VISEGRAD GROUP FACING
THE NORD STREAM AND SOUTH STREAM GAS PIPELINE PROJECTS

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

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This thesis analyzes the Visegrad Group's stance toward the Russian-German Nord Stream and Russian-Italian South Stream gas pipeline projects, which aimed to circumvent the traditional energy routes situated in Central Europe and Eastern Europe. The level of the Visegrad Group's dependency on inherited Soviet gas pipeline routes is examined alongside the Visegrad Group's policy setting ability within the group itself and in the European Union. The thesis also traces the evolution of energy relations between Europe and Russia and Visegrad Group's adaptation to the new state of affairs after the collapse of the Soviet Union, particularly with respect to energy issues. It is argued that despite all differences, Visegrad Group members are able to set a cooperation platform at times of crisis and develop common energy strategies. However, the thesis shows that the Visegrad Group's endeavor has encountered some setbacks at the national level and serious challenges at the European level, largely owing to the lack of a common European energy policy. The thesis concludes that the Visegrad Group's energy policy is both dependent on the stances of Russia and larger EU actors.

Keywords: Energy routes, Nord Stream, South Stream, Visegrad Group, Central and Eastern Europe.

ÖZ

KUZEY VE GÜNEY GAZ AKIM PROJELERİ KARŞISINDA
VİSEGRAD GRUBU'NUN TUTUMU

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Bu tez Orta ve Doğu Avrupa'da bulunan geleneksel enerji güzergâhlarını değiştirmeye yönelik hazırlanmış Rusya-Almanya işbirliğindeki Kuzey Akım ve Rusya-İtalya işbirliğindeki Güney Akım projeleri karşısında Visegrad Grubu'nun politikalarını analiz etmektedir. Bu bağlamda, Visegrad Grup üyelerinin Sovyetler Birliği döneminden kalan doğalgaz boru hattı güzergâhlarına olan bağımlılıkları ve Visegrad Grubu'nun kendi içerisinde ve AB dâhilinde politika üretme ve uygulama yetkinliği de incelenmektedir. Tez aynı zamanda Avrupa ve Rusya arasındaki enerji alım-satım ilişkisinin gelişimi ve Visegrad Grubu'nun Sovyetler Birliği'nin dağılması sonrasındaki yeni oluşuma uyum sağlama sürecinin izini sürmektedir. Visegrad Grubu'nun aralarında barındırdıkları tüm farklılıklara rağmen kriz dönemlerinde işbirliği platformu oluşturabildiği ve ortak enerji stratejisi üretebildiği savı geliştirilmektedir. Ancak tezin gösterdiği üzere, özellikle Avrupa ortak enerji politikasının oluşturulmamış olması nedeniyle Visegrad Grubu'nun çalışmaları ulusal düzeyde bazı engellerle ve AB nezdinde ciddi zorluklarla karşılaşmaktadır. Sonuç olarak Visegrad Grubu'nun enerji politikaları hem Rusya'nın hem de büyük AB aktörlerinin tutumuna bağlı olduğu tespit edilmiştir.

Anahat Kelimeler: Enerji güzergahları, Kuzey Akım, Güney Akım, Visegrad Grubu, Orta ve Doğu Avrupa.

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LIST OF ABBREVIATIONS

AGEB	Arbeitsgemeinschaft Energiebilanzen (Working Group Energy Balances)
AGRI	Azerbaijan-Georgia-Romania-Interconnector
AIGET	Italian Association of Wholesalers and Traders of Energy
Bcm	Billion Cubic Meters
BP	British Petrol
C	Capacity
CEE	Central and Eastern Europe
CEEC	Central and Eastern European Countries
CEPA	Center for European Policy Analysis
CIA	Central Intelligence Agency
CIS	Commonwealth of Independent States
CMEA	Council for Mutual Economic Assistance
CNG	Compressed Natural Gas
COMECON	Council for Mutual Economic Assistance
CSSR	Czechoslovak Socialist Republic
DM	Deutsche Mark
EaP	Eastern Partnership
EC	European Communities
ECT	Energy Charter Treaty
EEPR	European Energy Program for Recovery
ENP	European Neighborhood Policy
ETG	Energy Transportation Corporation
EU	European Union
EUROATOM	the European Atomic Energy Community
GDP	Gross Domestic Product
GDR	German Democratic Republic
GNP	Gross National Product

HAG	Hungaro-Austria Gasleitung
IEA	International Energy Agency
ITGI	Italy-Turkey-Greece-Interconnector
L	Length
LNG	Liquefied Natural Gas
Mcm	Million Cubic Meters
Mtoe	Million Tonnes of Oil Equivalent
N	North
NATO	North Atlantic Treaty Organization
NEGP (NEP)	North European Gas Pipeline
NETS	New European Transmission System
OECD	Organization for Economic Cooperation and Development
OMV	Österreichische Mineralölverwaltung/ Austrian Mineral Oil Authority
OPEC	Organization of the Petroleum Exporting Countries
PCA	Partnership and Cooperation Agreement
S	South
SDK	Slovak Democratic Coalition
SEEP	South East Europe Pipeline
Ser.	Service
SMER-SD	Direction-Social Democracy
TAG	Trans Austria Gasleitung
TAP	Trans-Adriatic Pipeline
Tcm	Trillion Cubic Meters
TEN-E	Trans-European Energy Network
U.A.E	United Arab Emirates
UK	United Kingdom
US	United States
USSR	Union of Soviet Socialist Republics
V4	Visegrad Group

CHAPTER 1

INTRODUCTION

Fossil fuels remain significant components of the world and particularly the European energy mix mainly due to high price, low efficiency, low productivity and technological shortcomings of alternative energy resources. The current scenario of high dependence on fossil fuels and European energy diversification strategy along with the climate change policy targeting decarbonisation indicate natural gas as an attractive energy source being relatively clean and competitive in comparison to other fuels. Natural gas' determinant position additionally has been forced by the recent Fukushima incident that undermined reliance on nuclear energy. Especially Germany has accelerated its exit from nuclear energy and has started to demand higher safety regulations in the European Union (EU).

Although conditions indicate increasing natural gas demand and decreasing indigenous gas production in the EU, energy forecasts on natural gas' share in the EU's primary consumption for 2030 ranges significantly. Some indicate on an increase to 725 bcm in 2030 in comparison to the peak value in 2005 of approximately 500 bcm and others await a decrease at the expense of renewables and nuclear energy,[1] as has been targeted by the EU. Yet, the positions of the Central and Eastern European countries (CEEC) differ since the energy sector in the region has not reached the average EU levels. The high one source dependency, particularly on

[1] For detailed information see Eurogas, *Natural Gas Demand and Supply, Long Term Outlook to 2030*, Spring 2007, pp. 2-3, available at: http://www.eurogas.org/uploaded/Eurogaspercent20longpercent20termpercent20outlookpercent20toppercent202030percent20-percent20final.pdf (accessed on May 5, 2012); Mott MacDonald, *Final Report: Supplying the EU Natural Gas Market,* November 2010 available at: http://ec.europa.eu/energy/international/studies/doc/2010_11_supplying_eu_gas_market.pdf (accessed on May 5, 2012); CEERD, *Analysis of Energy Trends in the European Union & Asia to 2030,* pp. 4-5, January 2009, available at: http://eeas.europa.eu/energy/events/asem_energy_2009/eu_asia_energy_trends_en.pdf (accessed on May 5, 2012) and Energy Roadmap 2050,*European Commission,* pp. 74-76, available at: http://ec.europa.eu/energy/energy2020/roadmap/doc/roadmap2050_ia_20120430_en.pdf (accessed on May 5, 2012).

Russia, low efficiency, and extended usage of fossil fuels are the main differentials of the region. According to market and infrastructure analyses, prepared for the European Commission, the average annual growth rate of the annual gas demand until 2030 in the region is estimated to be 2.3 percent.[2] Thus, the natural gas supply security constitutes a vital component of the energy policies and strategies of the region.

Natural gas' role in the in the CEEC's and even EU's energy sector has its historical reasons based on political and economic conditions of the 1970s. Modernization of the industry and high dependency on oil suppliers are key factors. The 1973 oil crisis especially forced European countries to seek out alternative energy sources and suppliers. Soviet natural gas appeared as an attractive alternative. It was close, cheap and available. Furthermore, a détente and Germany's Ostpolitik created a supportive environment for enhanced East-West energy relations. During the Cold War, set energy relations evolved in the partnership based on mutual benefits. Today, the largest trade partner of the Russian Federation regarding energy goods is the EU since 67 percent of natural gas exports go to the EU and 33 percent of the EU's gas imports originate from Russia.[3] This mutual dependence is also set by the fact that the Russian Federation is the current biggest proven single natural gas reserve holder in the world, with its 44.4 tcm of natural gas and 21.4 percent of the total share.[4]

The EU's old members' energy dependency on Russian supplies does not threaten their energy security at the level that it does the CEEC, which is directly connected to Russia by aged pipelines and primarily fed by supplies from an east-

[2]Kantor, *Market Analysis and Priorities for Future Development of the Gas Market and Infrastructure in Central-Eastern Europe under the North-South Energy Interconnections Initiative (Lot 2),* January 19, 2012, p. xv.

[3] Eurostat, *Natural Gas Consumption Statistics,* May 2012, available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Natural_gas_consumption_statistics (accessed on June 22, 2012) and Gazprom, 'Gazprom in Foreign Markets,' available at: http://eng.gazpromquestions.ru/index.php?id=4(accessed on July 22, 2012).

[4]British Petrol, *BP Statistical Review of World Energy*, June 2012, p. 20.

west direction. Interruptions of natural gas supplies thus cause economic and political crises at a level of dependence.

This is partially caused by the peculiarity of the natural gas transportation. Unlike oil, gas has to be principally transported via pipelines, which creates dependence on transit countries. In case of deliveries from Russia to the EU, transmission depends mainly on Belarus and Ukraine through where the old pipeline infrastructure goes. Hence, the region's natural gas supply security depends not only on complex energy trade but also on bilateral relations of the Russian Federation with transit countries. For example, in 2006 and 2009 some EU Members and the CEEC suffered the consequences of the dispute between Ukraine and Russia having been without gas in the middle of the winter for three and eighteen days, respectively. Both energy security supply crises led interested parties to take several measures. Diversification of routes inter aliawas one of them.

Gazprom, the state-backed Russian energy company, proposed two major diversification projects and gained the initial support of Germany and Italy at the displeasure of other EU Members positioned at the traditional transit line between East and West. German companies E.ON Ruhrgas and Wintershall joined the Nord Stream pipeline project, whereas Italian company ENI agreed on the South Stream. Since both projects were designed to connect Russian fields with Western and Southern Europe, circumventing traditional routes via CEE, it has been highly expected that the CEEC would be affected. This situation reveals the weak point of the European energy policy, namely lack of common EU foreign energy policy. Each state of the EU 27 represents different energy mixes, dependencies, perceptions of energy security and/or regional cooperation and each of these states has different ambitions within the EU at regional and/or international platforms. Without a common EU foreign energy policy the national interests may preclude the regional ones, if not those of the EU.

1.1 Research Question and Argumentation

This study focuses especially on the Visegrad Group's (V4)[5] position toward the Nord Stream and South Stream projects since the group members are the main transit countries of traditional routes politically and economically affected by these circumventions. In this regard, the research question of this study asks how the V4 Members interpret and react to these projects.

Either the V4 Members are able to meet on common ground, create and pursue a common strategy concerning their energy security, or the differences in energy policies and relations toward Russia are different to the extent that pursuing of a common policy is disabled for the sake of regional energy security. In case the Visegrad Group manages to meet on one point, the question is how and to what extent they are able to implement their policies within the EU.

This study argues that Visegrad countries may have found common ground on the energy security issue regarding pipeline politics over Central and Eastern Europe and an implementation tool for these common policies; yet, the possibilities of being effective remain questionable.

1.2 Literature Review

While doing research on Central and Eastern Europe pipeline politics, particularly the Visegrad Group, the main challenge has appeared to be a lack of studies, especially regarding its historical aspect from the Soviet Union era. Information has to be collected one by one from studies of related subjects or from history of private companies involved in the pipeline construction projects. Intelligence reports, official declarations and documents partially fill the missing parts.

In this regard, Angela Stent's[6] comprehensive book about the political economy of West Germany and Soviet Russia from 1955 to 1980 provides

[5] Visegrad Group consists of the Czech Republic, Slovakia, Poland and Hungary.

[6] Angela Stent, *From Embargo to Ostpolitik, The Political Economy of West German-Soviet Relations 1955-1980,* Cambridge University Press, Cambridge 1981.

background for the energy relations in this time period. On the other hand, Thane Gustafson's report on 'Soviet Negotiating Strategy: The East-West Gas Pipeline Deal, 1980-1984'[7] based on interviews with interested party representatives gives detailed information about Russian strategy and the relations with West Germany in the early 1980s. Yet, the most detailed study of this era comes from the Central Intelligence Agency's reports published under the US Freedom of Information Act.[8]

Besides political and economic aspects of the time, information about energy infrastructure of the region had to be gathered. Sussane Nies[9] in her report on European energy infrastructure provides a valuable summary. The lack of information in this report has been complemented by Simon Pirani's[10] editorial collection Russian and CIS Gas Markets and Their Impact on Europe, and David G. Victor's and Nadejda M. Victor's[11] analysis of the Belarus connection and historical backgrounds of private companies related to construction projects, such as Gazprom and Net4Gas.

The information about intra-COMECON and COMECON-Soviet relations concerning the pricing and energy trade are well examined, yet hindered by a one-sided perception, in Victor Merkin's article 'Intra-COMECON Bargaining and World Energy Prices: A Backdoor Connection?.'[12] Possibly, the lack of academic studies in this field causes information pollution. Even the information about pipeline names, directions, operation dates and capacities is inconsistent or missing.

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[7]Thane Gustafson, *Soviet Negotiating Strategy: The East-West Gas Pipeline Deal, 1980-1984,* Santa Monica, The Rand Corporation, February 1985.

[8] Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *FOIA*,September 21, 1982, available at: http://www.foia.cia.gov/Reagan/19820921.pdf (accessed on May 5, 2012).

[9] Susanne Nies, *Oil and Gas Delivery to Europe: An Overview of Existing and Planned Infrastructures*, IFRI, Paris 2008.

[10]Simon Pirani (ed.), *Russian and CIS Gas Markets and Their Impact on Europe*, Oxford Institute for Energy Studies, Oxford 2009.

[11] David G. Victor and Nadejda M. Victor, *The Belarus Connection: Exporting Russian Gas to Germany and Poland*, James A Baker III Institute for Public Policy, Stanford University, May 2004.

[12]Victor Merkin, 'Intra-COMECON Bargaining and World Energy Prices: A Backdoor Connection?,' *Comparative Economic Studies,* Vol. 30, No. 4, Winter 1988.

The Russian Federation's energy strategy on the other hand is a widely examined subject with contradicting outcomes. Vladimir Milov, Leonard Coburn and Igor Danchenko in their article 'Russia's Energy Policy'[13] argue that Russia actually does not have any systemic energy policy. On the contrary, Anders Aslund in 'Russia's Energy Policy: A Framing Comment'[14] claims that Russian energy strategy consists of three stages, namely the old Soviet model, liberal oligarchic model and state capitalism. The latter is also the starting point of this study. However, the foundation of this study considers Russian official energy strategy up to 2030.

A great deal of attention is given in academic circles to EU-Russian energy relations. However, a focus on the CEE region is rare and mainly comes from regional think tanks, some of them funded by the Visegrad Initiative, such as Polish Kosciuszko Institute's collection edited by Joanna Swiatkowska, 'Energy Security of the V4 Countries. How Do Energy Relations Change in Europe?'[15]that provide deep analysis of energy perspectives concerning each V4 Member. Besides regional initiatives, interest in the region shown by US based think tanks. In this regard, Ryan R. Miller's CEPA report on 'Central Europe's Energy Security Schism'[16] is worth noting since it indicates the weakness concerning energy security at the national and regional levels.

Literature regarding the Nord Stream project mainly focused on the Baltic States' and Poland's positions. However, development of the project brought quick outdating of the studies. Thus, the major information sources in this regard have been policy papers, plans, official declarations and newspaper articles. The lack of appropriate information is partially caused by the fact that part of the Nord Stream

[13]Vladimir Milov, Leonard Coburn and Igor Danchenko, 'Russian Energy Policy 1992-2005,'*Euroasian Geography and Economics,* Vol.47, No. 3, 2006.

[14] Anders Aslund, 'Russia's Energy Policy: A Framing Comment,' *Euroasian Geography and Economics*, Vol. 43 Is. 3, 2006.

[15]Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011.

[16] Ryan R. Miller, *Central Europe's Energy Security Schism*, CEPA, Washington D.C.,July 2008.

has been launched recently and the actual impact of this pipeline is still unknown. On the other hand, the South Stream project is still under development and main focus among academic and state circles is centered on a comparison of the Nabucco and South Stream pipeline projects. With respect to South Stream and in relation to the Russian strategy, Stefan Ehrstedt's and Peeter Vahtra's article 'Russian Energy Investments in Europe'[17] provides a valuable analysis indicating economic aspects of the Russian strategy and gives information about Russian investment strategy in the CEEC region.

The nature of the topic led this research project toward an analysis of official policy papers, such as the EU's Green Paper, infrastructure package, North-South Interconnections action plan; energy strategies; declarations as the V4's Budapest declaration on regional energy security; V4 presidency programs and reports and newspaper articles. Yet the main challenge to be overcome has constituted non-unified statistics and data about energy indicators, such as reserves, energy consumption levels or import/export volumes, including energy forecasts. Statistics of British Petrol, Gazprom, International Energy Agency, Eurostat and OECD differ on amount and unit, which significantly complicates the accuracy of the research.

1.3 Methodology

The issue of theVisegrad Group's position on the gas pipeline politics regarding Central Europe and Eastern Europe will be problematized based on secondary sources, both books and articles. Consequently, primary sources, such as energy policies, strategies and reports at national and European levels, market analyses, reports and statistics of private companies and international organizations will be used to substantiate the findings. Additionally, as the topic constitutes a current issue, news portals and think tank reports are consulted.

The topic will be explored through an explanatory manner, starting from the Cold War period until the present to reveal multidimensional relations and causal

[17] Stefan Ehrstedt and Peeter Vahtra, 'Russian Energy Investments in Europe,' *Pan-European Institute,* 4/2008.

conditions behind the pursued strategies and as well the changes in energy strategies of the interested parties. Hence, analysis of Russia's, the EU's and Visegrad Group's energy strategies and policies will be one of the leading methods within this work, which will help to clarify aspects of sustainable energy supply to the Visegrad countries, their stance in the EU and meaning of their position in between the East-West energy route. The latter method additionally explores how the Visegrad Group read Russian strategies, such as diversification of energy routes and customers or using energy resources as a political tool. Finally, the analysis of the Visegrad Group, its energy outlook and policies that complement the national and/or regional state of energy affairs will be problematized.

1.4 Organization of the Chapters

Following the Introduction, Chapter II provides historical background for East-West energy relations and the CEEC's in the inter-regional energy trade. These connections are examined from three perspectives: Western alliance, Soviet Union and the CEEC, setting the strategies and aims of actors. The historical background will lay a foundation for further analysis of regional energy and pipeline politics and facilitate to an understanding of steps taken by and policies of regional actors, namely the Russian Federation and select Visegrad Group Members. The questions to be answered in Chapter II are how and on what grounds the energy relations between Soviet Russia and Western Europe were established and what was the position of the CEEC in this context?

The main focus in Chapter III is devoted to the analysis of the Nord Stream's and South Stream's position in the Russian energy strategy and strategies of the European counterparts. Analysis of the Russian energy strategies starting from the dissolution of the Soviet Union will reveal changes and continuances of the Russian energy policy even with respect to a comparison with the Soviet era to reveal a basis of both projects. These projects are significant to explore decoupling within the EU with respect to the energy policies since both projects negatively have affected some EU Members in the CEE while privileging others. This chapter aims to reveal strong

and weak points of the counterparts to better understand the projects' backgrounds and possible future impacts.

Chapter IV analyzes how the V4 countries may be affected by Russian policies and what are their energy strategies with respect to their energy security. This task is going to be examined at national and regional levels and the last part will be devoted to the V4's efforts within the EU. The main question to be answered in this chapter is whether or not V4 Members agreed on a common strategy and developed a tool to integrate their regional interests into the EU's goals. If yes, a related question is to what extent these tools have been effective.

Finally, the conclusion will sum up the developments until the present, note the trends and point to the possible future developments regarding the V4 position toward the Nord Stream and South Stream projects.

CHAPTER 2

HISTORICAL BACKGROUND OF THE EAST-WEST GAS PIPELINE POLITICS AND POSITION OF THE CENTRAL AND EASTERN EUROPEAN COUNTRIES

2.1 Introduction

This chapter aims to explore the position of the Central and Eastern European countries (CEEC) in the natural gas pipeline politics within the context of East-West energy relations from the late 1960s, when first pipelines started to be built until 1991, collapse of the USSR. A brief overview of the pipelines constructed in this period is to be taken up first. The subsequent sections focus on the gas pipeline relations with respect to the various perspectives of the Western Alliance, Soviet Union and CEEC.

2.2 Major Transit Pipelines from Russia to Europe (1967-1991)

Natural gas has been used by Russia since the beginning of the 19th century, but significant development of the natural gas sector occurred after the Stalin era, in the late 1950s. In 1955, the production of natural gas, mainly from the European part of Soviet Russia and Ukraine, accounted for only approximately nine bcm. A year later, the gas industry was included in the Sixth Five-Year plan (1956-1960) and construction of international pipelines that commenced in the 1960s. Between1967 – 1991, twelve major international export lines and connectors delivering natural gas from the Soviet Union to the CEEC and Western Europe were constructed. While the region's major pipelines are briefly described in this study, other lines and connectors are also listed in Table 1.

Soviet Russia's first natural gas client, with its minor imports, was Poland (1949). In the late 1960s, the Soviets considered further gas deliveries to the CEEC and three Western European countries, Finland, Austria and Germany. Thus, the first

significant international pipeline,[18]Bratrstvo[19]was constructed and deliveries started in 1967, first to Czechoslovakia. In 1968, first Western company, Austria's state owned Austrian Mineral Oil Authority (Österreichische Mineralölverwaltung/OMV), made a long term natural gas contract with USSR.[20] Further development of the pipeline network to Central and Western Europe was discussed in several ways; offering an alternative to the transit route through Poland. Finally, political and technical reasons pointed to Czechoslovakia as the main transit country. This decision came in October 1970 and an agreement between the USSR and Czechoslovakia was signed on December. Under this contract, Czechoslovakia's Transgas undertook construction of the first line of the transit gas pipeline with an annual capacity of 28 bcm. Supplies to Austria and Poland were secured by extensions from this main line. In 1970, the total gas export of the Soviet Union was to these three countries. A broader conception of the network was identified in an international agreement signed among the USSR, German Democratic Republic (GDR) and Czechoslovakia. The construction of the pipeline to the Western countries, such as Germany, France, Austria and Italy began in March 1971.[21]

The first gas-for-pipe deal in 1970, between West Germany and the Soviet Union, overlapped with Willy Brandt`s Ostpolitik. The agreement included gas

[18]The naming of the pipelines differs among analysts. Some use the name of the field, while others apply the name of the project or the pipe/route. Such lack of standardization causes difficulties in identifying the particular pipelines. The naming in this study is primarily based on names of the pipelines/routes.

[19] According to David G. Victor&Nadejda M. Victor, the Bratrstvo pipeline used the Shebelinka gas field in Ukraine. See, David G. Victor and Nadejda M. Victor, *The Belarus Connection: Exporting Russian Gas to Germany and Poland*, James A Baker III Institute for Public Policy, Stanford University, May 2004, pp. 6-7. On the other hand, Simon Pirani claims that the Bratrstvo pipeline originated in Briansk and Tula and joined the westward system in Kiev. See, Simon Pirani, 'Ukraina: A gas dependent state,' in Simon Pirani (ed.), *Russian and CIS Gas Markets and Their Impact on Europe*, Oxford Institute for Energy Studies, Oxford 2009, p. 111.

[20]Gazprom,'40th Anniversary of Gas Supply to Austria,' available at: http://www.gazprom.com/about/history/events/40years/(accessed on December 24, 2011).

[21]Net4Gas,'40 let tranzitu zemního plynu přes území České republiky (40 Years of Natural Gas Transit through the Area of the Czech Republic),' Prague 2011, p. 1, available at: http://www.net4gas.cz/cs/media/tiskove-zpravy/N4G-40_NGTA-brozura-web.pdf (accessed on December 24, 2011).

supplies of an amount 0.5 bcm per annum from 1973 and 3 bcm per annum beginning in 1978 in exchange for 1.2 million tons of pipe (Mannesmann) and 1.2 billion DM in credit.[22]

The oil crises in 1973 and 1979 underscored the importance of the gas pipeline networks as transfer tools of a new alternative energy source. Thus, the new natural gas pipeline agreements boom started. The Soviets signed eight contracts with Austria, France, Italy and West Germany from 1968-1975[23] and three more until 1977.[24] Alongside the agreements on pipeline construction, new natural gas production unit construction in the Soviet Union started and incrementally increased existing capacity.[25]

The Trans Austria Gasleitung pipelines (TAG I and II, 1974) extended the range for Soviet clients; besides Czechoslovakia and Austria, Italy started to import gas from the Eastern Bloc. The MEGAL gas line started its deliveries to Austria in 1974, both East Germany and West Germany in 1976 and France in 1979. Another significant long-distance gas pipeline, Soyuz (1978), linked gas fields in Orenburg with Czechoslovakia (through Ukraine) and connects the existing network.[26]

The Northern Lights pipelinewas the second largest project to link Russia and first the CEEC via Belarus. This pipeline system consisted of five major trunk pipelines. The first one, the three-string (Torzhok, Minsk, Ivatsevitchi) pipeline, was constructed from 1975 to 1983. The second major trunk went to Ukraine, consisting

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[22] Susanne Nies, *Oil and Gas Delivery to Europe: An Overview of Existing and Planned Infrastructures*, IFRI, Paris 2008, pp. 17-18.

[23] Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *FOIA*,September 21, 1982, available at: http://www.foia.cia.gov/Reagan/19820921.pdf (accessed on May 5, 2012) p. 17.

[24]Thane Gustafson, *Soviet Negotiating Strategy: The East-West Gas Pipeline Deal, 1980-1984,* Santa Monica, The Rand Corporation, February 1985, p. 1.

[25]*Ibid*, p. 2.

[26] Central Intelligence Agency, 'Imagery Analysis Memorandum, Subject: Construction Status of the Soyuz Gas Pipeline, USSR,' *National Foreign Assessment Center Office of Imagery Analysis*, October 13, 1978, p.1.

of the two-string (Ivatsevitschi, Dolina) pipelines. The first string was built in 1976 and the second in 1986. The third trunk to Poland was constructed in 1985 and the fourth to Kaliningrad in 1988. The development of the Northern Lights lines continued with additional pipes going through Belarus until 1994.[27]TheProgresspipeline of 1986 under the Yamburg Agreement in 1985 was another joint project aiming for natural gas deliveries to the CEEC within the COMECON Six: Bulgaria Czechoslovakia, GDR, Hungary, Poland and Romania.[28]

In the late 1970s, negotiations started on a new export gas pipeline between Moscow and West European countries viaUkraine and that had pumping stations on the borders with Slovakia, Hungary and Romania. This Siberia-to-Western Europe project, or Urgenoi-Pomari-Uzghorod pipeline,[29] with an annual planned gross capacity of 35 bcm,[30] was the largest East-West trade project until that date.[31] The pipeline has been operational since 1985 and increased Soviet exports to the Western Bloc. The gas deliveries from 1985 to 1991 started to Turkey, Switzerland, Finland, France, West Germany, Italy and Austria.[32]

[27] Katja Yafimava, 'Belarus: the domestic gas market and relations with Russia,' in Pirani, Simon (ed.), *op.cit*, p. 139.

[28] Vladimir Socor, 'RAD Background Report/ 100 (Eastern Europe), Extensive Romanian Commitments to CMEA Joint Projects in USSR,' *Radio Free Europe Research,* July 1986, p. 4, available at: http://www.osaarchivum.org/files/holdings/300/8/3/text/69-6-52.shtml (accessed on January 1, 2012).

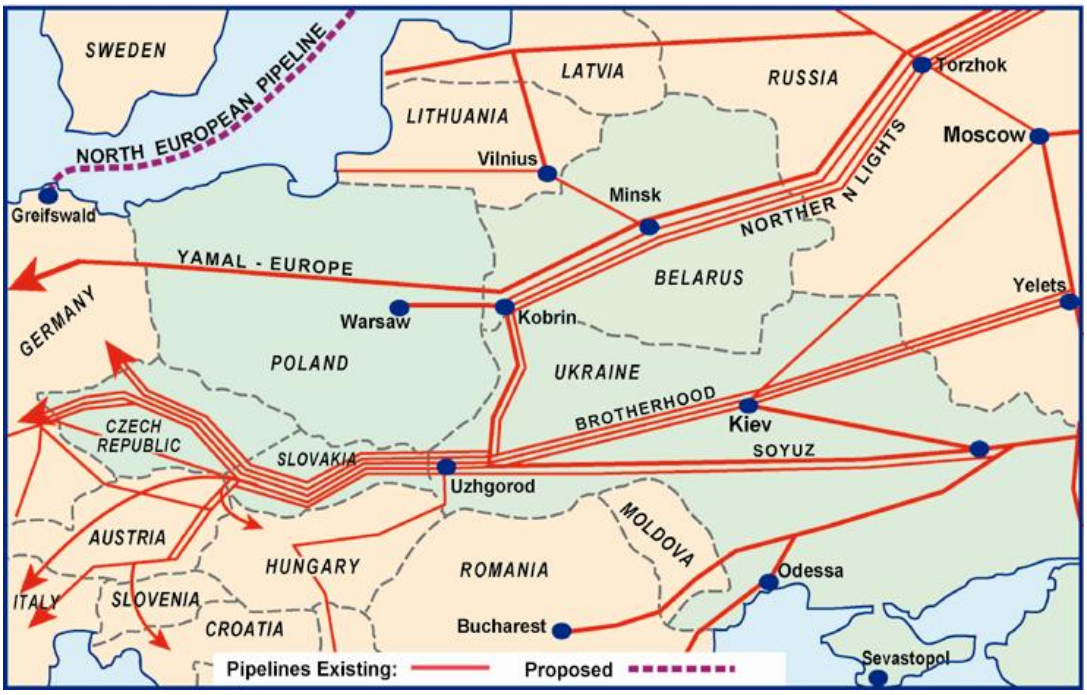
[29] Simon Pirani, 'Ukraine: A gas dependent state,' in Pirani, Simon (ed.), *op.cit,* p. 110-111.

[30] According to David G. Victor & Nadejda M. Victor, this amount is about 40 bcm. See, David G. Victor &Nadejda M. Victor, *op.cit,* p. 18.

[31] Central Intelligence Agency*, '*The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 17.

[32]David G. Victor &Nadejda M. Victor, *op.cit,* p. 12.

Map 1:



Source: Stern, 2005[33]

The continental natural gas pipeline network of Eastern and Western Europe was laid within twenty years before the collapse of the Soviet Union. The main lines to Europe still go through Ukraine and Belarus; further redistribution occurs by extensions, interconnectors and the western system itself. The major existing gas pipelines and connectors built from 1967 to 1991 are listed by year below:

[33] Jonathan Stern, 'The Russian-Ukrainian gas crises of January 2006,' *Oxford Institute for Energy Studies,* January 2006, p. 3.

Table 1:[34]

Pipeline	Pipeline Route	Transit Country	Length/ Capacity	In Ser. Since
Bratrstvo (North)	Russia (Torzok/Yamal)/ Germany	Ukraine, Czechoslovakia[a] Austria	L: 2750 km C: 30 bcm	1967
Bratrstvo (South)/ Trans-Balkan	Russia/ Turkey	Ukraine, Moldova, Romania, Bulgaria		1967
TAG I and TAG II	Austria/ Italy/ Slovenia		L: 380 km C: 32 bcm	1974[35]
Finland Connector	Russia/Finland			1974
Soyuz	Russia(Orenburg)/ Ukraine/ Czechoslovakia[a]		C: 30 bcm	1978
MEGAL	Megal North: Czechoslovakia[a] /Germany Megal South: Austria/ Germany		L/N: 467 km L/S: 161 km C:15	1979
Northern Light	Russia (Urgenoy)/ Ukraine (Uzghorod)	Belarus	L: 4500 km C: 25 bcm	1983
Urgenoi	Russia/ Germany/ Austria	Ukraine, Czechoslovakia[a]	L: 5000 km C: 40 bcm	1984
Progress/ Yamburg	Russia/ Ukraine		C: 30 bcm	1986
Poland/Ukraine [b]				1949
Hungaro-Austria-Gasleitung (HAG)[b]	Austria/Hungary		L:120 km C: 4.4 bcm	
Budapest-Belgrad[b]	Hungary/Serbia		C: 3.3 bcm	

[a] – The naming of the states is in accordance with the dates of pipeline constructions.
[b] – Even the operation dates of these connectors are not in Susanne Nies`s Charter, the HAG and Budapest-Belgrade pipelines presumed to had been built prior to 1990. In case of Poland-Ukraine pipeline, the connector should be one the first, since the gas export to Poland started in 1949 and Ukrainian fields accounted almost half of that time natural gas output.[36]

[34] Susanne Nies, *op.cit,* pp. 128-129. Minor interconnectors within the Western Bloc and Finland Connector (1973) are not included.

[35] *Ibid,* p.18, also OMV, 'Milstones of the OMV Success Story,' available at: http://www.omv.com/portal/01/com/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gDf1OLQC9HZyNXA3dPD18PI09DAwgAykdiypsaG8Dk8esOTs3T9_PIz03VL8iNKAcAt0TIfA!!/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfTTA5SEZJVTJVQTRJMEJSNVQ5NTAwMDAwMDA!/ (accessed on March 5, 2012).

[36] Simon Pirani, *op.cit,* p. 95.

2.3 Historical East-West Energy Relations: Position of the Western Alliance

The first Western European country that concluded a natural gas agreement with the Soviet Union was Austria. Yet, more significant were the gas trade negotiations with the West Germany that started in the late 1960s. The gas consumption level in West Germany in 1968 accounted for 3.2 percent of the total energy consumption, though West Germany was willing to enter into a natural gas agreement with the USSR. There were two economic reasons: a price below market prices and the eagerness of the West German steel industry to increase export opportunities. Soviet Russia was cautious after the pipe embargo in 1962, which was lifted in 1966 on West Germany`s insistence, and did not want to have direct dealings with any West German steel concern. Therefore, the indirect deal with Austrian iron and steel company VOEST was concluded in 1968. German counterparts, Thyssen and Mannesmann, became direct partners with the Soviets within a year. Thus, the joint construction of the pipe factories in the USSR was contracted in 1969. Satisfaction with the deals led to further negotiations over the extension of the Bratrstvopipeline to deliver the gas directly to West Germany and for gas-for-pipe deals between the West Germany and USSR. A deal with a competitive price was signed in February 1970. Mannesmann, which had incorporated Thyssen, agreed to supply 1.2 tons of pipe at a cost of $400 million, which was to be financed by credit at interest rates below the market rate. Seventeen German banks, coordinated by Deutsche Bank, granted the credit. This agreement was peculiar in that Hermes insured only half of the credit and the difference between the market interest rate, and Mannesmann rounded off the rate paid by the Soviets. In exchange, Soyuzexport agreed on deliveries to Germany, beginning in October 1973 for 5.5 bcm annually.[37]

Negotiations began before Willy Brandt came into office in 1969 and pursued the Ostpolitikright after. The basic idea of Ostpolitikwas encouragement of economic

[37] Angela Stent, *From Embargo to Ostpolitik, The Political Economy of West German-Soviet Relations 1955-1980,* Cambridge University Press, Cambridge 1981, pp. 165-167.

ties by credits, investments, technology, etc. for political purposes,[38] which apparently started before Brandt's tenure. However, Brandt was the one who directly encouraged German natural gas company Ruhrgas AG to engage in economic transactions with Soviet Russia. This was the first time the West German government interfered to create an economic linkage with the USSR.[39]

The détente period supported by the West Germany's Ostpolitik and positive economic linkage idea in general led to the strengthening of the East-West trade and energy relations. The latter opened the way to the declaration made after the Conference on Security and Cooperation in Europe, held in Helsinki in 1975, known generally as the Helsinki Final Act. Although the U.S. was not eager to participate, it was forced to act with its European allies. Parties to the Helsinki Final Act agreed to cooperate on a range of fields; energy was one of the matters dealt with under the chapter of cooperation in the field of economics, science and technology and environment.[40]

Besides political objectives, the economic and psychological effects of the first oil shock in 1973 should not be underestimated. The share of gas consumption increased and gas prices were nearly parallel to oil prices. Meanwhile, forecasts of low gas reserves were alarming. All these circumstances prompted European countries to turn to the alternatives and other ways to securitize their energy input. UK preferred to explore its own reserves. France tended towards the diversification of its energy mix and West Germany combined UK's strategy with investment into the infrastructure[41] and relations with the Soviets. West Germany turned to the Soviets not only for gas supplies, but also for the sake of its industry (production and

[38]Randhal Newnham, 'Economic Linkage and Willy Brandt`s Ostpolitik: The Case of Warsaw Treaty,' *German Politics*, Vol. 16, No. 2, June 2007, p. 247.

[39] Angela Stent, *op.cit,* p. 169.

[40]Conference on Security and Cooperation in Europe Final Act, Helsinki 1975, p. 27.

[41] Pavel Swieboda, 'Putting Flesh on the Bones of Energy Solidarity,' in Katynka Barysch (ed.), *Pipelines, Politics and Power: The Future of EU-Russia Energy Relations,* Centre for European Reform, London, October 2008, p. 40.

export).[42] The main goal of the Western European countries was to decrease their dependence on OPEC oil. The Soviet gas seemed to be best and most reliable option to cover Western needs,[43] even if in different levels.

The Western European countries were aware of Soviet strategies and usage of energy resources as a political tool. Besides the examples from the CEEC, the reduction of 50 percent in gas deliveries to West Germany and Austria occurred in 1979 and 1981. Furthermore, the USSR cut oil shipments to Finland, China and Israel as a demonstration of political discontent.[44] Despite this, the negotiations continued.

Western Europe imported 15 percent of its total natural gas demand from Soviet Russia in 1981 and considered increasing this amount to cover the gas consumption rise in 1985. Therefore, the new gas-for-pipe deal that of the Trans Siberian project, aimed to double gas imports by deliveries from the Urgenoi field to Western clients.[45]

In sum, there were three advantages regarding pipeline deals with the USSR. First, pipeline deals provided gas supply security for at least 25 years. Even a possible cut off from the Soviet side was taken into account and gas storage capacities were planned to cover three months of Soviet imports by 1990. At the same time, many industrial facilities would have been capable of switching to another fuel. According to the calculations of that time, Western Europe planned to

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[42] *Ibid,* pp. 8-9.

[43] One of the alternative energy sources was natural gas in the North Sea. Nevertheless, development and production of these reserves was expensive and time consuming. Further potential but insufficient Dutch and Norwegian gas supplies (a maximum 80 percent of the estimated consumption in the 1990s), alternatives from Nigeria, Algeria, Qatar, Indonesia and Canada were taken into account. However, these options were perceived as unreliable and/or expensive. Besides these, Norway did not want to be dependent on the development of hydrocarbons; high taxes in producing countries such as the UK and Norway were obstaclesand, finally, Soviet gas was cheaper. See, Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit,* pp. 27, 29.

[44] R.V.Roosa, M. Matsukawa, A. Gutowski, *East-West Trade at a Crossroads,* New York University Press, 1982 New York, p. 32.

[45] *Ibid.*

import three percent of its total energy supplies from the USSR. West Germany, as the biggest client, purchased 30 percent of its gas and five to six percent of its total energy supplies from the USSR. These data show the minor dependence of the European side. The second advantage was the flexibility set up between both sides. For instance, Western European countries were allowed to reduce their gas purchases from the USSR up to 20 percent within the year of the contract. The third advantage was the price. Even thought the price of natural gas at the time of the agreement was higher than the market prices, West Germany and other European countries expected a crude oil price increase. In the end, 10 percent lower prices for gas had been anticipated.[46]

On the other hand, this deal caused disputes between the Western allies. The U.S. held reservations that were based on three points: economic strengthening of the Soviet Union and possible usage of the technologies in the armament; Western dependency on Eastern energy resources; and usage of energy resources as a political tool. The Western allies' response was clear: Soviet gas constituted a useful diversification and reduced dependence on OPEC oil; dependence on Soviet gas was low; prevention against disruptions was to be taken; and the Soviet Union's dependency on hard currency earnings was sufficient enough to secure gas flows.[47]

After the European Community disregarded U.S. reservations, the US attempted to impede the construction of the Urgenoi pipeline with the June 1982 amendments to the Exports Administration Regulations. A summary of the amendments is as follows:

> […] The person within the third country may not re-export machinery for the exploration, production, transmission or refinement of oil and natural gas, or components thereof, if it is US origin, without permission of the US Government. […]Any person subject to the jurisdiction of the United States is

[46]*Ibid,* p. 29.

[47]*Ibid,* pp. 32-33.

> required to get prior written authorization from the Office of Export Administration for export and re-export to the USSR of non-S goods. […] No person in the US or in a foreign country may export or re-export to the USSR foreign products directly derived from the US […].[48]

These restrictions were directed toward energy exploration, exploitation, etc. The response from the European Community came in August, underscoring that these amendments were unlawful under international law, U.S. public law and the criteria of the Export Administration Act of 1979. The European Community reiterated in its comments that the US had refused similar measures in the past and demanded that the amendments be withdrawn.[49]

Especially the Carter and Reagan Administrations perceived the East-West pipeline project as a Soviet strategy on how to render Western Europe dependent on Soviet gas and to weaken the Western alliance. Therefore, the Reagan Administration devised the aforesaid restrictions on goods for the pipeline in 1982.[50] After the cited comment, the EC countries agreed on the formula that European sanctions would not include an export embargo and suggested a decrease of the planned import for the year 1982 by $350 billion, which accounted for approximately 3.5percent of the total amount imported from the Soviet Union. However, even this decision was subjected to change in March 1982 and the amount was reduced by $140 billion. Thus, Reagan's plan was left unfulfilled.[51]

This unsuccessful attempt to hinder the project considered to be 'largest commercial deal ever made between East and West'[52] (1981 pipeline deal) also

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[48]Delegation of the European Commission, *Comments of the European Community on the Amendments of 22 June 1982 to the U.S. Export Regulations,* August 12, 1982, pp. 1-2.

[49]*Ibid,* pp. 1, 20.

[50] Thane Gustafson*, op.cit,* pp. 40-41.

[51] Petr Suchý, *Reagan a Říše Zla (Reagan and Empire of the Evil),* CDK, Brno 2004, p. 73.

[52]Time,'Go-ahead for the biggest East-West deal ever,' July 12, 1981, Vol. 118, Is. 23, p. 54.

revealed the European reluctance to abandon gained benefits. Hence, the European answer was in favor of maintaining détente. Some contracts made by the Soviets indicate that they expected U.S. reaction in the form of an embargo and they were preparing themselves for it. On the other hand, they did not anticipate that European countries would refuse an embargo decision and threatened its contractors by invoking penalty clauses.[53]

The CEEC's significance for the Western Europeans arose from the CEEC's position as a border with the Eastern Bloc. While the CEEC functioned as energy route transit countries, their dependence on the Western imports and credits were higher. Furthermore, tighter relations with Western Europe could mean greater autonomy from the USSR.[54] These relations were supported mainly by West Germany`s Ostpolitik toward the CEEC, primarily Poland.

On the other hand, the US perception of the CEEC was based on minimal understanding, though the region was "the most heavily armed, military alert region of the world."[55] The first stage was a minimalist approach to the CEEC by the US since 1956. Secondly came President Eisenhower's people-to-people initiative, which aimed to reduce hostility. The Johnson Administration fostered the idea of "building bridges of understanding" and peaceful trade in 1966. The Nixon Administration adopted a new attitude with the policy toward the CEEC that consisted of bilateral relations taking each country as an independent and sovereign state, progressing the economic relationship and incorporating these countries into European affairs. These attempts created the foundation for détente and differentiation policy. During Carter`s tenure, importance was given to the separate entities in the CEEC and their support.

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[53] Thane Gustafson*, op.cit,* pp. 6, 26-27, 41.

[54] Giovanni Angelli, `East-West Trade: A European View`, *Foreign Affairs*, Summer 80, Vol. 58, Is.5, p. 1026.

[55]William H. Leuers, 'The U.S. and Eastern Europe,' *Foreign Affairs,* Vol. 65, No. 5, Summer 1987, p. 977.

While the first term of the Reagan administration continued the differentiation policy, sanctions against Poland in 1981, denunciation of the Yalta Agreement and similar actions revealed the lack of US understanding and blocked the intended effect of the policy in general.[56] The formal concept of foreign policy toward the USSR included National Security Decision Directive 54, adopted on September 2, 1982, which was centred upon COMECON Six. The primary objective of this directive's decision was to facilitate integration of these countries with the West. The differentiation policy toward the Soviet Union and other members of the Warsaw Pact as well as toward these countries themselves was supposed to help exert the influence of the US by intensifying the countries' differences via the individual attitude of the US.[57]

In sum, as declassified CIA documents point out, the non-understanding between the US and its Western allies was not based on the assumption that the US did not understand the stance of Western Europe. The opposite is true. The US even knew Western Europe's suggestions with regard to lessening or cutting off trade with the East were unrealistic from the European perspective. Despite these calculations, the US leaders forced their Western allies to take measures in accordance with US foreign policy without appropriate consultations, which can be interpreted as the US deeming itself superior, leading to discrepancy. The US insisted on economic restrictions in order to weaken the Soviet Bloc. On the other hand, the Western European countries, led by Germany, believed in positive economic linkage and its power to influence counterparts' behaviour.

2.4 Soviet View on East-West Energy Relations

The bipolar system led to economic and political competition between the Eastern and Western blocs. Secretary General of the Communist Party Nikita Khrushchev set the Soviet economic goal after the Stalin era in the 1950s: "to catch

[56] *Ibid,* pp. 978-980.

[57] Petr Suchý, *op.cit,* p. 55.

up with the US in 25 years."[58] This meant modernization of industry and usage of modern fuels such as natural gas. Although oil was still a prominent industrial fuel, natural gas started to gain importance and became a part of the Sixth Five-Year plan (1956-60) with the objective to build long-distance pipelines and exploit new fields in energy rich regions of the Soviet Union, including the Caucasus, Turkmenistan and even Ukraine.[59]

The first mention of Russian natural gas export to Central and Western Europe was published in the 1960s. This idea was initially denied; yet afterward, the Soviet Union accepted 1bcm annually only for Czechoslovakia.The Bratrstvo pipeline was built upon this decision.[60] In 1966, the significance of the Eastern Siberian gas fields was recognized in the Eight Five-Year Plan, as Khrushchev demanded. The main focus was on the Urgenoi field since other resources were either dispersed or under tough geographical conditions.

Another significant aspect of the natural gas trade was the acceleration of the East-West energy trade and relations. The investments made to maintain hard currency exports resulted willy-nilly in mutual dependence: Increasing dependence of Western Europe on Soviet energy deliveries and Soviet dependence on Western exports and payments. This kind of dependency was vital, as it became a factor in decision-making on East-West[61] issues during the Cold War and mostly bilateral international decisions affecting regional ones after the collapse of the Soviet Union.

The German Ostpolitikpursued by Willy Brandt started in 1970 with the aim of making a direct connection with the Soviet Union. This political strategy promoted relations between Western Europe and the Soviet Union and resulted in the Helsinki Final Act (1975), setting the cooperative basis on relations between the two blocs.

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[58]David G. Victor &Nadejda M. Victor,*op.cit,* p. 4.

[59] Susanne Nies, *op.cit,* p. 15.

[60]Net4Gas, *op.cit,* p. 1.

[61]Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit,* p. 20.

The mid-1970s meant turmoil in the détente period. On the one hand, the trade-energy relations between Western Europe and Soviet Russia accelerated before 1975 primarily due to the oil crises and also to the political will. On the other hand, the gas negotiations in the second half of the 1970s, also called the Second Cold War, started in a tense period caused by three steps of Soviet Russia: deployment of intermediate-range missiles in Eastern Europe (1977); deployment of troops in Afghanistan (end of 1979); and intervention in Poland (1980). While these events brought Soviet-American relations to the freezing point, Western European countries insisted on the continuation of détente and did not want to abandon their gained benefits by taking the same measures as the U.S. against the Soviet Union. Disagreements within the Western Alliance gave an opportunity to the Soviet Union to implement a two-track policy. The aim of this strategy was to promote discord between the European countries and the U.S., supporting the European side and suggesting that the Europeans should rethink their reliance on the U.S. in terms of energy security.[62]

The second oil shock and its effects constitute the second aspect of external settings. Extended usage of gas instead of oil and climbing gas prices (after the oil prices) resulted in Western European countries' "desire to buy gas, willingness to lend and eagerness to sell equipment."[63] The Soviets were aware that the equipment manufacturers in the West needed orders from the Soviet side.[64] Though not many jobs were on the line (20,000 to 30,000 jobs in total were directly dependent on pipeline contracts), all of them were in key depressed industries.[65] This position was endangered by rapid change in worldwide interest rates, which started to increase and Western banks started to be less willing to lend to Eastern Europe from 1980 to 1981.[66]

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[62]Thane Gustafson, *op.cit*, pp. 5-7.

[63]*Ibid,* p. 8.

[64]*Ibid, pp.* 8,11.

[65] Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 29.

[66]Thane Gustafson, *op.cit*, p.11.

Besides the external factors effecting East-West energy relations, national issues such as energy and technology politics, foreign trade and the overall weak economic situation in the Soviet Union influenced the energy policies of that time. Construction of gas pipelines to Western Europe reflected a change in Soviet thinking. The Soviet elites supported decisions to make natural gas an export commodity.[67] Giving priority to natural gas instead of oil was important because of rising consumption levels and the prospect of hard-currency earnings. Thus, the inevitable positive decision came in July 1980 on the occasion of West German Chancellor Schmidt`s state visit to Moscow.[68]

With regard to foreign trade, Soviet foreign trade had been subordinated to domestic central planning since the 1920s. At the end of the 1960s, Soviet economists discovered new merit in the principles of comparative advantage and international specialization of the production, which needed greater exposure to the uncertainties of the world economy. This was not accepted by Soviet leaders of that time; yet, it brought new thinking into debates in the 1980s. The need for change in the assumptions and structures of foreign trade management came at the end of the 1970s when foreign trade turnover had grown to more than 10 percent of Soviet GNP.[69]

At the beginning of the 1970s in terms of the East-West energy relations, Soviet economic interaction with the West continued during the Cold War both legally and illegally. The peaks were in the 1970s when Soviet post-war productivity slowed and in the beginning of the 1980s when the economic growth rate was not higher than two percent. The Soviet Union faced economic difficulties due to three primary reasons. First, the growth of the working age population dramatically dropped. Second, difficulties in production and transport of energy and other

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[67]*Ibid.*

[68]*Ibid,* p. 10, 11.

[69]*Ibid,* p. 12.

resources increased. Finally, other problems arose from the Soviet bureaucracy and the system lacked flexibility to cope with issues of a modern economy.[70]

Rather than undertake major economic reforms, Soviet leaders preferred to handle the economic burden with imports from the West. As the US Central Intelligence Agency analysis indicates, the value of USSR hard currency import from 1970 to 1981 increased more than nine-fold in current prices and three-fold in constant prices. Soviet leaders succeeded in negotiating a range of buyback deals with the West, including the purchase of plants and equipment, financed at favorable rates and long-term capabilities[71] in exchange for Soviet raw materials and semi-manufacturing at prices set in accordance with a rising inflation level.

These imports played a significant role in many programs such as projects to increase energy production and ease transport. In the 1970s, the Soviet Union bought oil and gas equipment (drill bits, pumps, pipeline equipment) worth $5 billion. Besides the oil equipment from the US, most of the large-diameter pipe for gas pipeline construction was provided by Japan and Western Germany.[72]

In the second half of the 1970s, when Soviet economic difficulties increased, hard currency earnings, which were invested in necessary domestic shortages, declined.[73] In 1977, machinery and equipment imports decreased by approximately

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[70] Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 9.

[71] "If all official debt had been contracted at commercial rates, the Soviets would have had to pay $35 million more to the United Kingdom and perhaps $20 million more to Japan. Any West German subsidy was undoubtedly quite small because only one to three percent of exports to the USSR had been financed through West Germany`s AKA rediscount facility. When the Soviets demanded interest rates below market levels in Hermes-guaranteed credits, the German exporter usually covered the financing cost by charging higher price." *Ibid*, p.15.

[72] *Ibid*, p. 9, 11.

[73] Often government-guaranteed western credits were a significant item of Soviet imports. The range of their amount changed in time until 1980 as follows: $475 million in 1971-1973, $2 billion in 1975, $2.5 billion per year since 1978 and less than $2 billion by 1980. See, Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 14.

40 percent; such imports decreased further in the beginning of the 1980s.[74] According to OECD data, from 1977 to 1980, official credit commitments to the USSR constituted $305 million for oil and gas equipment ($299 million was from France) and $2.5 billion for pipe (mostly from Japan and West Germany, followed by France).[75]

The natural gas trade from the late 1960s resulted in increasing Soviet dependence on hard currency imports garnered by gas and oil exports. Energy output allocated for exports had increased since 1960; the level was 7 percent to 16 percent in 1980.[76] Export dependence of Soviet Russia rose after the oil crises; thus, negotiations in the 1980s changed in several ways. For instance, the Soviet Union proposed for the first time to build a gas pipeline for deliveries to the Western European market.[77] In 1981, the gas purchase agreements were signed with West Germany, French utilities and in 1982 with Austria's Ferngas. These agreements covered a period over 25 years and deliveries were to begin in 1987-1988, which was a manageable task due to the existing Soyuz export pipeline and existing East European transit routes.[78]

The aforesaid new, more sophisticated, three-part negotiation strategy came into force in the summer of 1980.[79] First, the Soviets singularly chose all other subcontractors and negotiated every supply contract separately, which is as is still done today. Previously, they dealt via one general contractor (German

[74] The hard currency squeeze of the USSR was caused by the situation of soft oil market (after two crises in the 1970s), unplanned expenditures on grain imports and on aid to Poland. See, Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 14.

[75] *Ibid*, p.15.

[76] *Ibid,* p. 12.

[77] Thane Gustafson, *op.cit*, p. 1.

[78] Central Intelligence Agency, 'The Soviet Gas Pipeline in Perspective,' *op.cit*, p. 19.

[79] Thane Gustafson, *op.cit,* p. 4.

Mannesmann). This change resulted in competition between equipment suppliers and savings up to 60 percent.[80]

The second feature concerned credit packages. In contrast to previous periods when one general contractor or Western supplier was chosen and it chose other subcontractors, the negotiation was held with each major supplier country separately. As in the previous case, competition between equipment suppliers, mainly from Japan, Germany, France and other major West European countries, pushed governments and banks to soften their terms and the total amount of offered credit was three times the total they actually needed, which added to Soviet bargaining power.[81]

Lastly, gas price negotiations began to be conducted differently. The Soviets found that they could obtain rates below the market rate by discussing not specific prices but the formula. According to the terms offered by European bankers, they perceived gas deliveries as an indirect form of security.[82]Since the price negotiation was not a zero-sum game, the bargaining was tougher than in other fields.[83] Russia had to make some concessions such as lowering "their demand for 100 percent parity link to crude to 50 percent, and then in November gave in to the Germans' insistence on 20 percent."[84]

European negotiations with Algeria about energy supplies alternative to the Soviet ones and distraction for the Soviet in a form of Poland crises,[85] both in the

[80]*Ibid,* p. 23.

[81]*Ibid,* p. 18-21.

[82]*Ibid,* p. 3.

[83]*Ibid,* pp. 27-28.

[84]*Ibid,* p. 29.

[85]An attempt of "peaceful revolution" took place in Poland, in 1981 and was suppressed by the Polish regime by imposing marital law across the country. See, Douglas J. MacEachin, 'US Intelligence and the Polish Crises 1980-1981,'*Central Intelligence Agency,* available at: https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-

early 1980s, caused the agreement to be postponed. The financial effects of this postponement were remarkable. The deal was far from the starting point of the Soviets in terms of price and change in basket of reference fuels, which led to alignment of the gas prices with the competing fuels. Though, the Soviets got what they needed and wanted, maintenance of their market share.[86]

The position of the CEEC in the Soviet energy perspective was significant. The main agreements with Western Europeans regarding gas deliveries to Europe, through the export pipeline from Orenburg, were proposed to be for the CEEC, not Western Europe.[87] For example, one of the major projects concerning the CEEC was constituted under the Yamburg Agreement (1985) and was about cooperation in the construction of energy facilities of the Yamburg natural gas field as well as pipelines to the western Soviet border and afterward to the GDR.[88]

Furthermore, its geo-strategic position as a transit region between two blocs, the main reason for secure energy deliveries to the CEEC seems to have been the militarily strategic. Ensuring energy deliveries to the CEEC at favorable prices was an agreeable cost for the maintenance of the Eastern Bloc. On the other hand, examples of decrease in oil deliveries to Poland in 1982, when the country was in socio-economic crisis, reveals different angles of Soviet strategy.[89] Usage of energy supplies as a political tool was not an unknown measure and should not be overlooked.

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monographs/us-intelligence-and-the-polish-crisis-1980-1981/index.htm(accessed on January 25, 2012).

[86]*Ibid,* pp. 33-34.

[87] Thane Gustafson, *op.cit,* p. 1.

[88]Verbundznetz Gas AG,'VNG Chronicle,' available at http://www.vng.de/VNG-Internet/en/1_Unternehmen/geschichte/chronik/ (accessed January 3, 2011) and Net4Gas, *op.cit,* p. 4. It was a five-year project with the aim of delivering 20-22 bcm of natural gas a year. See, Thane Gustafson, *op.cit.,* p. 44.

[89] Victor Merkin, 'Intra-COMECON Bargaining and World Energy Proces: A Backdoor Connection?,' *Comparative Economies Studies,*Vol. 30, No. 4, Winter 1988, pp. 42-43.

As well, according to East European analysts, the Soviet Union secured itself in the energy trade within the COMECON through a pricing mechanism (see 2.5.2). In brief, the prices of fuels exported to the CEEC were determined by a floating average formula and compensation projects. Both were used under different conditions of the world market:

> It appears that this system was designed to provide 'insurance' for the USSR and allow it to benefit in the environment of the either upward or downward trends in the world market[…].When the world prices trend down and the Bucharest formula [moving-average formula] ceases to generate the benefits expected […], the USSR begins to emphasize joint 'compensation' projects and, in effect, raises prices of fuels and raw materials by making the 'option to buy' more expensive and increasing the share of total energy deliveries provided under 'compensation' agreements.[90]

Besides the pricing mechanism, the Soviet Union pursued new strategy toward the CEEC in the mid-1980s, as it did toward Western Europe. After the fall of oil prices in 1986, the Soviet Union, as an oil producer and exporter, found itself in a disadvantageous position and realigned its energy relations to be led by bilateralism and secrecy, instead of unanimity within the COMECON. The CEEC were left to compete with each other to obtain the best conditions without knowing the position of the others. Thus, the Soviets reached their goal of separating the CEEC or preventing them from unifying against the Soviet Union, weakening their bargaining position and setting their own hands free in decision making within the COMECON.[91]

Finally, Gorbachev`s glasnost and perestroikastrategy in the second half of the 1980s tended to revise the existing relations within the Eastern Bloc. A higher level of political freedom given to the CEEC was accompanied by less financial support from the Soviet Union.

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[90] Victor Merkin, *op.cit,* pp. 33, 34.

[91] *Ibid,* p. 50.

2.5 Position of the Central and Eastern European Countries

The CEEC's position during the Cold War period was characterized by the COMECON Six's level of political integration and energy relations. Besides the political interconnection, the level and form of these countries' energy trade with Soviet Russia is to be explored. The first part of this section starts with a description of the political environment of the intra-COMECON relations and is followed by the determinants of the energy relations at that time.

2.5.1 Political Integration in the COMECON

The prior objective of the organization since the late 1960s was the establishment of the "single effective market with unified prices, free flow of [production] factors and harmonization of policies."[92] Integration was used in this context as a tool of developmental strategy with the aim of maintaining the current state of play, including unequal distribution of values and attributes. The maintenance with development strategy controlled by the USSR meant, in other words, a restriction of the CEEC's policy options.[93]

Central control in the CEEC arose from the Soviet regime in general. Nevertheless, even the central control by the Communist Party devices did not prevent the conflicts between elites, which emerged continuously at two levels: national and international (controlling Soviet elites and compliant Eastern European national elites). This tension generated two-sided pressure upon the CEEC elites, those who were caught between Soviet demand and internal demands for systemic change. However, these conflicts of interest were mostly neglected by a sticks and carrots instrument: The Soviet elites offered privileged positions to CEEC national elites in return for concessions regarding foreign interests. The elites had almost no chance to refuse Soviet offers. This kind of integration approach resulted in strengthening the position of pro-Soviet elites and weakening the position of the

[92] Rowland Maddock, 'Energy and Integration: The Logic of Interdependence in the Soviet Union and Eastern Europe,'*JCMS*, Vol. XIX, No. 1, September 1980, p. 21.

[93] Arpad Abonyi and Ivan Y. Sylvain, 'CMEA Integration and Policy Options for Eastern Europe: A Development Strategy of Dependent States,' *JCMS*, Vol. 16, Is. 2, December 1977, pp. 132, 133.

reformers and technocrats, which in the final stage could have had a negative effect on the bargaining position of the CEEC toward Soviet Russia. On the other hand, it should be noted that the COMECON Members rather emphasized sovereignty equality rather than diminish national sovereignty, which prevented, at least, the emergence of formal supra-national institutions and gave a space to the aligned countries, even if the informal penetration continued.[94]

The CEEC were established on different economic conditions, but their focus on domestic surpluses and scarcities, the need to cope with limited resources and old technology, and a low-skilled labor force and management resulted in production of inferior and non-competitive goods for the Western market; therefore, there was a low volume of foreign trade. Hence, these goods created a surplus for the CEEC. These countries could not enter an intensive phase of development and remained dependent on technology imports from the West in exchange for primary goods and basic manufacturing. More developed countries such as Hungary, Czechoslovakia, GDR and Poland offered their low quality consumer goods and machinery to the USSR in exchange for essential raw materials for industrialization. In general, the CEEC's development was dependent on Soviet Russia's inputs, yet Soviet Russia's development was not, which gave the Soviets significant freedom in decision-making within the COMECON. This superiority was enhanced by the strategy of the USSR, based on bilateral relations with each member, placing the CEEC in a disadvantageous position.[95]

Along with the 1970s oil crises, awareness of the dependence on the USSR was heightened among the CEEC countries:

> In return for secure supplies of raw materials it has had to adjust its national development plans to large-scale, capital intensive projects. This new situation has

[94] *Ibid,* pp. 134-137.

[95] *Ibid,* pp. 139-140.

> hardly been accepted gracefully by smaller CMEA [COMECON] members, but they have little choice.[96]

Despite all these circumstances, the integration level within the COMECON remained low. The main reason could be found in different perceptions of the optimal integration level. While Soviet Russia desired a higher level of integration, the CEEC preferred to be part of formal cooperation and take an advantage of veto right within the organization.[97] However, the implementation of the Comprehensive Programafter 1971 brought structural differences to the organization. The unanimity rule harmonized with the interested party principle, which allowed for the possibility to conduct cooperative strategies with a limited number of members. This system gave the CEEC an opportunity to decide whether to be a part of the venture or a project or to refuse it.[98]

2.5.2 Energy Relations in the COMECON

Small quantities of natural gas had been exported to Poland since the late 1940s[99] while Ukrainian gas fields were used (primarily in the 1950s) until its production declined and shifted to newly discovered fields.[100] Nevertheless, the engine of the Eastern European economies (except Romania) was mainly coal instead of oil or natural gas. Even in 1970, when shipments of larger quantities of natural gas to the CEEC had already started, 70 percent of the total energy consumption was still derived from coal. This was also when the massive switch from oil to gas began within the scope of modernization.

The economic decline in Eastern Europe starting in the 1960s is another significant feature of this era. The solution to the crises was seen in the intensive

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[96] *Ibid,*p. 147.

[97] Rowland Maddock, *op.cit,* pp. 30-31.

[98] Arpad Abonyi and Ivan Y. Sylvain, *op.cit,* p. 152.

[99] Jonathan Stern, 'Natural Gas in Europe – Importance of Russia,' *Oxford Institute for Energy Studies*, available at:http://www.centrex.at/ru/files/study_stern_e.pdf (accessed on December 26, 2011), p. 1.

[100] Simon Pirani, *op.cit,* p. 95.

growth strategy, which required modernization, an increase in productivity and technological progress. Besides the energy flow from the USSR, capital and technological support from the Western sources was needed. The idea was simple: borrow from the West, invest those funds in capital and technology imports, modernize the economy and finally, increase exports to the hard currency countries to payback debt. Nevertheless, CEEC indebtedness increased ($50 billion in 1979) and energy crises in the international arena along with a low level of technological development in the region and inferior CEEC products greatly diminished the prior export plans and economic growth strategy.[101]

On the other hand, attempted modernization and industrialization increased imported energy resources. Between 1950 -1975, oil and natural gas imports from the USSR increased at an average annual rate of 12 percent. According to Maddock, in the 1970s, the USSR provided for that decade 90 percent of the energy resources in Bulgaria, GDR and Hungary and 50 percent in Czechoslovakia.[102] These statistical data underline the importance of the USSR in the CEEC economies.[103] The natural gas demand was rising constantly from 12.7 bcm in 1960 to 86.2 bcm in 1990.[104] Soviet commitments to Eastern Europe prompted Soviet leaders to sustain energy flows, even if it meant reducing the deliveries to Western Europe (in 1979, export amounts declined 20 percent) and even if it was partly compensated by higher prices.[105]

The energy issues played a different role in the COMECON. CEEC's dependence created a space to pursue joint exploitation of natural resources and

[101]Political consequences of the economic downturn appeared, for instance, in Poland in 1980 and ended with the resignation of the prime minister and several senior economic officials. See, Rowland Maddock, *op.cit*, p. 23-25.

[102] These rates include both, natural gas and oil consumptions.

[103] Rowland Maddock, *op.cit,* p. 22.

[104] Jonathan Stern, *op.cit,* p. 12.

[105] Rowland Maddock, *op.cit,* p. 30.

encourage members to constitute a unified market as another goal of the integration process. Most of the major energy projects, including production and transport (e.i. Soyuz, Bratrstvo gas pipelines), were provided by the CEEC. Their investment accounted for approximately $5 billion since the late 1960s until 1980. As Maddock notes, the Polish prime minister announced in 1980 that, "each East European country would allocate up to 5 percent of its total investment budget to long term energy related projects in the USSR."[106] The table of the COMECON Six and individual countries' natural gas imports from the USSR in years 1961-1980 (except Romania, which was not an importer from the USSR until 1980) is given below in Table 2:

Table 2:[107]

COMECON 6	1. Column: Natural gas imports as a **%** of total gas imports 2. Column: Natural gas imports from the USSR (mcm)

Year	%	mcm
1961-65	n.a.	312
1966-70	n.a.	1586
1975	98	11291
1979	97	22193
1980	n.a.	30100

	Bulgaria		**CSSR**		**GDR**		**Hungary**		**Poland**	
Year	%	mcm	%	mcm	%	mcm	%	mcm	%	Mcm
1961-65	-	-	-	-	-	-	-	-	100	312
1966-70	-	-	100[e]	771[b]	-	-	-	-	100	970
1975	100	1185	98	3694	100	3302	75	601	100	2509
1979	100	4600	92	6770	100	4330	92	2500	100	3993
1980	100	6000[p]	n.a.	8200	n.a.	6500	n.a.	3600	n.a.	5600

[e]estimated **[p] projected** **[b]1967-1970**

The increase in the low-priced energy supply to Eastern Europe became burdensome for the USSR. Maintenance of the subsidy continued until 1974. Later

[106] *Ibid,* p. 31.

[107] Witold Trzeciakowski, 'Energy: Prospects and Policy Issues in Intra-CMEA Relations,' *International Institute for Applied Systems Analysis,* August 1982, Austria, pp. 10-12.

on, a revised pricing system[108] creating a new peculiarity in CEEC-USSR energy relations had been developed. The new pricing formula used in COMECON since 1975 caused an increase in energy prices in intra-COMECON relations.[109] This mechanism had two determinants. The first was the floating average, or so-called Bucharest formula. Price setting by this formula took into account the average world prices of the five previous years. The COMECON energy prices calculated in this way were updated each year. Second were the compensation projects, which refer to a payback system based on quid pro quo - construction of energy related facilities in exchange for energy resources.

The linkage among gas prices, compensation projects and delivered gas was highly complex. The CEEC paid for option to buy fuel at the COMECON price in the future, not for the fuel itself. Therefore, the final price was higher than the declared COMECON price. The Polish case serves here as an example to clarify the situation. The cost of the option to buy, basically the "difference between the actual cost of the project and payments received from the USSR, divided by the amount of fuel generated by the agreement,"[110] was calculated and additional interest on the cost of the option to buy was added. In this case, Poland accepted an additional 10 percent interest. Thus, in 1974, 52.8 percent of Poland's payment was for cost of the option to buy and 47.2 percent was for the nominal COMECON price. The percentage devoted to the cost of the option to buy, at the full price, decreased to 30.5 in 1980 and 24.8 in 1982. The decision to be made by each CEEC country was whether or not to undertake construction or to pay directly to other suppliers in the world market and at market prices. The domestic and global economic situation, conditions of the world energy market and relations with Soviet Russia simplified the decisions.

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[108] Information in this section is mainly taken from Merkin`s analysis; see, Victor Merkin, 'Intra-COMECON Bargaining and World Energy Prices: A Backdoor Connection?,' *op.cit*, pp. 24-51.

[109] Rowland Maddock, *op.cit,* p. 23.

[110] Victor Merkin, *op.cit,* p. 27.

The catch of the compensation projects was at the bilateral dimension. The agreements were constituted bilaterally leaving wide powers to the USSR, which could change the price of the option to buy whenever and however the USSR wanted to do so. The Soviets could change the quantity of energy to be delivered in accordance with the changes in ordered construction. These conditions worsened the CEEC's bargaining position and heightened the countries' reluctance to share information about deals (especially those that thought they had the best one). Hence, the USSR's position strengthened and a Soviet type of integration developed.

With regard to the aforementioned pricing mechanism, it had a double effect. Between 1974 and 1982, when world energy prices were high as a result of the crises, even full COMECON prices were below world prices. Since 1982, the USSR started to implement an energy policy based on a switch from oil to gas, not only in the USSR, but also in the CEEC.[111] After 1982, especially in 1987 onward, a decrease in world market prices affected the nominal COMECON prices. As a result, the full COMECON prices became higher than the market prices.

It can be argued that this was the main reason for the CEEC's hesitation toward the Yamburg Agreement (1985). These reservations were handled by Soviet Russia successfully by a known strategy. Romania had been punished for its reluctance toward Soviet led policies for years with low deliveries of oil and rewarded for the acceptance of the Yamburg Agreement with an increase of the same subsidy. At the same time, Bulgaria`s hesitation to sign the agreement led to oil cuts by Russia with the warning that "further procrastination was intolerable and Bulgaria should either get on board with Yamburg or fend for itself in the world oil market."[112] A deal with Bulgaria was made shortly after in March 1986.[113]

[111] Thane Gustafson, *op.cit,* p. 44.

[112] Victor Merkin, *op.cit,* p. 35.

[113] *Ibid.*

However, acceptance of the agreement caused greater financial burden than previous projects. According to the data from 1986 to 1990 presented by Victor Merkin, Czechoslovakia[114] submitted 895 million transferable rubles (which nearly equals the expenditures from 1971 to 1980), GDR 855 million rubles (triple the previous expenditures of the Soviet gas industry), and Poland 400 million rubles. Other countries invested almost the same amounts as GDR and Czechoslovakia. Thus, according to the study released in 1986 by the Institute of Economics of the Polish Science Academy:

> Instead, settlements for raw material sales in world market prices and without additional conditions involving our investment contributions would be the best solution for us […] The latter requirement could be realistic if our products exported to COMECON countries achieved world quality levels.[115]

The "Soviet tank factor," maintaining Soviet hegemony by not allowing any challenges to the single Party rule, disappeared with Gorbachev`s aforesaid policy of glasnost and perestroikain the late 1980s. The revision of Soviet relations with the CEEC led to the dissolution of the Soviet Union and restructuring of relations in the 1990s.

2.6 Conclusion

Even if the Western European countries were not so dependent on Soviet energy commodities,to make sacrifices on security interests, as the U.S. used to think, the energy supplies and East-West trade, in general, were important to Western Europe. Approximately 300 thousand jobs were directly dependent on trade with the Eastern Bloc. The 8.8percent unemployment rate in 1981, the highest level since 1946,[116] along with the aforesaid factors, shows that cutting off East-West trade

[114]In the case of Czechoslovakia, total investment in the energy industry in the former USSR, including Russia, Ukraine and Kazakhstan in 1975-1999 accounted for 72.8 billion Czech crowns in exchange for 40.26 bcm of natural gas. See, Net4Gas, *op.cit,* p. 5.

[115] Cited in Victor Merkin, *op.cit,* p. 32.

[116] Time,'Go-ahead for the biggest East-West deal ever,' *op.cit*, p. 54.

would have meant serious economic and social consequences for Western Europe rather than the US.

Furthermore, from the European view, détente was the great opportunity to create positive economic linkage to influence the behaviour of the USSR and the Eastern Bloc. However, East-West relations were based on mutual benefit: energy supply security in return for hard currency earnings with the advanced technology imports. Even the political justification for this relation was complementary. One side believed in power of the influence; the other in decoupling via economic measures.

The CEEC's position concerning the perception of the Western alliance was ambivalent. Lack of understanding from Western Europe and the US was partially compensated by the West Germany`s Ostpolitik. Interactions with the Western Bloc created presumptions of partial independence from Soviet Russia.

The increased dependence of the Soviets on hard currency earnings in the late 1970s brought changes in foreign trade policies with the Western European countries and the CEEC. Negotiations through general contractors in Western Europe and the unanimity rule in COMECON were overshadowed by bilateral negotiations and secret agreements. This strategy gave the USSR the partial power of divide and rule and restrained the CEEC's ability to maneuver. As a result, the USSR managed to make advantageous deals and secure its own economic interests, even in relations with the CEEC. But the CEEC countries' economic difficulties, dependence on the Soviet financial supports along with the need for Western imports increased in time. Despite the negative effects of the policies such as foreign trade strategy and energy pricing mechanism for the Eastern Bloc as a whole, it should be recalled that the CEEC was a primary concern of Soviet Russia regarding energy supplies until the late 1980s. The latter is going to be changed after dissolution of the Soviet Union.

CHAPTER 3

NORD STREAM AND SOUTH STREAM PROJECTS IN CHANGING ENERGY STRATEGIES

3.1 Introduction

The aim of this chapter is to explore the position of the Nord Stream and South Stream projects within Russian and involved European actors' energy strategies. The first part of this chapter examines changes and continuities in Russia's energy strategies since 1992 to the present with regard to foreign relations and trade, particularly pipeline politics and diversification. Special emphasis will be placed on the Nord Stream and South Stream projects that are explored in second part of the chapter. Finally, the role of these projects in the context of Russia's partners Germany's and Italy's energy strategies will be analyzed in the last section.

3.2 Developments in Russian Energy Strategy and Foreign Pipeline Politics

The collapse of the Soviet Union brought structural, institutional and economic changes. Therefore, the change in Russian energy strategy can be viewed from at least two different periods. The first one is the 'transition period,' which is considered to be liberal with oligarchic connotations. President Boris Yeltsin and his advisors set the main points of the energy strategy up to 2000 when Vladimir Putin became Russia's president and started to restructure state policies and institutions. The transformation lasted about four years. This period overlaps with the beginning of the second period strengthening the state control, which dates to as late as 2004. The aim of this section is to show continuity and/or difference in energy strategies and pipeline politics of the Russian Federation and to analyze the fundamental basis of the objectives of the South Stream and Nord Stream natural gas pipeline projects.

3.2.1 Transition Period and Liberal Model (1992-2004)

Decline in the Soviet economy, up to a 40 percent, is commonly considered one of the consequences of the Soviet Union's collapse. Seen from the perspective of the energy trade, the economic crises lowered domestic natural gas demand and exports to the Commonwealth of Independent States (CIS) declined as well. Despite the economic recession and decline in demand, decline in production remained low (8 percent). The natural gas surplus in the 1990s thus could be allocated for export, which strengthened Russia's position in its way to becoming the world's largest natural gas exporter.[117] Meanwhile, the world oil and gas prices hit a low point, which meant for Russia a decrease in needed hard currency income and prevention from a blockage of necessary energy sector investments. Still, the relations between Europe and the Russian Federation continued to strengthen and in the mid-1990s, the EU became Russia'slargest trade partner with the lion's share allocated to the energy trade.[118]

New energy related strategies and policies were devised in tough economic and political circumstances by Yeltsin's administration and advisors. Particularly two of these men determined a new trajectory for the Russian Federation: Yegor Gaidar,[119] second Prime Minister of the Russian Federation and author of the shock therapy reforms, and Anatoliy Chubais, influential business authority in Yeltsin's administration. Both believed in the competition of private energy companies in the free market. Pursuing this idea, they ensured the abolishment of the old Soviet

[117] David G. Victor and Nadejda M. Victor, *The Belarus Connection: Exporting Russian gas to Germany and Poland,* James A Baker III Institute for Public Policy, Stanford University, May 2004, p. 13.

[118] Sijbren de Jong and Jan Wouters, 'European Energy Security Governance: Key-Challenges and Opportunities in EU-Russia Energy Relations,' *Leuven Centre for Global Governance Studies*, June 2011, p. 6.

[119] After Yegor Gaidar, Victor Chernomyrdin, the founder and chairman of Gazprom, became prime minister in 1992 and officiated until 1998, which shows how the government was mingled with the most prominent energy company.

industrial ministries and set up a new Ministry of Energy and Fuel to formulate state's energy policy and manage related enterprises.[120]

It is worth mentioning that change started just before the collapse of the Soviet Union. In 1989, the USSR Ministry of the Gas Industry coordinating the production and transmission of natural gas had been transformed to the gas concern named Gazprom[121] working as a state committee. Since then, Gazprom aimed to build close connections with the companies in European downstream to obtain better information on the European pricing mechanism and to have greater access to the European gas market.[122] In 1992, after the USSR's dissolution, a presidential decree reorganized Gazprom into a joint stock company 'RAO Gazprom' and stakes of this company were divided among Belarus (1.5 percent), Ukraine (9.5 percent) and Russia (89 percent). The Russian part of 'RAO Gazprom' underwent three years long of a privatization process through which it evolved into the open joint-stock company 'OAO Gazprom.' The state could hold at most a stake of 40 percent, so government owned stakes were sold mainly to the employees of the company, literally managers and a minority was sold to foreign investors.[123] Indeed, the de-monopolization and restructuring of Gazprom was part of the wider concept on natural monopolies, which was one of the Yeltsin administration's old-new targets. Another part of the structural changes in the energy sector, significant regarding energy strategies of the state, was the establishment in 1998 of the State Institute for

[120] Anders Aslund, 'Russia's Energy Policy: A Framing Comment,' *Euroasian Geography and Economics*, Vol. 43 Is. 3, 2006, p. 323.

[121] Gazprom, 'About Gazprom, History, Chronicle, 1989-1995,' available at: http://www.gazprom.com/about/history/chronicle/1989-1995/ (accessed on March 15, 2012).

[122] David Dusscault, 'Europe's Triple By-pass,' *Asia Europe Journal,* Vol. 8, Spring-Verlag 2010, p. 382.

[123] David G. Victor and Nadejda M. Victor, *op.cit,* pp. 13-14.

Energy as a coordination center ensuring the analysis and long-term forecasts in accordance with the country's social and economic developments.[124]

These steps in the transition period welcomed the 'liberal or oligarchic model,'[125] as Anders Aslund refers to it. Objectives of this model, applied between years 1992-2004, were briefly to de-monopolize[126] the energy sector, liberalize the prices and allow foreign investors to enter the industry.[127] The first official energy strategy was developed with respect to these objectives and was parallel to general policy changes. As early as 1992, the government adopted the 'Energy Policy Concept of Russia in the New Economic Condition.' This newly composed energy policy stressed willingness to safeguard Russian independence and security through reliable energy supplies and to enhance the state's energy export potential. Two years later, the Ministry of Fuel and Energy proposed 'Energy Strategy for Russia', which was subsequently adopted by the government.[128] Later, in 1995, President Yeltsin announced and government approved the 'Major Provisions of the Energy Strategy of Russia up to 2010.'

Transit Issue: First Diversification Attempts on Their Way

The collapse of the Eastern Bloc did not bring about only institutional and policy changes. Along with newly created states, the old unified system of interests concerning the energy sector, including a unified gas pipeline network, fractured[129] and the concept of a transit country, a corridor for a pipeline between a producer and

[124] Energy Strategy of Russia for the Period up to 2030, *Ministry of Energy of the Russian Federation,* Moscow 2010, p. 3.

[125] Anders Aslund, *op.cit,* pp. 323-234.

[126] In 2004, the Russian share accounted for 38.5 percent and foreign investors had 11.5 percent. See,David G. Victor and Nadejda M. Victor, *op.cit,* pp. 13-14.

[127] Anders Aslund, *op.cit,* p. 323.

[128] Michael Fredholm, 'The Russian Energy Strategy and Energy Policy: Pipeline Diplomacy or Mutual Dependence?,' *Conflict Studies Research Centre,* Defence Academy of the United Kingdom,September 2005 Oxford, pp. 2-3.

[129] David Dusscault, *op.cit*, p. 381.

a consumer gained importance. The transit country holds certain bargaining power; it can demand higher transit fees or lower cost off-takes. Depending upon the political conjuncture, the transit country can use its strategic position even as a political tool.

One such examples is that of a main gas pipeline connection between Russia and Germany. When the first pipeline was to be constructed at the turn of the 1960s and 1970s, West Germany asked Russia to bypass East Germany to prevent energy supply interruptions. Thus the connection between the Soviet Union and Western Europe was provided through Ukraine,[130] Belarus and Czechoslovakia. Yet, with the system change in the early 1990s, the bargaining power changed place. The new situation brought uncertainties concerning the secure natural gas supplies. However, doubts about Czechoslovakia, later the Czech Republic and Slovakia, proved to be false since these countries expressed a willingness to be part of the West via membership in the EU and NATO. Commitment of this kind prevented both countries from disrupting energy supplies from the Russian Federation to the West, as they did not want to harm the interests of their new allies.[131]

The same reservations were held toward post-Soviet countries. The internal political relations and trade started to be a part of foreign relations and trade. As well, security of the natural gas supplies started to be dependent on new transit countries, particularly Ukraine and Belarus. Especially Ukraine takes a significant position in this context. About 80 percent of Russia's gas export goes through Ukraine with the Transgas system continuing to Slovakia, Austria and Italy or directly to the Czech Republic.[132] The extent of the change is vivid in natural gas export statistics, which show a 60 percent increase in Russian natural gas export in years 1990-1992, mainly caused by reclassification of the internal transfers into the export.[133]

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[130] Yuli Grigoryev, 'The Russian Gas Industry, Its Legal Structure, and Its Influence on World Markets,' *Energy Law Journal,* Vol.28, Is.125, 2007, p. 136.

[131] David G. Victor and Nadejda M. Victor, *op.cit,* p. 12.

[132] *Ibid,* p. 19.

[133] *Ibid,* pp. 12-13.

Ukraine's status change also brought so called 'gas wars' between Ukraine and the Russian Federation that started as early as the 1990s. Ukraine's inability to collect gas prices from the domestic customers arose in non-payment to Russia and a run up of its debts. Within this scenario, the first incident concerning interruption of the gas supplies occurred as early as October 1992 with the excuse of strong weather conditions and the fall in gas supply from Turkmenistan. This situation damaged Russia's reputation and its position in trade relations with European countries that wanted to diversify their supply base. Russia needed to secure an increased amount of gas flows to Europe; however, the Transgas system was fully used and the market on the edge of the system was glutted. Thus, Russia sought alternative ways to get its gas flowing to Europe. One of the possibilities was the northern connection to Finland, in operation since 1974.[134] In this case, the interconnector was both dated and the Finnish gas market was not virgin any more. So, expansion to Scandinavia was not attractive. In the meantime, there was a proposal to build a pipeline under the Baltic Sea (see 3.2.3), but Gazprom advocated for the so called 'Yamal-Europe' pipeline that by-passes Ukraine, goes through Belarus and serves Poland and Germany. This pipeline, called by David G. Victor and Nadejda M. Victor the 'Belarus connector,' remained incomplete within the scope of the original project since demand on the Polish side had not been as high as it had been expected by Gazprom officials (see Chapter 4).[135] Although a traditional ally, Belarus proved to be a tough trade partner as well since the country had had difficulties to pay increasing gas prices and its indebtedness rose especially in the 2000s.[136]

[134] Northern line and exploration of the Yamal field were in discussion since the late 1970s, but in 1981 the interest shifted to an easier target (financially and technically) Urgenoi field and then Yamburg field. In the late 1980s the state ministry financed exploration of the Yamal field, but it was once more suspended in 1989, when the ministry was transformed to Gazprom. See, David G. Victor and Nadejda M. Victor, *op.cit,* pp. 20-21.

[135] *Ibid,* pp. 21, 26.

[136] Lindsay Wright, 'Pipeline Politics: Russia's Natural Gas Diplomacy,' *Pipeline and Gas Journal*, August 2009, Vol. 236 No.8, p.2, available at: http://www.pipelineandgasjournal.com/pipeline-politics-russiapercentE2percent80percent99s-natural-gas-diplomacy (accessed on February 22, 2012).

There were three other alternatives discussed in the 1990s to diversify energy routes and/or push higher gas volumes from Russia to Western Europe. The first project came on the agenda when the first disputes with Ukraine appeared and were discussed in years 1992-1995. The original idea was to connect existing pipelines in Belarus (Northern Lights) with Slovakia bypassing Ukraine. The relatively cheaper solution ($1 billion) had two major disadvantages since the length of the pipeline would have been short. First, it would not have provided any access to new markets and second, there was no capital to realize the plan. Customers in Germany, as the main Russian energy partners, preferred either to diversify the source or obtain higher volumes of gas and the possibility of transit risk was not a task for the German companies to solve. The second option was to increase gas flows through Ukraine, Slovakia and the Czech Republic. The main soft spot of this project in Gazprom's view was the issue of third party access since the German market did not allow third parties to join the market at that time and the fact that Germany did not have capacity to take higher volumes of gas from the line coming from Czech Republic. Both these factors, supported by Ukraine's unreliability as a trade partner and transit country caused the project to be shelved. The possibility of this projects' revival came in the first years of the 2000s, when Ukraine's political environment seemed to settle and Germany, Russia and Ukraine agreed on a consortium (see below). The third discussed option was the costly trans-Baltic pipeline connecting the Scandinavian grid, UK and Germany directly.[137] Perceived to be impractical in the 1990s, it evolved into the Nord Stream, as it is known today (see 3.2.3).

From the business perspective, emergence of the new transit countries led Gazprom in the early 1990s to increase transit revenues, or in other words decrease transit spending. As a part of this strategy, the company capitalized upon opportunities of the privatization era in post-Soviet states well and purchased stakes in gas distribution and marketing companies in the CEEC. One of the main targets was Ukraine, with its annual nameplate input capacity of 280 bcm, output capacity of

[137] David G. Victor and Nadejda M. Victor, *op.cit,* pp.29-32.

175 bcm and being the main transit route of Russian gas to Europe.[138]On the domestic scene, it took control of the Soyuzexport and managed to concentrate almost all Russian gas exports under itself in the early 1990s. This had incrementally evolved, resulting in the dominance of Gazprom in the Russian gas sector. The company's control over the pipeline network and low prices did not allow independent producers to enter the market, except those such as Itera from Florida with political connections to Gazprom and therefore also to the pipeline network.[139] Another important strategy of Gazprom at this time was to achieve a significant profit increase by raising the prices and volume of the exports to the West, even to overseas via liquefied natural gas (LNG), or to China or Korea. None of these plans was accomplished due to various reasons, starting with lack of technology and capital, in the case of LNG, and ending with the ignorance of the southeastern potential clients. Gazprom had to rely on its existing pipeline network with a connection to the former COMECON Members. Other viable and attractive connections[140] were considered pointing toward Yugoslavia, Greece and Turkey.[141]

3.2.2 Consolidation of New Energy Strategies under Vladimir Putin's Tenure

Vladimir Putin's takeover of Yeltsin's position in 2000 promised changes in politics, primarily, strengthening role of the State. The economic recovery and rising energy prices since 1999 gave a clue to the economic waxing of the federation; however, dependence on sustainable energy exports remained vital. On the European side, the high energy prices, access restrictions to Russia's energy market, 40 percent dependence on Russian gas and growing demand of the industry headed the EU toward new strategies to secure energy supplies. This was coupled with the rise of

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[138] Simon Pirani, *op.cit,* p. 109.

[139] David G. Victor and Nadejda M. Victor, *op.cit,* pp. 14-15.

[140] Gazprom established 'Prometheus Gas' in Greece and proposed the Blue Stream project in 1997, a direct connection between Turkey and Russian Federation. See,David G. Victor and Nadejda M. Victor, *op.cit,* p. 17.

[141] David G. Victor and Nadejda M. Victor, *op.cit,* pp. 16-17.

energy prices due to War in Iraq that resulted in strengthening of the dialogue with the Russian Federation.[142]

New circumstances made it necessary to review the previous energy strategy and thus, the State Energy Institute and Council of experts under the Ministry of Fuel and Energy prepared a renewed version of energy strategy, known as 'Major Provisions of the Energy Strategy of Russia for the Period up to 2020.' This document was adopted by governmental resolution on November 23, 2000.[143] Since that time, energy policies and strategies evolved toward a re-monopolization of energy sector under state control. The model is based on attracting market capitalization that welcomes foreign investments where the investors can obtain only minority share since their duty is to drive up the price. Contrary to Yeltsin's liberal model, the new model put an emphasis on state control and re-monopolization of pipelines and infrastructure by taking control of new oil and gas fields hindering the property rights of both domestic and foreign shareholders. [144] Within this trajectory, Gazprom became gas monopoly in 2006 and on April 2008 adopted law 'On procedures for foreign investments in companies of strategic significance for national defence and security' that complicates foreign investments in the energy sector. According to this code, companies willing to invest in 'strategic sectors' have to obtain prior government approval given by the Russian competition authority or in case of key decisions by governmental commission under the chairmanship of Vladimir Putin, who was the prime minister at that time. Lawmakers mentioned 42 strategic companies to differentiate those of 'strategic importance' and that includes companies involved in oil, gas and other natural resources and transportation

[142] Sijbren de Jong &Jan Wouters, *op.cit,* p. 8.

[143] Energy Strategy of Russia for the Period up to 2030, *op.cit,* p.3.

[144] Anders Aslund, *op.cit,* p. 324.

activities, such as pipelines. The exception is given to strategic subsoil companies whereby the Russian Federation owns over 50 percent of the voting shares. [145]

Three companies held a significant position in state control over energy issues including the infrastructure: Gazprom (gas), Transneft (oil) and Unified Energy Systems of Russia (electricity). Other independent companies in the country were led by economic reasons though their success depended on the willingness of the pipeline operators to transport their commodity. Putin presented his opinion on state control over the energy infrastructure as late as October 2003 to German Chancellor Gerhard Schröder during his visit, cited by Michael Fredholm as, "The gas pipeline system is the creation of the Soviet Union. We intend to retain state control over the gas transportation system and over Gazprom. We will not divide Gazprom. And the European Commission should not have any illusions. In the gas sector, they will have to deal with the state."[146] A year later, in April 2004, he clarified the boundaries of the relation between private investment and state control saying, "At the moment I consider there are no grounds for the state to give up its control over pipeline transportation. But this does not hinder private investment, which will be welcomed… Private investment is possible with continued state control and state ownership of pipeline transport."[147]

In 2003, when significant steps toward the re-monopolization of the energy sector under the state control transition had been made, the government approved the first official Energy Strategy of Russia for the Period up to 2020. The aim of the Russian Federation in this strategy was to become 'substantive member of the world energy market' instead of being solely a supplier of raw resources. The strategy also

[145] Christian Cleutinx and Jeffery Piper, 'The EU-Russia Energy Dialogue,' in Katynka Barysch (ed.), *Pipelines, Politics and Power: The Future of EU-Russia Energy Relations,*Centre for European Reform, 2008 London, p. 29. See also, Law on Strategic Foreign Investment, *Russian Law News,* available at:http://www.russianlaws.com/newsdetail.aspx?news=7054 (accessed on March 15, 2012).

[146] Michael Fredholm, *op.cit,* p. 9.

[147] *Ibid.*

indicates being a 'stable and reliable partner' for European countries and the world. This means providing energy supply security of partner countries by development of common energy transport infrastructure. Pointing to transit problems, Russia envisaged participation of Russian energy companies in international gas and oil transport projects with Europe and Asia. However, in the forthcoming 20 years, the Central and Western European energy market is still considered as the largest market with which to trade.[148]

The year 2004 became turmoil in Russia-EU energy relations since some post-communist countries in the CEE region became EU Members and thus, EU's dependence on Russian energy resources significantly increased. By this time, economic recovery and strengthening of the Russian state brought a confidence in foreign policies of the federation. Russia did not accept the Europeanization through adopting the EU's legal norms and caused procrastination of already accepted regulations by the former government, such as Partnership and Cooperation Agreements (PCA) and the concept of Energy Dialogue. Another dispute arose from Russia's increasing power and influence in the region. Its show of power in Chechnya and reaction to the 2004 pro-European and anti-corruption movement in Ukraine called the Orange Revolution caused political discrepancies between the two energy partners.[149] Especially political development in Ukraine became a serious issue due to its strategic position.

Russia first attempted to gain ownership or management control of the Ukrainian transit network to secure its own deliveries to Europe. These attempts started in 1991 and failed due to resistance of Ukrainian governments.[150] As an alternative step, the Russian, German and Ukrainian presidents launched a new

[148]The Summary of the Energy Strategy of Russia for the Period of up to 2020, *Ministry of Energy of the Russian Federation,* Moscow 2003, p. 12, available at: http://ec.europa.eu/energy/russia/events/doc/2003_strategy_2020_en.pdf (accessed on March 15, 2012).

[149] Sijbren de Jong & Jan Wouters, *op.cit,* p. 13.

[150] Simon Pirani, *op.cit,* p. 109.

initiative, which was the establishment of the Russo-Ukrainian pipeline consortium as a management entity for the transport system. This consortium was set up in 2002, but it remained ineffective since "Gazprom pressed for it to take over the system a concession basis, Naftogaz refused and the nature of German participation could not be agreed."[151] Interestingly, Ukrainian President Kuchma was in favor of making concessions to Russia regarding ownership and management of the pipeline network, even in 2003. Nevertheless, he met strong opposition, which strengthened during and after the Orange Revolution.

In 2004, Russia attempted to constitute a single economic space that included Ukraine and other CIS countries. This step created a struggle with a simultaneous European strategy on integrated European economic space in the same region. The EU's goal essentially had been to safeguard free flow of capital, goods and services through neo-liberal restructuring of the region. Thus, the created integrated European economic space would undermine the Russian hegemony in the region, which would avoid direct confrontation and secure the energy flows. Yet, the Russian Federation attempted to create an economic linkage between itself, Kazakhstan, Belarus and Ukraine and establish a single economic space. This would give Russia leverage over the EU concerning energy issues and prevent U.S. presence and influence in the region.[152] The Ukrainian pro-European Orange Revolution protest wave changed the perceptions. Ukraine being inclined toward Europe prompted Russia to intervene using energy to force a change of attitude in the Ukrainian policy. This continued until the 2008 Russian-Georgian conflict after which Russia underwent re-consolidation.

Following the Orange Revolution, Gazprom replaced the Energy Transportation Corporation (ETG) with RosUkrEnego, an intermediary company reselling Turkmen gas, in which Gazprom owned 50 percent. As a second step,

[151] *Ibid,* pp. 101, 115.

[152] Mustafa Türkeş, 'Contested Hegemonies in the Black Sea Region,' *Current Problems of InternationalRelations*, L. V. Hubersky (ed.), Vol. 61, Part 1, Kiev National University "Taras Shevchenko" Institute of International Relations, Kiev 2006, pp. 35-37.

Gazprom gained significant concessions from Ukraine in not buying Turkmen gas directly, but only via Gazprom export. Lastly, the Russian company suggested a price increase from $50/mcm first to $160/mcm and at the very last day of year to $230/mcm with a threat to standoff. As a result, gas flows to Ukraine and further to the Gazprom's Western customers were delayed due to the lower pressure in the network system from January 1 to 3,2006.Parties settled the dispute on 4 January 2006 by corporate agreement envisaging a modest price increase for Ukraine, $95/mcm[153] by mixing expensive Russian gas with cheap gas from Kazakhstan and Turkmenistan.[154] Parties came to an agreement on trading arrangements that changed in favor of Gazprom, including removal of the gas-for-transit barter system.[155]

At the same time, Russia attempted to secure the Belarus string, the second major connection to Europe, by promising cheap gas. This was both a financially and politically costly step due to an uncompetitive economy of the state and since President Lukashenko was perceived in Europe as the last dictator. Close relations with Russia enabled Lukashenko to resell cheap Russian gas at market prices to maintain his own popularity and Soviet era social programs.[156]

Russia used its dominance in energy possession nearly 60 times since 1991. There were several interruptions of oil and gas supply during Yeltsin's tenure due to political and/or economic reasons, although it is difficult to prove the political motivations, in which the timing played a significant role. In 1991, Russia cut off energy deliveries to Lithuania after its declaration of independence. Gas deliveries to Estonia were interrupted in 1993 due to the adoption of 'Law on Aliens,' which affected ethnic Russians. In the same year, Russia lowered gas supplies to Ukraine

[153] *Ibid,* p. 115.

[154] Thomas Catan and Tom Warner, 'Russia and Ukraine Reach Gas Agreement,' *Financial Times*, January 4, 2006, available at: http://www.ft.com/cms/s/0/6ea768c4-7c8c-11da-936a-0000779e2340.html#axzz1rq6EpQsL (accessed on March 15, 2012).

[155] Simon Pirani, *op.cit,* p. 115.

[156] Ariel Cohen, 'The North European Gas Pipeline Threatens Europe's Energy Security,' *Backgrounder,* No. 1980, October 26, 2006, pp. 4, 7.

before an important meeting about the Black Sea fleet and nuclear weapons. Threatening a price increase on energy commodities has been another tool used by Russia in foreign trade and/or diplomacy. In 1995, the Kremlin offered Ukraine to join the CIS Customs Union and raised gas prices at the same time. Finally, the 1998 threat on gas cut off made to Moldova before negotiations about the break away region of Transnistria is among other examples.[157] Putin used these means in foreign policy as well. For instance, besides the natural gas interruptions in 2006 caused by disputes with Ukraine, in July 2008 Russia cut off the oil supply to the Czech Republic one day after the Czech government signed an agreement on antimissile radar with the U.S., ignoring an early warning mechanism and explained the cease as a 'technical difficulty.'[158]

The gas dispute between Ukraine and Russia affecting EU Members accelerated since 2006 due to the Russian request to get European netback prices, Ukrainian political disturbance and dispute over companies for Turkmen gas transportation.[159] These three factors and rising Ukrainian debts resulted in an 18-day gas cut off in the beginning of 2009. Eighteen European members, including mainly the CEEC, reported a decrease or complete interruption in gas shipments coming through Ukraine. After the settlement, European partners accused Russia of not implementing international legal arrangements, devising instead its own proposed legal framework announced by Russian President Dimitri Medvedev[160] in April 2009. The 'Conceptual Approach to the New Legal Framework for Energy Cooperation (Goals and Principles)' focused on the necessity of a new universal international legally binding instrument since the up-to-date bilateral and multilateral

[157] Michael Fredholm, *op.cit,* pp., 17-18.

[158] Keith C. Smith, 'Russia and European Energy Security,' *CSIS,* Washington D.C.,October 2008, p. 3, available at: http://csis.org/files/media/csis/pubs/081024_smith_russiaeuroenergy_web.pdf (accessed on March 15, 2012).

[159] Simon Pirani, *op.cit,* p. 103.

[160] Dimitri Medvedev is former chairman of Gazprom, which shows the close connection between the Kremlin and Russian energy giant. Lindsay Wright, *op.cit,* p.1.

binding norms failed to solve conflict in energy relations. The document focuses on the transit issue proposing, among others, to set transit tariff principles and pointing out the "unacceptability of interruption or reduction of transit that is un-provided for in transit Treaties, or intervention in transit flows."[161]

The same year, the Russian government approved its renewed 'Energy Strategy of Russia for the Period up to 2030.' The new strategy determined major problems in the gas sector as 'infrastructure restrictions of pipeline gas transportation, high transit risks of gas export to Europe, insufficient development of gas-processing and gas chemical industries, underestimated regulated gas prices and insufficient liberalization on the domestic market.'[162] The solutions proposed to overcome these problems can be summarized as the development of new gas deposits, an increase in domestic gas prices to enable needed investments and complete the transition to application of market gas pricing principals until 2011, development of LNG to gain access to non-European gas markets (US and Asia-Pacific region), and diversification of routes via construction of new pipeline networks (toward Europe but as well toward Korea and China). Likewise, gas imports from Commonwealth of Independent States (CIS) and development of gas deposits in countries such as Algeria, Iran or Central Asian countries play significant role within this policy framework. [163]

The latter denotes Russia's long-term aim to get cheap gas from surrounding countries to re-export it. As early as January 2002, President Putin suggested a 'single export channel' collecting natural gas from Russia, Kazakhstan, Turkmenistan and Uzbekistan and the establishment of the Euroasian Gas Producers' Alliance. These countries' presidents signed a joint statement on cooperation on

[161] Conceptual Approach to the New Legal Framework for Energy Cooperation (Goals and Principles), *President of Russia Official Web Portal,* available at:http://archive.kremlin.ru/eng/text/docs/2009/04/215305.shtml (accessed on March 15, 2012).

[162]Energy Strategy of Russia for the Period up to 2030, *Ministry of Energy of the Russian Federation,* Moscow 2010, p. 76.

[163]*Ibid,* pp. 77-80.

energy issues and protection of energy producing countries. Subsequently, Russia bound its gas exports with long-term bilateral agreements on March 1, 2002.[164] Even Azerbaijan, a key country for the European source diversification project Nabbucco, signed an agreement on annual 500 mcm natural gas export to Russia in 2009.[165] Natural gas export to Russia seems to be profitable, even for CIS countries, since it is cheaper to export gas through existing infrastructure than to build a new one.[166]

The significance of the European market that needed to be safeguarded, external factors affecting the Russian energy sector along with foreign trade policy and diversification to secure reliable supply belongs to significant constituents of the federation's latest energy strategy. Related documents point to four major gas pipeline projects regarding the route diversification task: Blue Stream, Yamal-Europe, Nord Stream and South Stream. The main concerns about energy foreign policy are focused on five points: Global economic crises and their effect on energy demand and cut in price, need for sales markets and export commodities diversification, politicization of energy relations abroad and insufficient activities of Russian energy companies[167] abroad.[168]

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[164] Michael Fredholm, *op.cit,* pp. 15-16. See also, Volodymyr Saprykin, 'Gazprom of Russia in the Central Asian Countries,' *Razumkov Centre,* Kiev, May 1, 2004, available at: http://www.razumkov.org.ua/eng/article.php?news_id=348 (accessed on March 15, 2012).

[165] Vladimir Socor, 'Azerbaijan-Russia Gas Agreement: a Wakeup Call to Brussels and Washington,' *Euroasia Daily Monitor,* Vol. 6 Is.127, July 2, 2009, available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=35216 (accessed on March 15, 2012) and Brian Whitmore, 'Azerbaijan Could Scuttle Nabucco Over Turkey-Armenia Deal,' *Radio Free Europe Liberty,* October 19, 2009, available at: http://www.rferl.org/content/Azerbaijan_Could_Scuttle_Nabucco_Over_TurkeyArmenia_Deal/1855784.html (accessed on March 15, 2012), and Daniel Freifeld, *op.cit.*

[166] Michael Fredholm, *op.cit,* pp. 15-16.

[167] The Russian Federation aims to access the markets via control of the management or ownership of the foreign companies, not only in Europe, but also in Northern Africa, Middle East and Latin America. For instance, Gazprom today has total control of Belarusian infrastructure, since it owns 100 percent of Beltrangaz and 48 percent of Polish Europolgaz, Tranzit Gas Pipeline System. This strategy provides two fundamental advantages to Russia: access to information and provision of sustainable trade and supply security.

In sum, control, re-integration and diversification seem to be the main concepts of the current Russian energy strategy on natural gas. Russia aims for re-integration with CIS to re-unify the former unified natural gas pipeline network. In the meantime, there are attempts to lower domestic natural gas consumption by increasing nuclear power and coal consumption to decrease the amount of natural gas to export. Development of LNG technologies is an endeavour to diversify energy markets; however, Europe is still and in the near future going to be the main partner to do energy business, due to existing infrastructure and established mutual dependence pertaining in current circumstances. Nevertheless, the issue of transit disputes leveraged by economic and political reasons forced the Russian government to take steps on diversification routes. The development of the Nord Stream is declared a priority and the South Stream as a project of 'great importance.' The wording in the official strategy document leaves questions whether these projects by-pass current transit states or alter supply routes, since it is explicitly declared that "Russian gas will be delivered to the European market via this gas pipeline (Nord Stream) by-passing territories of other countries."[169] In the case of the South Stream, Russia's aim is to establish a "Euroasian integrated gas transportation system for provision of export and transit cross-flows between Europe and Asia. Hence, the big picture concerning Russian foreign policy in energy that Russia intends to see is to become a management center [170] and regionally 'power-bridge' between Europe and

[168]Energy Strategy of Russia for the Period up to 2030, *op.cit,* p. 56.

[169]Energy Strategy of Russia for the Period up to 2030, *op.cit,* p. 79.

[170] Russia started to pursue its aim to become an energy management center earlier. At the Gas-Exporting Countries Forum in Doha in 2007, Russia took its first steps to establish an intergovernmental gas cartel. This organization would increase leverage over European gas supplies since it enables its members, gas producing countries, to set prices, divide markets and cooperate in the development of the LNG technology. Such a gas cartel would ensure Russia's strong position in the world energy market as largest exporter. See, Vladimir Socor, 'Gazprom, the Prospects of a Gas Cartel, and Europe's Energy Security,' in Svante E. Cornell and Niklas NIlsson (ed.), *Europe's Energy Security,* Central Asia – Caucasus Institute & Silk Road Studies Program, Singapore 2008, p.71.

Russia based on wide pipeline infrastructure."[171] However, achievability of these goals is questionable since new variables have appeared.

Recent changes in the European gas market point to changes in equilibrium. Europe imports 33 percent of its natural gas demand from Russia and Russia exports 67 percent[172] of its gas export to Europe. However, according to the U.S. Energy Information Administration, the current availability of LNG and newly discovered shale gas resources in Europe can weaken the position of Gazprom in Europe, especially in Eastern Europe, since main shale gas resources have been found in Poland. In this regard, Poland and Ukraine focus on the development of shale gas to lessen their dependence on Russia. In addition, Europe now has access to Qatar's LNG gas. The gas is expensive but development in the sector will bring competition and lower prices. The U.S., with its focus on shale gas and LNG, could be a supplier of natural gas to Europe in the near future as well. Furthermore, there is weak but stable and strengthening renewables alternative.[173]Thus, Gazprom needs to bind itself to European market sooner than later[174] and improve its image.

Besides development of LNG and access to other markets in the long-term, Russia has had two options to safeguard energy relations with Europe hindered by interruption: gain full control over transmission pipelines or diversify the routes. In the case of Belarus, in 2011, Gazprom gained full control over the Beltrangaz pipeline network. It bought the company for $2.5 billion and in exchange offered a $10 billion loan and rate reduction for gas in 2012 from $244 tcm to $164 tcm, which is less then half of the average rate requested from European customers to pay. This

[171] *Ibid,* p. 83.

[172] Eurostat,*Natural Gas Consumption Statistics,*May 2012, available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Natural_gas_consumption_statistics (accessed on June 22, 2012) and Gazprom,'Gazprom in Foreign Markets,' available at: http://eng.gazpromquestions.ru/index.php?id=4(accessed on July 22, 2012).

[173] Judy Dempsey, 'Time to Bury Nabucco,' *op.cit.*

[174] Judy Dempsey, 'If Gas Talks Fail, Europe Has Backup Plan,' *op.cit.*

deal secures a stable flow of gas to Europe through Belarus and it enables Russia to control the Yamal Europe route.[175]

The dependence on gas transition via Ukraine is a more complicated issue to be solved. Until today, Ukraine had an ace in its hands, since most of the gas has flowed to Europe through its region. In fact, Ukraine has had the power to decide how much gas will flow to Europe. There are unproven accusations about 2006 and 2009 events on Ukraine's gas usage devoted to European customers. According to these claims, Ukraine took European gas when Russia lowered gas volume to Ukraine due to price and debt disputes. Hryhory Nemyria, then deputy prime minister of Ukraine, rejected accusations and added that Ukraine took just enough technical gas to maintain the functioning of the system.[176]

These maneuvers undermined the reliability of both states and proved to be unwise, finally resulting in a lose-lose scenario. After the attempts to gain ownership control of the transit network in Ukraine, failed diversification routes such as the Nord Stream and South Stream were put on the agenda. On November 8, 2011 the first deliveries started from Russia directly to Germany through the Nord Stream. It does not work at full capacity yet, but enables Russia to divert gas flows to Europe and avoid transport risks. At the same time, it gained a great bargaining power in negotiations with Ukraine. In the case of other diversification projects, ensuring supply to Southeastern Europe, the so-called South Stream is still under discussion about whether construction of the pipeline is or is not cheaper than to buy and upgrade Ukraine's infrastructure.[177] The final statement came on December 2011 when Prime Minister Vladimir Putin and Alexei Miller, chairman of Gazprom's management committee declared that it would be cheaper to construct the South

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[175] Palash R. Ghosh, 'Russia Gains Full Control of Berlarus Gas Pipeline,' *International Business Times,* November 25, 2011 available at: http://www.ibtimes.com/articles/256213/20111125/moscow-gas-pipeline-belarus-putin-lukashenko.htm (accessed on March 15, 2012).

[176] Ecnomist, 'Russia, Ukraine and Gas: Pipe Down,' January28, 2009, available at: http://www.economist.com/node/12903050 (accessed on March 15, 2012).

[177] Judy Dempsey, 'If Gas Talks Fail, Europe Has Backup Plan,' *op.cit.*

Stream than to buy and upgrade the Ukrainian transmission network. The South Stream was expected to cost up to $21 billion; on the other hand, if consent were given to sell its infrastructure, Ukraine estimated its aged network in need of modernization at a cost of $20 billion. Thus, with modernization investment, the final sum is going to run to $30 billion. This does not mean that Russia is not interested in the Ukrainian network anymore. Putin hinted that the Ukrainian network still will be in demand with increasing European gas consumption.[178]

3.3 Nord Stream and South Stream Gas Pipeline Projects in Foreign Pipeline Politics

A broader concept of energy and foreign trade politics of the Russian Federation indicates an interpenetrating politico-economic essence of international pipeline projects proposed by Russian actors. The economic aspect is inherent to energy, while the political aspect is strengthened mainly by increased governmental control over the energy sector in Russia. The examination in this study includes both aspects and is based on the chief aim of the federation, namely to become a management center of energy corridors to Europe. This aim is to be achieved by diversification of energy routes, control over (re)sources and infrastructure opening a way for Russia and its companies to be strong global actors in the energy related business world.

Russian energy companies have become significant actors in the world energy market since the dissolution of the Soviet Union. They focus on both, upstream and downstream activities. The oil and gas production activities are mainly concentrated in the CIS region; however they are active in South America, North Africa and the Middle East, as well. The current center of downstream activities is Europe, as it is a geographically and historically close market to Russia. Focus on upstream and downstream is part of the greater global energy management strategy,

[178]EU Business,'Putin Advances South Stream Pipeline Building to 2012,' December 30, 2012, available at: http://www.eubusiness.com/news-eu/russia-gas-energy.ec0 (accessed on March 15, 2012).

in which Europe plays a significant role and will remain an important partner in near future.

Stefan Ehrstedt and Peeter Vahtra point to two dimensions of Russia's expansion to Europe. First, Gazprom and Lukoil, Russian most influential and government backed energy companies, are greatly interested in downstream activities in European countries such as distribution and storage or marketing facilities. For instance, Lukoil acquired 400 European petroleum stations in 2006. Gazprom, as impressive, acquired important gas storage facilities in Austria, Belarusian gas pipeline infrastructure, Serbian energy company NIS, etc. (see 3.3.2 South Stream). Both companies openly admitted that gaining control over or purchasing of European energy infrastructure is among their strategic objectives. Second, Russia's geographical strategic target to control energy flows to Europe is the Baltic Sea region (Nord Stream) and Southern Balkans (South Stream). Yet, there is also focus on the Caucasus and Southern Balkan region since the European source diversification projects, such as the Baku-Tbilisi-Ceyhan oil pipeline and Nabucco gas pipeline projects, attempt to undermine Russian dominance.[179]

[179] Stefan Ehrstedt and Peeter Vahtra, 'Russian Energy Investments in Europe,' *Pan-European Institute,* 4/2008, pp. 15, 17, available at: http://www.tse.fi/FI/yksikot/erillislaitokset/pei/Documents/Julkaisut/Ehrstedt_Vahtra_42008.pdf (accessed on April 22, 2012).

Map 2: [180]

Source: BBC

3.3.1 Nord Stream

The northern connection with Europe was under discussion since the first attempts to build a unified gas network system in the 1970s and as early as 1974, when the interconnector between Finland and Russia was in operation. Further need for an alternative pipeline arose in the 1990s after Russia's first transit disputes with Ukraine and a pipeline going under the Baltic Sea was among diversification proposals of that time. The decision on a northern connection came in 1997, yet was accompanied by speculations about the prime purpose, natural gas deficit of the Russian Federation, military strategy and environmental concerns.

Technical Features and Development of the Project

The Nord Stream pipeline is an offshore pipeline with two parallel lines of 1224 km in total length that originate in Portovaya Bay (Russia), going through the Baltic Sea and ending in Lubmin (Germany). Gazprom constructed the onshore pipeline (917 km) in Russian territory, while Wingas and E.ON Ruhrgas constructed

[180] Map is available at: http://www.powerengineeringint.com/articles/print/volume-18/issue-5/features/europes-gas-supply-dilemma.html (accessed on August 1, 2012).

two onshore connections in Germany (850 km), connecting the pipeline with the European gas network. The total capacity of the pipeline would be 55 bcm of natural gas per year, 27.5 bcm for each line. Major gas supplies will come from the Yuzhno-Russkoye field in Western Siberia having an annual 25 bcm gas production capacity, having been developed by a joint venture project between Gazprom, E.ON Ruhrgas and Wintershall and called Severneftgazprom.[181] The gas source of the second leg is not clear yet, but Yamal, Obsko-Tazovskaya Bay and and Shtokman gas fields have been under discussion since the mid-2000s.[182] German WINGAS Group and E.ON Ruhrgas AG constructed the first line of the Nord Stream since August 2011 and connected it to the OPAL pipeline to supply gas to the Czech Republic.[183] The pipeline enters the Exclusive Economic Zones of Russia, Finland, Sweden, Denmark and Germany. Besides Germany, prior prospective customers of Russian gas will most likely be Belgium, Denmark, France, the Netherlands, and the UK. Final shareholders of the Nord Stream are OAO Gazprom (Russia, 51 percent), E.ON Ruhrgas AG (Germany, 15.5 percent, joined 2005), BASF SE/Winterhall Holding GmbH (Germany, 15.5 percent, joined 2005), N.V. Nederlandse Gasunie (Netherlands, 9 percent, joined 2008), GDF SUEZ S.A. (France, 9 percent, joined 2010).[184]

The first decision regarding the establishment of a joint venture between Gazprom and Finnish gas company Neste Oy (todays Fortum) to build the North

[181]Nord Stream AG, 'The Pipeline – Nord Stream AG,' available at: ww.nord-stream.com/pipeline (accessed on April 22, 2012).

[182] Nina Kulikova, 'Trans-Baltic Pipeline Moves Ahead,' *Russia Profile,* November 28, 2005, available at: http://russiaprofile.org/business/a1214.html (accessed on October 9, 2011).

[183] Nord Stream, 'Golden Weld Joins Nord Stream's Firs Line to the European Pipeline Network,' *Facts,* Is. 19/ September 2011, p. 2 available at: http://www.nord-stream.com/press-info/library/?q=&type=9&category=&country= (accessed on April 22, 2012).

[184]Nord Stream,'Nord Stream Pipeline Project – Fact Sheet,' April 2012, available at: http://www.nord-stream.com/press-info/library/ (accessed on April 22, 2012) and Gazprom, 'Nord Stream History,' available at: http://gazprom.com/about/production/projects/pipelines/nord-stream/spg-history/ (accessed on April 22, 2012).

European Gas Pipeline (NEGP) occurred in 1997.[185] According to original plans, the direct connector between Russia and Europe should have originated in Murmansk, go through Finland to the Russian Baltic Sea and then to Germany, Denmark and Sweden. After the establishment of the joint venture, feasibility studies started, German companies Ruhrgas and Wintershall joined the project and the EU acknowledged the project as a 'Trans-European Network' (December 2000). The aspiration of two major European energy companies, such as TotalFinalElf and Royal Dutch Shell, to join the project[186] shows the project's prestigious image among energy concerns.

The original plan changed in March 2004 when Gazprom declared its aim to allocate gas production in the Shtokman field to LNG rather than to the NEGP project and Finnish Fortum retired from business leaving space to other interested parties, particularly to German gas industry headed by E.ON Ruhrgas[187] and backed by Dr. Klaus Mangold, Chairman of the Eastern Committee of the German Economy.[188] NEGP became a Russian-German initiativeafter the success of German companies to press the project until other foreign competitors, BP Group[189] among them, gave up. Roland Götz describes the deal as follows:

> While the development could be interpreted as a successful move by E.ON, it could equally be understood as a highly efficient Gazprom strategy to sell its favorite project to the highest bidder. The huge interest in NEP project may be seen surprising, as the project's cost efficiency is at best questionable, but

[185] Roland Götz, 'The North European Pipeline,'*SWP,* September 2005, p. 1.

[186] Roland Götz, *op.cit*, p. 2.

[187]E.ON Ruhrgas,E.ON and Ruhrgas has merged in 2003. See, 'Company Development Highlights 2003,' available at: http://www.eon-ruhrgas.com/cps/rde/xchg/SID-396B1B92-D123AA9E/er-corporate/hs.xsl/3867.htm (accessed on April 22, 2012).

[188] 'Nord Stream History,' *op.cit.*

[189]*Ibid.*

> demonstrated the success of Russian lobbying in promoting tightly defined Russian national interests. [190]

In 2006, NEGP was renamed to Nord Stream and first natural gas deals were concluded. E.ON Ruhrgas contracted 100 bcm of natural gas to be delivered in years 2010/2011-2036 (4 bcm annual pumping) via Nord Stream. In 2009, Danish energy company DONG agreed to purchase 1 bcm of natural gas per year for 8 years, starting in 2012 and being delivered through the second line. Lastly, Gaz de France SUEZ joined the project in 2010 and started to negotiate possibility of natural gas supply via Nord Stream in the amount of up to 1.5 bcm per year starting from 2015. The commercial gas deliveries started on November 8, 2011, right after completion of first string, enabling deliveries of 27.5 bcm per year.[191]The second line completed on April 18, 2012 and the gas deliveries will be able to start at the end of the year.[192]

Disputes over Nord Stream: Expensive and Politically Motivated

Poland and Baltic states proposed the first alternative to a northern offshore connection in 2004. The so-called Amber pipeline was supposed to bring Russian natural gas through Latvia, Lithuania, Poland and join the Yamal Europe line to Germany circumventing non-EU transit countries. The second option was the Yamal 2 pipeline proposed to lead along Yamal Europe as an additional line.[193] Many experts consider both these alternatives as cheaper solutions than the offshore Nord Stream since construction of the onshore pipeline route is cheaper in itself[194] and

[190] Roland Götz, *op.cit*, p. 2.

[191]Nord Stream, 'Nord Stream History,' *op.cit.*

[192]Gazprom, 'Nord Stream Finalize Second Line Ahead of Schedule,' April 18, 2012, available at: http://www.gazpromexport.ru/en/presscenter/news/537/ (accessed on April 22, 2012).

[193] Robert L. Larsson, 'Nord Stream, Sweden and Baltic Sea Security,' *FOI Defence Research Agency,* Stockholm, March 2007, p. 9, available at: http://www.foi.se/upload/english/reports/foir2251.pdf (accessed on April 22, 2012).

[194] Bendik Solum Whist, *op.cit,* pp. 19-20.

further, direct connection to EU solves the risk of supply interruption caused by transit disputes.

Although both alternatives appear to provide all needed benefits, the Russian Federation preferred the offshore Nord Stream project. According to Whist, the Nord Stream consortium's counter-argument to the Yamal 2 proposal was an indication of the need for independence for unstable transit countries and the insufficiency of the Yamal 2 as a diversification alternative.[195] This argument is accepted in regard of Russia's transit disputes with Ukraine and Belarus, although, the preference of the expensive offshore Nord Stream instead of geo-strategically secure Amber pipeline remains questionable. During the public hearing of the EU Parliament's Committee of Petitions on 'the Nord Stream Pipeline and its Impact on the Baltic Sea,' the Nord Stream AG explained the stance of the company concerning onshore versus offshore budget debate as follows:

> Onshore pipelines are cheaper to construct, but more expensive to maintain, as they require manned compressor stations every 200 km. Calculating investment, operation and transport costs together we will see a cost advantage for an offshore pipeline of around 15percent after 25 years of operation time. And the expected lifespan of the pipeline is 50 years, which means even greater savings. Moreover, offshore pipelines bring considerable benefits in terms of safety, as they avoid many of the risks of possible disturbance and sabotage that accompany an onshore pipeline.[196]

On the contrary, Prof. Dr. Alan Riley, in his economic analysis of the Nord Stream project submitted to European Parliament on January 2008, indicates the real cost of the Nord Stream could be higher than is anticipated by the company. Rough calculation based on costs and transit fee savings deduced from released

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[195] *Ibid.*

[196] Nord Stream,'Response to Questions Asked, and Inaccurate Statements Made during the Public Hearing of the Committee on Petitions "The Nord Stream Pipeline and Its Impact on the Baltic Sea,'" European Parliament, Brussels, January 29, 2008, p. 8, available at: http://www.envir.ee/orb.aw/class=file/action=preview/id=988582/TpercentE4iendavad+vastused.pdf (accessed on April 22, 2012).

Ukrainian transit fees of that year and the fact that there is no clear natural gas source for the second line of the project confirmsthat according to Riley that until the late 2000s the transit fee gain for Nord Stream is to be rather $300 million than anticipated $1billion per annum, 'hardly substantial offset for an offshore pipeline costing upward of €12 billion ($17.5 billion).'[197]

The speculations about Nord Stream are difficult to prove since the transit fees are usually commercially confidential. Nevertheless, Russian insistence on the controversial Nord Stream project instead of generally accepted alternatives satisfying reservations of Baltic States, Poland and the EU in general lead the opponents to question whether Nord Stream is not more a project of political strategy rather than a project driven by purely economic intentions and aiming for energy supply security.

Another reservation of opponents to the project in mid and late 2000s was whether Russia would manage to supply promised additional gas volumes through new pipelines to Europe. Vladimir Socor sees these maneuvers as 'commercial bluff and political hype' and claims that "Gazprom cannot in fact provide declared gas volumes for all its existing and planned pipeline to Europe."[198] This concern rooted in underinvestment of the Russian gas sector, slow development of new fields and increased domestic consumption instigated by further gasification of the regions in Russian Federation.[199] Global economic crises in 2009 supported skepticism regarding the Russian natural gas sector since European spot prices were lower than prices for gas from Russia, sales to Europe slowed[200] and production decreased. Thus, some analysts evaluated 2030 targets defined by the Russian government in

[197] Alan Riley, 'Nord Stream: An Economic and Market Analysis of the North European Pipeline Project,' Brussels, p. 7, available at: http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/peti20080129_economicanalysisriley_/PETI20080129_EconomicAnalysisRiley_en.pdf (accessed on April 22, 2012).

[198] Vladimir Socor, 'Sourcing the Nabucco Pipeline to Prevail Against South Stream,' *op.cit.*

[199] Energy Strategy of Russia for the Period up to 2030, *op.cit,* pp. 80, 83.

[200] Sergey Paltsev, *op.cit*, p. 11.

2010 at least as ambitious. Within these projections, production was envisaged to grow from 650 bcm to 1000 bcm, domestic gas consumption to be 549-599 bcm and exports to become 455-520 bcm. Furthermore, Prime Minister Putin demonstrated his believe in the possibility to increase Russian annual gas production to 1,650 tcm.[201]

Sergey Paltsev argued in 2011 that resumed economic growth in the EU, an increase in European spot prices and concerns about safety of nuclear energy after Fukushima event, after German Chancellor Angela Merkel decided to close all 17 nuclear power plants in Germany by 2022[202] would improve chances of Russian targets, especially regarding trade with Europe. Even the IEA 2011 projections reflected these developments and in comparison to 2010, the production projections increased from 772 bcm to 842 bcm and consumption from 503 bcm to 522 bcm.[203] On the other hand, there are still concerns about the future of the European economy since its growth halted and is expected to be just ¼ percent in 2012 in comparison to 2 percent in 2011 according to International Monetary Fund.[204] The OECD's latest estimations are more pessimistic. The organization cut Euro-zone forecasts of GDP by 0.1 percent from a previous forecast of 0.2 percent growth. The outlook for 2013 is also reduced from 1.4 percent to 0.9 percent.[205] There are other variables. As mentioned above, LNG's position, shale gas, non-conventional gas and renewables

[201] Government of Russia, A Meeting on the General Scheme for Natural Gas Sector Development for a Period up to 2030, Moscow, Russia, available at: http://premier.gov.ru/visits/ru/12528/events/12539/ (accessed on April 22, 2012).

[202] Judy Dempsey, 'Time to Bury Nabucco,' *Carnegie Endowment,* March 26, 2012, available at: http://carnegieendowment.org/2012/03/26/time-to-bury-nabucco/a53a (accessed on May 5, 2012).

[203] Sergey Paltsev, *op.cit*, pp. 10-11.

[204] International Monetary Fund, *World Economic Outlook*, April 2012, Washington DC, p. 52, available at: http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf (accessed on May 5, 2012).

[205] Geoffrey T. Smith and William Horobin, 'OECD Slashes Euro-Zone Growth Forecast,' *The Wall Street Journal,* May 22, 2012, available at: http://online.wsj.com/article/SB10001424052702303610504577419563963545538.html?mod=google news_wsj (accessed on May 22, 2012).

are strengthening in Europe and undoubtedly, this will significantly affect Russian future energy export to Europe.

On the domestic side of the issue, despite newly discovered gas fields, Russia's gas sector faces several challenges. The majority of the gas production is still from fields that were developed during the Soviet era and already have peaked. The production in these fields is maturing or in decline. The new reserves are mostly in environment that is technically and climatically challenging. David Dusseult points out that just one reserve proposed as a source for the Nord Stream is inland, Yuzhno-Russkoye, and this land is covered by permafrost. "The Shtokman field is under Barents Sea, far from coastal storage and transit infrastructure. Yamal's fields... present a specific engineering challenge due to location..., the climatic conditions..., size and grouping of the field(s), along with proximity to existing infrastructure, if any."[206] In addition, aged infrastructure needs modernization and it is doubtful whether indebted Gazprom is able to provide necessary investments in infrastructure.[207]

The Russian government is aware of shortages in its natural gas sector and envisages solutions, such as to attract foreign investors, adopt new technologies, increase domestic gas prices and reduce domestic gas consumption in favor of nuclear energy and coal in its Energy Strategy up to 2030.[208]

Despite these negative factors, Russia has the biggest reserves of natural gas in the world and more than third of these are in production.[209] According to BP Statistical Review 2012, Russian proven gas reserves at the end of 2011 accounted

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[206] David Dusseault, 'Europe's Triple By-pass,' *Asia Europe Journal,* Vol. 8, Is.3, 2010, p. 389.

[207] Zeyno Baran, 'Security Aspects of the South Stream Project,' *European Parliament,* October 2008, pp. 21-22.

[208] Energy Strategy of Russia for the Period up to 2030, *op.cit,* pp. 58, 59, 66, 76.

[209] Sergey Paltsev, 'Russia's Natural Gas Export Potential up to 2050,' *MIT CEEPR,* Cambridge, July 2011, p. 6.

44.6 tcm.[210]As such, Russia controls 21.4 percent of the world reserves (208.4 tcm).[211]Indeed, the possession of resources does not *a priori* mean their production, but indicates on potential for production. However, as time has shown, alarming estimations put into words until today proved to be false. For instance, according to Milov, cited by Whist, Russia would have faced a natural gas deficit of 126 bcm in 2010.[212] Yet, after the global financial crises, the Russian Federation produced 588.9 bcm gas, 32.6 bcm added as natural gas imported from CIS, and total natural gas to be exported and consumed accounted for 621.5 bcm. Domestic consumption within the same year was 414.1 bcm,leaving 207.4 bcm for export that was realized at an amount of 186.45 bcm.[213] The recent discoveries of natural gas reserves and an increase in gas production with the development of new fields should be taken into account. Putin announced the last increase in production by 66.28 bcm in April 2012.[214] According to Sergey Paltsev's calculations counting on domestic gas resources, world gas production and trade, greenhouse policies, concerns about nuclear energy and developing Asian markets, Russia has gas for more than 80 years if maintaining the 2011 gas production level.[215]

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[210] According to Ria Novosti daily, Putin stated in 2010 that "just one area in north-east Russia boasted gas reserves of 55 tcm. This would mean that Russia possess greater reserves than is estimated since real volumes are state secret. See, Aleksei Nikolski, 'Putin Hails Russia's Gas Reserves as Austria Joins South Stream Project,' *Ria Novosti,* April 24, 2010, available at: http://en.rian.ru/world/20100424/158729140.html (accessed on March 5, 2012).

[211] British Petrol, *BP Statistical Review of World Energy,*June 2012, p.20.

[212] Bendik Solum Whist, 'Nord Stream: Not Just a Pipeline,' *Fridtjif Nansens Institut,* November 2008, p. 26.

[213] British Petrol, *BP Statistical Review of World Energy,*June 2011, pp.20, 22, 23.

[214]Gazprom,'Gazprom to Increase Operating Gas Reserve in Russian UGS Facilities to 66.28 Billion Cubic Meters by Forthcoming Winter,' April 26, 2012, available at: http://gazprom.com/press/news/2012/april/article134221/ (accessed on April 28, 2012).

[215] Sergey Paltsev, *op.cit*, pp. 3-4. Putin guarantees even more, 100 years of gas supply in advance. See,Aleksei Nikolski,'Putin Hails Russia's Gas Reserves as Austria Joins South Stream Project,' *op.cit.*

As Paltsev has noted, the concerns about the condition of the Russian natural gas sector in the mid-2000s evolved to projections of a boost of natural gas production and diversification of the markets. This progress is projected on the development of LNG and shale gas trade,[216] which enables producer countries to diversify natural gas routes that were firm up to recently. Hence, a decrease in dependence on the European market seems to be inevitable, but the Russian gas deficit is, at least in the near future, questionable.

3.3.2 South Stream

Technical Features and Development of the Project

The South Stream gas pipeline project is besides the Nord Stream, the second key project designed to maintain Russian dominance in the European gas market, diversify energy routes and become a global actor of the energy market controlling energy flows in the Euroasian region. The project dates back to 2006, when Gazprom and an Italian energy company, ENI, signed a strategic partnership agreement on direct gas supply from Russia to Italy starting from 2007. A year later both companies agreed on the South Stream project and laid the foundation of the equally shared South Stream AG in 2008. The company requested the pipeline indicating increasing European natural gas demand, forecasted to be 80 bcm by 2020 and more than 140 bcm by 2030, and supply security between Russia and the EU.[217]

According to original plans, the pipeline would have provided 31 bcm[218] of natural gas to Europe. Today, the capacity of the pipeline is extended to 63 bcm.[219] However, the natural gas to fill the South Stream pipeline is not specified yet.[220] The

[216] *Ibid,* p. 3.

[217] South Stream AG,'Significance,' available at: http://south-stream.info/index.php?id=9&L=1 (accessed on March 5, 2012).

[218] Zeyno Baran, 'Security Aspects of the South Stream Project,' *European Parliament,* October 2008, p. 1.

[219] South Stream AG, '5 Questions About South Stream,' available at: http://south-stream.info/index.php?id=30&L=1 (accessed on March 5, 2012).

[220] *Ibid.*

company avoids the answer by stating that gas will come from the Unified Gas Supply System and therefore specification of the source would not be appropriate.[221]

The final pipeline route is still under discussion. The offshore section from Russia to Bulgaria under the Black Sea considered as the key one, is counting on crossing executive economic zones of Russia, Turkey[222] and Bulgaria. Gazprom will construct this part in cooperation with its partner ENI, German Wintershall and French EDF that recently joined the company and obtained 30 percent of ENI's stakes, each per 15 percent.[223]

The onshore section in Europe is considered in two ways. First is the northwestern route, running through Bulgaria, Serbia and Hungary to Slovenia and finally Austria. Although the route is under consideration, Gazprom started its control via investment manoeuvre related to materialization of the South Stream project as early as early 2008. The company has obtained shares in energy infrastructure in future transit countries and laid the foundation for joint project companies where the Russian giant owns half or the majority of the stakes. In the case of Bulgaria, Gazprom has aquired 50 percent in the South Stream Bulgaria joint venture designed to operate the pipeline on Bulgarian territory in cooperation with Bulgaria Energy Holding.[224] Ognyan Minchev, the head of the Institute for Regional and International Studies, remarks in conversation with Daniel Freifeld from New York University how Russia threatened Bulgaria with gas cut off and gained an agreement with higher prices for Russia and lower transit fees for Bulgaria adding,

[221] *Ibid.*

[222] Turkey gave consent for the South Stream pipeline construction in its exclusive economic zone in December 2011. See, South Stream AG, 'Project History,' *op.cit.*

[223] *Ibid.*

[224] Stefan Ehrstedt and Peeter Vahtra, *op.cit,* p. 13.

"The Bulgarian government is obedient to Russia. Bulgaria has put the entire energy system in Russian hands."[225]

Serbia was rather reluctant to sell the majority of the Nafta Industrija Srbije (NIS) oil company to Russia, until Gazprom offered Serbia to become a South Stream transit country with a gas hub in its territory. Hence, Serbia safeguarded restoration of the oil refineries, gas transit revenues, amicable gas prices and strategic position in European energy corridors.[226] In addition, Gazprom aquired a 51 percent stake in South Stream Serbia joint venture established with Serbijagas.

The section of South Stream running through Hungary is under management of a joint venture between Hungarian Investment Bank and Gazprom, both with a 50 percent share. In addition, Surgutneftgas, one of the least transparent companies in Russia, acquired a majority stake in Hunagrion MOL, a Nabucco consortium member, offering twice the market price. Laszlo Varro, MOL's head of strategy, has concerns about the Russian company's real aim since its official owner Vladimir Bogdanov is the former manager of Putin's presidential campaign and it is assumed that Putin himself stands behind the company. This would mean a drop in the funding of the Nabucco pipeline and paralyze the project.[227]

In Austira, Gazprom invested in the Baumgarten gas hub by acquiring 50 percent of a joint company with Austrian OMV.[228] The Baumgarten is a final destination for Nabucco as well.

The second line is the southwestern route to Greece and Italy, with the additional line to Macedonia and Croatia. Regarding the Greek part of the project,

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[225] Daniel Freifeld, 'The Great Pipeline Opera,' *Foreign Policy,* Sept./Oct. 2009, available at: http://www.foreignpolicy.com/articles/2009/08/12/the_great_pipeline_opera?hidecomments=yes (accessed on March 5, 2012).

[226] Stefan Ehrstedt and Peeter Vahtra, *op.cit,* p. 13.

[227] Daniel Freifeld, *op.cit.*

[228] Stefan Ehrstedt and Peeter Vahtra, *op.cit,* p. 14.

Gazprom cooperates with Greek gas transmission operator DESFA.[229] In the final stage, Russia signed intergovernmental agreements on the implementation of the South Stream pipeline with the aforementioned interested countries except Macedonia.[230]

Putin's decision to postpone the project construction start to December 2012[231] (instead of 2013) with 2015 as the estimated year of operation[232] is gaining popularity. Recently Republika Srpska and Montenegro declared their willingness to join the project. The arguments about the Nord Stream and transit countries are not valid for the South Stream project, where the motto 'the more the better' applies. The reason for such a stance will be discussed below.

South Stream Project's Place in Russian Strategy

The South Stream project generally fits into Russia's re-integration, diversification and control objectives stated previously. It provides re-integration with post-Soviet countries, diversification of energy supply route to its major energy customer and control of the energy flows in the European region. Nonetheless, 'penetration and control' seems to be the operative word for this project.

A suspicious approach of some analysts regarding this project simply arose from its timing and target countries. In late 2003, the EU awarded the 3900 km long Nabucco pipeline project, with a 31 bcm capacity[233] with possibility to increase to 60

[229] 'Project History,' *op.cit.*

[230] *Ibid.*

[231] Project History,' *op.cit.*

[232] South Stream AG,'New Gas Pipeline Routes in Russia,' available at: http://south-stream.info/index.php?id=10&L=1 (accessed on March 5, 2012).

[233] Nabucco,'Facts & Figures,' http://www.nabucco-pipeline.com/portal/page/portal/en/press/Factspercent20_Figures (accessed on March 5, 2012).

bcm, as a 'priority project.'[234] The project was created to diversify energy sources so as to not be solely dependent upon Russian gas sources. Initially Austria proposed to connect Iranian gas sources with Europe, but later political disputes and U.S. involvement led European leaders to turn to Turkmenistan and Azerbaijan. This move attracted interest of the U.S. government to the project.[235] Egyptian, Georgian and Iraqi gas resources had been into account as well.[236] New transit states would be Turkey, Bulgaria, Romania and Hungary and the pipeline would terminate in Austria's Baumgarten gas hub.

Nabucco, as an EU and U.S. backed project, gained importance especially after the Russian-Ukrainian gas dispute in 2006. Russia, however, gave a faster and stronger response to the dispute than did Europe in terms of diversification and prevention of EU attempts to circumvent Russia.[237] At first, it proposed new supply routes, the northern line discussed above and a southern line. Both aimed to circumvent traditional transit states in CEEC. The original southern line project was South European Gas Pipeline, renamed Blue Stream II that was planned to be

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[234] Aleksandra Jarosiewicz, 'Azerbaijan Will Decide the Shape of the Southern Gas Corridor,' *OSW Centre for Erastern Studies,* available at: http://www.osw.waw.pl/en/publikacje/eastweek/2011-01-19/azerbaijan-will-decide-shape-southern-gas-corridor (accessed on March 5, 2012).

[235] *Ibid,* p. 7. See also, Agata Loskot-Strachota, 'Nabucco vs. South Stream – Rivalry over Balkan Gas Pipelines,' *OSW Centre for Eastern Studies,* available at: http://www.osw.waw.pl/en/publikacje/osw-commentary/2008-03-20/nabucco-vs-south-stream-rivalry-over-balkan-gas-pipelines (accessed on March 5, 2012) and Paul Taylor, 'U.S. Throws Weight behind EU's Nabucco Pipeline,' *Reuters,* February 22, 2008, available at: http://uk.reuters.com/article/2008/02/22/eu-energy-usa-idUKL2212241120080222 (accessed on June 24, 2011).

[236] Agata Loskot-Strachota, *op.cit.* For more detailed information see, Vladimir Socor, 'Sourcing the Nabucco Pipeline to Prevail against South Stream,' *Euroasia Daily Monitor,* Vol. 5, Is. 25, February 8, 2008, available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=33365 (accessed on March 5, 2012).

[237] European diversification attempts gave birth to six competing pipeline projects created to bring natural gas from the Caspian Region and the Middle East. The so-called 'Southern Gas Corridor' includes NABUCCO, the Italy-Turkey-Greece-Interconnector (ITGI), the Trans-Adriatic Pipeline (TAP), the Azerbaijan-Georgia-Romania-Interconnector (AGRI), White Stream and lastly launches the BP project South East Europe Pipeline (SEEP). All of these projects are competing for Azeri gas, whose client is Russia. The SEEP pipeline is seen as second great competitor to the favorable Nabucco project, since BP is a shareholder in Shah Deniz, the field to provide gas to the pipeline. See, Aleksandra Jarosiewicz, *op.cit* and Judy Dempsey, 'Time to Bury Nabucco,' *op.cit.*

parallel to the Blue Stream I Russia-Turkey connection. Yet, Russia ultimately changed its plans and put the South Stream project on agenda. Zeyno Baran tells of South Stream's tactical birth:[238]

> Russia wanted to reach the Turkish market first so that it could saturate it with its own supplies, thus maintaining a monopoly in the country and keeping Caspian gas out. The absence of Caspian gas in Turkey would also mean that TGI and Nabucco would be able to transport only Russian or Russian-controlled gas to European markets. When negotiations with Turkey dragged on, and when neither TGI nor Nabucco showed interest in Gazprom's involvement..., Russia changed tactics. As soon as it became clear that Nabucco could not necessarily be derailed through action in Turkey alone, Russia moved to bypass it by planning direct connection to Bulgaria-the first EU territory. By mid-2006, Gazprom had come up with the idea of a sub-sea pipeline of unprecedented length to Bulgaria: South Stream.

Russia's tactic to prevent projects undermining its strategic position is not limited to line diversification proposals. Analysts recognise two main strategies in this regard: First, Russia aims to control markets do not allow potential competition.[239] This includes above mentioned infrastructure deals in Europe, especially South Stream transit countries that are mostly transit countries of planned Nabucco and also Interconnection Turkey-Greece-Italy (ITGI) pipelines. Salient is investment in the Baumgarten gas hub in Austria, the final destination of Nabucco and South Stream as well.[240] Gazprom's investments in the European energy sector, where Gazprom usually demands a controlling share, create significant commercial ties with usually powerful entities in domestic politics and enable Russia to pressure national governments.[241]Second, Russia closes long-term, large-volume gas deals with gas producers in CIS, such as Turkmenistan, Azerbaijan, Uzbekistan and

[238]Zeyno Baran, *op.cit,* p. 8.

[239]*Ibid,* p. 9. See also, Stefan Ehrstedt and Peeter Vahtra, *op.cit,*p.12-14.

[240] Stefan Ehrstedt and Peeter Vahtra, *op.cit,* p. 14.

[241]Zeyno Baran, *op.cit,* p. 6.

Kazakhstan. Baran points to several tactics used by Russia to bind related countries to the South Stream such as "promising significant amounts of investment and turning the country into a 'gas hub' for Europe; providing various forms of support to political leaders during election campaigns and then, after they reach office, extracting concessions from them; and working through non-transparent third parties and reaching deals that are hidden from the public."[242]

Russia succeeded in raising doubts about the viability of the EU-U.S. backed Nabucco pipeline. The uncertainties about gas sources to fill the pipeline, since key actor Azerbaijan has not decided yet to whom it will sell gas, restrained potential investors from the project and made it easier for Russia to persuade Nabucco countries to sign deals in favor of the South Stream. Additionally, significant involvement of Putin in the South Stream campaign, which is lacking with the EU and U.S. leaders, helped the project to forge ahead and made an impression on governments and the public.[243] In April 2010, by signing the South Stream deal with Austria, in Vienna, Putin assured the public that Russia was able to supply gas to Europe for an additional 100 years. He stated that construction of the Nabucco pipeline was pointless since there were no contracts that had been signed.[244] It is worthy to note that the first Nabucco deals planned for signing in 2011 have not been closed yet.

3.3.3 An Assessment of the Russian Strategy on Nord Stream and South Stream Gas Pipeline Projects

The Nord Stream falls under the diversification part of the Russian energy strategy, namely diversification of energy routes, which brings Russia several strategic advantages. First, the alternative and direct gas pipeline connection with Western Europe enables Russia to avoid traditional transit countries such as

[242]Zeyno Baran, *op.cit,* p. 13. See also, Vladimir Socor, 'Sourcing the Nabucco Pipeline to Prevail against South Stream,' *op.cit.*

[243]Vladimir Socor, 'Sourcing the Nabucco Pipeline to Prevail against South Stream,' *op.cit.*

[244]Aleksei Nikolski, 'Putin Hails Russia's Gas Reserves as Austria Joins South Stream Project,' *op.cit.*

Ukraine, Belarus and Poland and thus it gains bargaining power over these countries concerning transit fees and natural gas prices. As Prime Minister Putin stated, "Any transit country has always the temptation to take advantage of its transit status. But that exclusivity is now disappearing."[245]

Second, the economic linkage of this manner provides Russia with an opportunity to use a traditional political tool: the offer of cheap gas in exchange for political loyalty. Russia, in its strategic game, secures its own and direct trade with Western Europeans and undermines the economic weight of transit countries in the Central and Eastern European region, the environment with anti-Russian tendencies.[246]

Third, from a Russia-EU relations perspective, Nord Stream will make it possible for Gazprom, and thus Russia, to play significant role in the European energy sector, particularly the European downstream market. The opposite is not likely since Russia is reluctant to open its upstream to European companies.

Fourth, Nord Stream enables Russia to increase exported volume to Europe and gain customer diversification within the EU. Hence it strengthens its position toward states connected to the pipeline, namely Germany and to a lesser extent Belgium, Denmark, the Netherlands, the UK[247] and France.

Russia's objectives somewhat differ regarding the South Stream project. Still fitting into the diversification, re-integration and control triangle, the South Stream project was initiated as a counter-project to the EU-led Nabucco project that attempted to undermine Russia's long-term interests. Additionally, the South Stream includes many 'investment' sub-projects that need to be analyzed from an economic perspective.

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[245] Fred Weir, 'Nord Stream Pipeline Gives Russia Edge in European Gas Wars,' *CSMonitor,* 8 September 2011, available at: http://www.csmonitor.com/World/Europe/2011/0908/Nord-Stream-pipeline-gives-Russia-edge-in-European-gas-wars (accessed on March 15, 2012).

[246] Roland Götz, *op.cit*, p. 2.

[247] Robert L. Larsson, *op.cit*, p. 6.

Some analysts criticises Moscow for investing in assets in Europe or construction of infrastructure instead of investing in production[248] to secure its contracted long-term supplies. On the other hand, Stefan Ehrstedt and Peeter Vahtra draw attention to the benefits of these investments. First, Russia's strategy is to evolve from just a producer country to a strong actor in the global energy market. Hence, acquisition of various energy companies, pipeline networks, etc. enables Russia to increase its role. Control of the European energy infrastructure would mean a better standing in the value chain. This approach can be seen in both the gas and oil sectors. Second, Russia's gas production in existing fields peaked and exploration of other fields is engaged in investments since new fields are in the geographic area difficult to reach and expensive to explore. Thus, control of the extensive pipeline network enables Russia to influence the final price for its gas and the best market in which to sell its gas remains Europe.

The political goals, however, are more often propounded. Examining both projects in one, Baran indicates that in case both pipelines are in operation, Russia will 'enjoy a surplus of export capacity.' Hence, Russia, prevented projects in contrast to its own interests, will control transit routes to Europe and hold the access of other producers to the infrastructure. Thus, Russia will increase its leverage especially over European countries with high dependence on its gas resources that can be used to set the gas prices, increase competition among customers and gain political concessions in a pro-Kremlin way.[249]According to Vladimir Socor: "By putting a multiplicity of options on the table, Russia can pressure countries it regards as 'recalcitrant' into transportation deals favorable to Moscow."[250] This seems to be

[248]Vladimir Socor, 'South Stream: Gazprom's New Megaproject,' *op.cit;* Vladimir Socor, 'Sourcing the Nabucco Pipeline to Prevail against South Stream,' *op.cit* and Zeyno Baran, *op.cit,* pp. 21-22.

[249]Zeyno Baran, *op.cit,* p. 23.

[250]Vladimir Socor, 'South Stream: Gazprom's New Megaproject,' *Eurasia Daily Monitor,* Vol. 4, Is. 125,June 25, 2007, available at:http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=32826 (accessed on March 5, 2012).

the first significant step to becoming an energy management center of the Euroasian region.

3.4 European Actors' Strategies on Nord Stream and South Stream Gas Pipeline Projects

The nature of EU-Russia energy relations plays a significant role in international energy projects initiated by the Russian Federation and affecting the CEE region. While the EU Commission attempts to situate energy relations with Russia into a common legal framework, Russia resists this kind of Europeanization and prefers to deal with EU Members on a bilateral basis, which is regarded by some analysts as a 'divide and rule' strategy. The strength of the Russian Federation relies on a high degree of state control in the gas sector and representation by state-backed Gazprom. As a result, Russia is able to bind its commercial and political interests and play its card as a single entity.

On the other hand, the EU presents a highly diversified environment in terms of geography, demography, economy, institutions, historical heritage, energy needs and policies. A variety of actors and interests did not lead to fragmentation in the energy sector; instead, it resulted in domination of the market by the profit driven large enterprises focused on downstream, including 'wholesale and retail distribution, power generation and transit.'[251] Although the world of business and politics are in many ways similar, politicization of the energy trade complicates terms for both sides, since business is mainly focused on profit maximization and relies on a stable market, whilst politics and political interest are formed over a short period by changeable factors. At this point, the political diversity of the EU in means of needs and interests complicate the creation of a needed common energy policy as well institutional coordination.[252]

[251]David Dusscault, 'Europe's Triple By-pass,'*op.cit,* p. 391.

[252]*Ibid,* p. 392.

The energy business environment in the EU eases Russia's aim to deal with energy companies and their country of origin separately. In this manner, the diversification projects such as the Nord Stream and South Stream cannot be regarded as EU-Russia projects. Rather, they are bilateral projects, such as Nord Stream between Germany and Russia (Gazprom and Wintersall, E.ON. Ruhrgas) and South Stream mainly between Russia and Italy (Gazprom and ENI) that pay sufficient attention to other related countries.

This subsequent section of the study will provide a brief overview of Russia-EU energy relations and the EU's strategy in general. Furthermore, it examines the EU actors' position regarding the Nord Stream and South Stream, particularly Germany's and Italy's positions.

3.4.1 The EU's Energy Strategy toward Russia

Dissolution of the Soviet Union and changed circumstances gave Europe significant leverage over a new and weak Russian Federation. This was the perfect time for EU-led initiatives to ensure European energy supply security via constitution of an international legal framework. The first step was the encouragement of Russia to implement the Energy Charter Treaty (ECT). This treaty entered into force in 1998 and is legally binding to 51 states, the European Community and Euratom. Yet the Russian Federation did not ratify the ECT, even though it signed the treaty in 1994. The federation provisionally applied ECT and related provisions until 18 October 2009, when ending the termination period after Russia announced it did not intend to become a contracting party.[253] It should be mentioned in this regard that even other producer countries, such as the U.S., the UAE and Venezuela, known as energy producers, did not enter the treaty since the ECT is focused on benefits of consumer states.

Secondly, the EU proposed a Partnership and Cooperation Agreement (PCA) that was launched in 1994 and came into force for ten years in 1997. According to

[253]Energy Charter, 'Russia,' available at: http://www.encharter.org/(accessed on March 15, 2012).

Article 106 of the PCA, the agreement is automatically prolonged unless one of the parties declares its request for termination.[254] Despite both parties being dissatisfied by the incomprehensive provisions of the current PCA, neither party terminated the agreement to avoid having no agreement at all. The PCA framed the energy relations under the principles of the market economy and the ECT, but it did not make any reference to the diversification of energy supplies. According to some analysts, this indicates that the EU viewed Russia as the prime energy supplier.[255]

The EU's Common Strategy on Russia dates back to 1999. It aims for Russia's integration into the European economic and social zone and an increase of cooperation in specific areas, including energy. The main focus on energy relations was to improve natural resources' exploitation, management and to safeguard supply security. However, in 1999 gas and oil prices increased and the Russian Federation entered into the economic recovery[256] and gained confidence in the international arena. Hence, attempts to harmonize Russian energy sector with the European system was seen as Europeanization and was avoided.

The increasing Russian power and confidence is visible in crises such as the 1999 Second Chechen War and 2008 South Ossetia War and in reaction to the EU. In case of the Second Chechen War, the General Affairs Council discussed potential measures against Russia; however, reserved EU Members preferred to strengthen their tight bilateral energy relations. Discord within the EU also occurred when the EU expressed its disapproval of increased Russian involvement in Georgia. Yet, this disapproval was carefully expressed so as not to hinder energy relations with its main supplier.

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[254]Agreement on Partnership and Cooperation, Establishing a Partnership between the European Communities and their Member States, of One Part, and the Russian Federation, of the Other Part, *Official Journal of the European Communities L327/3,* November 28, 1997, p. 28, available at: http://ec.europa.eu/world/agreements/downloadFile.do?fullText=yes&treatyTransId=643 (accessed on March15, 20012).

[255] Sijbren de Jong and Jan Wouters, *op.cit,* pp. 6-7.

[256]*Ibid,*p. 8.

The EU's attitude toward Russia in first years of the new millennium centered upon attempts to strengthen dialogue with the Russian Federation and pursue geographic diversification.[257]In September 2000, the EU and Russian Federation agreed at the Paris Summit to establish an energy partnership as a political partnership going beyond producer-customer relations. A year later the first of what would become regular energy dialogues took place, which increased cooperation. The 2001 EU-Russia Energy Dialogue Synthesis Report points out 'common and complementary' interests collected under five headings: "Ensuringthesecurity ofenergysuppliesoftheEuropeancontinent,thedevelopmentofthevastpotential of the Russian economy, inparticularRussia'senergy resources,theopportunitiesof the pan-European market, the challenge of climatechange and the conditionsframingthe use of nuclearenergy."[258] This report highlights the significance of long-term contracts that give opportunity to share risks between producers and consumers and new strategic projects including "development of new energy production and transportation in Russia and non-discriminatory access for the transit of energy."[259] Russia and the EU took responsibility to ensure transport routes, chosen by involved companies, and label them as common interest projects (Trans-European Energy Network, TEN-E). Three such projects are the Northern Trans-European gas pipeline (later on called the Nord Stream), the Yamal-Europe gas pipeline (transiting Belarus and Poland) and the development of the Shtokman gas field. The EU promises with this declaration assistance in evaluation of the Russian existing export lines and requests that Russia participate in the EU-Central and Eastern European regional projects of transit and energy transportation systems aiming at their development, extension and optimization. Another important output of this

[257]*Ibid,* p. 8.

[258] EU-Russia Energy Dialogue Synthesis Report, Brussels/Moscow, September 2001, p.1, available at: http://ec.europa.eu/energy/international/russia/doc/reports/progress1_en.pdf (accessed on March 15, 2012).

[259]*Ibid,* p. 2.

dialogue seems to be emphasis on the importance of fast track dispute settlement to secure accelerating investments flows.[260]

Both sides have raised and dealt with issues over the years. The issues have concerned the EU's request for abolishing the destination clauses, preventing wholesalers from re-selling the commodity outside the country where they are established or Russia's concerns about the alleged existence of the EU's or member states import limits up to 30 percent and Russia's demand of indication that the EU's electricity and gas markets are non-discriminatory in order to be opened to Russian suppliers. The positive relations continued by the EU's 2002-2003 National Indicative Program for Russia aiming at de-monopolization of the natural monopolies such as Gazprom and giving priority to the private sector. Although the EU allocated the above stated aim of €42 million,[261] it is doubtful that Russia accepted this financial support for the same purposes since the energy policy strategies evolved during the first years of Putin's tenure, which was marked by a form of state capitalism.

The trajectory of Russia-EU relations started to change with the 2004 enlargement and favorable position of the EU left its place to Russia. The energy demand in the industry increased along with dependence on Russian energy resources, reaching 40 percent. A new level of dependence was partly caused by high dependence of the new member states on energy routes and sources from Russia, particularly the Visegrad Group Members. In this environment, the Russo-Ukrainian energy crisis in 2006 pointed to European vulnerability and raised question marks about the reliability of Russia as a gas supplier. It was a kind of warning for the EU Members, which was reflected in further steps of the commission.

EU released its Green Paper 'A European Strategy for Sustainable, Competitive and Secure Energy' in 2006. The Green Paper suggests development of

[260] *Ibid,* pp. 2, 5, 8.

[261] Country Strategy Paper, National Indicative Progamme 2002-2003, Russian Federation, September 21, 2001, pp. 23-25, available at http://eeas.europa.eu/russia/docs/02-06_en.pdf (accessed on March 15, 2012).

a competitive internal energy market based on a new legal framework, extended pipeline interconnections and diversification of energy mix within two years. Furthermore, the EU admits in this document the need for a coherent external energy policy to play a more effective role in the international energy market in tackling common problems with its energy partners.[262]

This has been a reasonable, yet difficult task to achieve since the EU Members' relations with third countries differ from one to another. Each member bears different historical experiences and in this sense, post-communist countries, Visegrad Group Members above all, are still resistant toward Russia and often bet first on the US policies and then on the EU's policies. This resistance caused crises within the EU during EU-Russia negotiations on new PCA vetoed by Poland (see Chapter 4).[263] On the other hand, founder membersignore the CEEC's political reservations and prioritize yielding trade partnerships with Russia, despite the disputes over democracy, human rights and the like. Moreover, energy policies and dependencies of member states differ significantly. Germany and CEEC rely on Russian gas heavily but other members do not. They either import gas from other sources (Spain, Portugal, Italy and France import gas from Algeria, Libya and Egypt) or the other energy types' share in the energy mix is higher, such as France and its nuclear energy. Additionally, countries as the UK, Ireland, Denmark, the Netherlands, and Italy belong to European natural gas producers.[264] However, European natural gas reserves are in decrease and the UK for the first time since

[262] COM (2006) 105 final, *Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy,*March 8, 2006 Brussels, pp. 3, 5, 14.

[263] Sijbren de Jong and Jan Wouters, *op.cit,* p. 16.

[264]Eurostat, 'Energy Production, 1999 and 2009,' available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Energy_production,_1999_and_2009_(million_tonnes_of_oil_equivalent).png&filetimestamp=20111123174647#filehistory (accessed on April 4, 2012).

1967 consumed more gas than it produced in 2011.[265] Thus, the UK made a deal with Nord Stream and the policies of European gas producers are subjected to change. Yet, as Andrew Monaghan states, "If the EU was less diverse than it currently is, it might be easier to create a unified strategy: at present, the agenda of every state varies significantly."[266]

Another measure to secure energy supplies is the Third Liberalization Package announced on September 2007,[267] which suggests internal gas market reform by unbundling transmission system operators, supply and production activities across the EU. Commissions aimed to safeguard companies from third countries undergoing the same unbundling process as EU companies and put forward a clause known as the 'Gazprom clause': "…no supply or production company active anywhere in the EU can own or operate a transmission system in any Member state of the EU."[268]Separation of production, supply and transmission activities to secure energy supplies threatened by conflicted interests is main idea of the proposal. Due to this strategy, liberalization of unbundling the market should constitute a common

[265]Emily Gosden, 'UK Gas Imports Outstrip Production for First Time since 1967,' *The Telegraph,* March 29, 2012, http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/9173373/UK-gas-imports-outstrip-production-for-first-time-since-1967.html (accessed on April 4, 2012).

[266] Andrew Monaghan, 'Russia and the Security of Europe's Energy Supplies: Security in Diversity?,' *Defence Academy of the UK Conflict Studies Research Center,* January 2007, available at: http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=44087 (access on January 29, 2011).

[267] European Commission exposed that the Second Liberalization Package adopted in 2003 was not applied by member states, except Cyprus and Malta, and thus came up with the Third Liberalization Package. See, Euroactive 'Třetí liberalizační balíček v energetice' (Third Liberalization Package in Energy), July 21, 2009, http://www.euractiv.cz/energetika/link-dossier/liberalizace-unijni-energetiky-000055 (accessed on January 29, 2011).

[268]COM (2007) 529 Final, 'Proposal for a Directive of the European Parliament and of the Council Amending Directive 2003/55/EC Concerning Common Rules for the Internal Market in Natural Gas,' *European Commission,*September19, 2007, Brussels, p. 7, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0529:FIN:EN:PDF (accessed on March 15, 2012).

energy market and unify the interests within the EU, which enable the EU to take joint action with energy suppliers.

It is worth mentioning that the "Gazprom clause," limiting third countries from acquiring energy stakes within the EU was a condition of France to continue in the liberalization process. Yet, concerning the internal unbundling conditions, France was one of the pioneers against them. France and Germany raised concerns that internal unbundling would decrease energy security and increase prices. They did not want to divide their energy champions. Along with backing from Austria, Bulgaria, Greece, Luxembourg, Lithuania and Slovakia, France and Germany insisted on their own version of the package, known as the 'third way to liberalization' that softened regulations on unbundling. According to this proposal, the production and transmission will be able to still be under one corporation. The European Commission under veto threat stepped back and a third internal energy market package was finally adopted in 2009,[269] leaving the right to choose which way of liberalization member states prefer.[270]

Conflict in Georgia along with interruption threats pushed the EU to take further measures to secure its energy supply. The EU released its Energy Security and Solidarity action plan in late 2008, also called the Second Strategic Energy Review. Besides common energy policy and market targets, the plan highlights the significance of infrastructure needs and the diversification of energy supplies in terms of sources and routes, external energy relations, increased stock capacities and crises response mechanisms, use of indigenous sources and energy efficiency. These

[269]Directive of the European Parliament and of the Council of 13 July 2009 Concerning Common Rules for the Internal Market in Natural Fas, *Official Journal of the European Union,* L 211, August 14, 2009 Brussels, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:en:PDF (accessed on March 15, 2012).

[270]Euroactive, 'Třetí liberalizační balíček v energetice'(Third Liberalization Package in Energy),'July 21, 2009, http://www.euractiv.cz/energetika/link-dossier/liberalizace-unijni-energetiky-000055 (access on January 29, 2011).

objectives also laid the foundation of the Europe 2020 Strategy adopted in November 2011.

The diversification priorities of the EU stated in the action plan includes interconnections and reverse flows between member states to increase the solidarity among EU Members. However, attention is paid primarily to the Southern Gas Corridor for gas supply from Caspian and Middle Eastern sources. Yet clear specification of the Southern Gas Corridor is lacking in this document. Thus, some analysts have indicated that both the Nabucco and South Stream pipeline projects can be considered as Southern Gas Corridor projects. One circumvents Russia and the other does not. In addition, gas to fill both pipelines is still in question. EU representatives, especially those involved in the South Stream project, who emphasize the complementarity of both projects, support this idea. The action plan also mentions the significance of the energy ring between Europe and the Southern Mediterranean through interconnections and development of renewable energy potential.[271]

Infrastructure and diversification in general constitute a significant part of external relations, one of the key parts of the European Energy Policy. The 2011 Communication on Energy Supply Security and International Cooperation document acknowledges that bilateral energy relations between member states and third countries undermine the internal market and weaken energy supply security and competitiveness of the EU. The Southern Gas Corridor planned to transmit 10-20percent of EU estimated gas demand by 2020 is regarded as a key infrastructure priority. This time, the description is more specific, involving the Trans-Caspian gas pipeline system, economic and political engagement with the Caspian and Middle Eastern regions, especially with Azerbaijan, Turkmenistan, Iraq and other countries from the Central Asian region. This cooperation includes also the EU's assistance in exploration and development of the energy sector. Hence there is an attempt to

[271] MEMO/08/703, 'EU Energy Security and Solidarity Action Plan: 2nd Strategic Energy Review,' *European Commission,*November 13, 2008, Brussels, available at: http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/703&format=HTML&aged=0&language=en&guiLanguage=en (accessed on March 15, 2012).

circumvent Russia and decrease the EU's source dependence. Yet, still there is special focus on Russia, where the aim is to engage Russia on common legal bases. The Ukraine issue is another matter to solve since 20percent of the European imports flows through this country. The proposed solution to secure gas flows from the Eastern Corridor is to set up tri-partite cooperation at political and administrative levels with Russia and Ukraine. Besides the above-mentioned regional targets, one of the European official alternatives is the Mediterranean region with its potential in fossil fuel resources.[272]

The European Union's increasing natural gas demand, growing dependency and transit disputes of its main supplier led the commission to pursue diversification strategies in terms of sources, routes and at a lower degree of the energy mix. In this respect, the main success of the European Union is the release of more than 12 documents in the last six years, though action is still lacking. Little progress has been made on planned gas interconnections and the Southern Gas Corridor, which should have secured diversified supplies by the end of 2011. In the case of unconventional gas, there is competition between Estonia, Latvia and Lithuania on the location of the LNG terminal with a capacity of 2-3 bcm. The construction of the LNG terminal with capacity of 5-7 bcm in Poland actually began in 2011 and planned to be finished by mid-2014. The European Commission proposed a €9.1 billion investment in priority corridors and trans-European infrastructure in October 2011. The decision will be made at the autumn European Council summit and is anticipated despite current economic crises.[273] However, it is an issue of concern whether multidimensional diversification will be reached under current fragmentation, low-level political involvement in comparison to Russia and clumsy steps.

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[272] COM (2011) 539 Final, 'On Security of Energy Supply and International Cooperation – "The EU Energy Policy: Engaging with Partners beyond Our Borders,"' *European Commission,* Brussels, September 7, 2011, pp. 5, 8, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0539:EN:HTML:NOT (accessed on March 15, 2012).

[273] EU-Russia Relations and the Diversification of Gas Supply Routes,*The European Council on Foreign Relations,* available at: http://ecfr.ideasoneurope.eu/2012/05/09/eu-russia-diversification-of-gas-supply-routes-to-europe/ (accessed on May 15, 2012).

The question is whether focus on infrastructure is the strategy to be pursued by Europe. David Dusseault, in this respect, claims that regarding European energy security more infrastructures will result in increasing competition for limited resources and the growing gap among energy-rich and energy-poor countries within the EU. This may force countries dependent on energy resources, such as Poland, the Baltic States, Ukraine and Belarus to search for alternative solutions including coal, nuclear energy or expensive LNG.[274] Yet, an inclination for alternative resources and shale gas is visible in current energy policies. Meanwhile, state-backed Gazprom's projects and policies, including Nord Stream and South Stream projects, stake acquisitions in European energy companies and gas deals with Azerbaijan and other gas rich countries of Caspian region tie the EU's hands. Fragmentation and the EU's non-assertive approach result in the EU's growing dependence on Russian resources.

3.4.2 Nord Stream and Germany

The European increasing gas demand and transit disputes are key arguments of the Nord Stream pipeline supporters. Yet, German gas demand is another part of the matrix. Indeed, the EU is Russia's main energy partner, but Germany is the main client within the EU. About 40percent of Germany's gas import is from Russia, particularly Gazprom. This moves Germany to the top in the list of Gazprom's European clients. The question is whether Germany's natural gas consumption increases are in compliance with the EU.

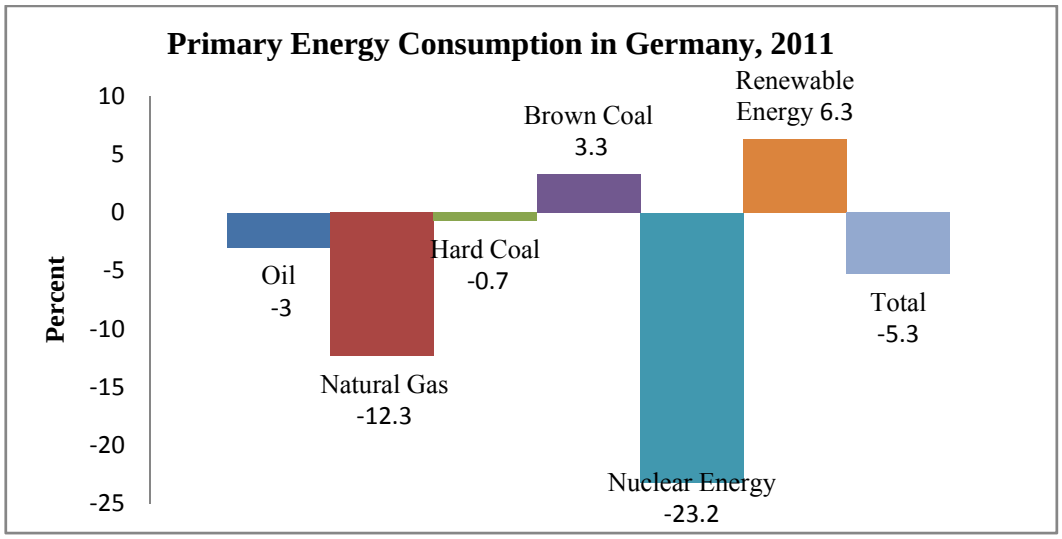
Changes in German energy policies in the last decade, especially its attitude toward nuclear energy, prompted some analysts to assume that the natural gas demand in Germany will rise. In 2000, the German government decided to phase out all nuclear power stations by 2022 and approved the Atomic Energy Act Amendment in 2002. Yet, in 2010 the Socialist/Green Government extended the life span of 17 nuclear power stations for approximately 12 years. However, the Fukushima nuclear accident in Japan gave an impetus to reconsider the safety aspect of nuclear energy and energy policy in general. In July 2011, the Conservative–Liberal coalition,

[274] David Dusscault, 'Europe's Triple By-pass,' *op.cit,* p. 380.

headed by Chancellor Angela Merkel, adopted a Nuclear Power Exit Energy Package that goes beyond the scope of the previous nuclear exit amendment from 2002. Seven power plants were shut down, one left to provide back-up power until 2013 and others are going to be phased out until 2022. All these legal changes are designed to facilitate a transition to the age of renewable energy.[275]

Interestingly, Germany's energy consumption statistics reveal success in the transition since the share of renewable energy in primary consumption has increase by 6.3percent, whereas nuclear energy's share has decreased by 23.3 percent and natural gas consumption by 12.9 percent. The only natural resource that had a share increase besides renewable energy is brown coal with 3.3 percent. By February 2012, the share of natural gas in Germany's energy mix was 20.2 percent, while oil was 34 percent, coal 24.3 percent, renewable energy 10.9 percent, nuclear energy 8.8 percent and others 1.3 percent (see Table 3).[276]

Table 3:



Source: Arbeitsgemeinschaft Energiebilanzen (Working Group Energy Balances – AGEB)

[275]Mathias Lang, 'Clear Bundestag Majority for 2022 Nuclear Phase-Out and Coalition Party Approval for Energy Package,' *German Energy Blog,* available at: http://www.germanenergyblog.de/?p=6677 (accessed on May 15, 2012).

[276]Arbeitsgemeinschaft Energiebilanzen (Working Group Energy Balances – AGEB),'Witterung drückt Energieverbrauch auf niedrigsten Wert seit der Wiederverinigung,'available at: http://www.ag-energiebilanzen.de/viewpage.php?idpage=62 (accessed on June 5, 2012).

Natural gas demand in Germany does not tend to rise however, and the future is not clear since the rest of the power plants are in operation. Under current circumstances, additional gas volumes from the Nord Stream would provide different kinds of benefits to Germany. Re-export and management of natural gas flow in the region are among them. On the other hand, the peculiarity of the Russian-German energy relations regarding the Nord Stream project resides in the partnership between ex-Chancellor G. Schröder and V. Putin. G. Schröder, during his chancellorship in years 1998-2005, was reliably pro-Russian and helped Russia to reach its strategic objectives through given support to the Nord Stream project. Just few days before leaving his post, Chancellor used his office to safeguard $1.4 billion for the project, which was later turned down. In return, he got a senior post in the Nord Stream AG consortium after the collapse of his coalition government in 2005.[277]

Personal relations played an important role in German-Russian relations: "Chancellor Willy Brandt's swimming with Soviet leader Leonid Brezhnev near Yalta in 1971 paved the way for Germany's Ostpolitik policies aimed at normalizing relations and de-escalating Cold War tensions with the communist states of Eastern Europe. In July 1990, Helmut Kohl held talks with Mikhail Gorbachev wearing a cardigan; the wardrobe choice was intended to symbolize their close and trusting relationship. In 2001, Putin and Gerhard Schröder -- who are on a first-name basis -- took a horse-drawn sleigh ride through snow-covered Moscow."[278]Personalization of the relations between Germany and Russia dates back to the Willy Brandt's Ostpolitik. Then West Germany as a politically weaker party used its economic power to gain political goals with regard to the Soviet Union. The significance of the linkage politics arose from the fact that regardless of the political environment both parties sustained their economic cooperation at an acceptable degree of normality. This attitude constituted a significant aspect of German-Russian relations during the

[277] Daniel Freifeld, 'The Great Pipeline Opera,' *op.cit.*

[278] Ralf Neukirch and Matthias Schepp, 'German-Russian Relations Enter a New Ice Age,' *Spiegel Online,* March 5, 2012, available at: http://www.spiegel.de/international/germany/german-and-russian-relations-are-at-an-impasse-a-835862.html (accessed on June 5, 2012).

Cold War[279] and even afterward. Thus, the disagreements on the political level, such as the Russian-Georgian conflict, Chechen Wars, and violation of human rights did not affect relevant parties' economic relations.

This time, the fact that these relations affected Europe's energy future was alarming, since construction of the Nord Stream undermined the EU's source diversification project Nabucco and increased European dependence on Russian supplies. J. Fischer, another prominent German politician who served as Vice-chancellor and Minister of Foreign Affairs during Schröder's tenure, represents a different wing within German energy politics. Fischer, in his interview with periodical *Der Spiegel*, answered the question about the most objectionable side of Schröder, as his position on Russia. Even Fischer found a place in energy business after his political career and took post of political communications advisor at the Nabucco consortium, a competitor of the Nord Stream and South Stream. Daniel Freifeld indicates that struggle between Fischer and Schröder is personified version of the struggle within the EU: "On one side are those countries most worried about their dependence on Moscow, especially the former communist countries of Central and Eastern Europe. On the other are countries such as Italy and Germany and leaders, such as Schröder, who see closer ties with Russia as both a mercantilist opportunity and a strategic imperative."[280]

Russian interest in Germany is not solely business-oriented. Germany is a gate that opens to the West facilitating influence in Europe. On the other hand, even Germany accepts the role of mediator between the West and Russia. Meanwhile, both states are significant trade partners. German exports to Russia rose by 34 percent and imports by 27 percent in 2011. Germany is Russia's second most important trade partner.

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[279] Angela Stent, *From Embargo to Ostpolitik, The Political Economy of West German-Soviet Relations 1955-1980,* Cambridge University Press, Cambridge 1981, pp. 3, 7.

[280] Daniel Freifeld, 'The Great Pipeline Opera,' *op.cit.*

Yet, the relation between Putin and Merkel is distanced and business-oriented. Germany is the leading power in the EU and A. Merkel, in contrast to her predecessor, acknowledges reservations and mistrust of the CEEC toward Russia. The coldness between Berlin and Moscow is palpable in recent developments. Merkel raised accusations about manipulations in the lower house of Russian parliament, the Duma, held in December and bet on Medvedev in presidential elections, but were disappointed. Putin cancelled his May meeting with his counterpart from Germany, J. Gauck, for what should have started 'German-Russian Year.' He did not find any time in his schedule for meeting in June. Putin sees Russia as a global power and accuses Europeans of being America's vassals. His non-attendance at the G-8 summit in mid May and the NATO summit in Chicago indicates his self-confidence about Western partners.[281]

Despite these developments in the political arena, the Nord Stream is partially in operation, Germany's ties with Russia have strengthened and European natural gas dependence on Russia has increased. European source diversification attempts, particularly Nabucco, seem to have fallen apart with Germany's contribution. The strong partnership between Germany and Russia and with respect to the Nord Stream connection line will carry Germany to the position of natural gas flow manager in Europe since the Nord Stream is designed to carry 55 bcm of natural gas and the interconnections under the European energy strategy are being built. Thus the relations between Russia and Germany will continue. On the other hand, Germany is just one destination. Russia's diversification policy with alternative ways leading to Europe, particularly the northern, eastern and southern lines, increases its leverage over the EU as whole and would have increasing competition within the EU.

3.4.3 South Stream and Italy

Italy belongs to the group of European countries with indigenous gas production, although a decreasing one. Italy's domestic production covered 90 percent of supply needs in 1973, whereas today, the country's gas import

[281] Ralf Neukirch and Matthias Schepp, 'German-Russian Relations Enter a New Ice Age,' *op.cit.*

dependency is about 90 percent and anticipated to reach 95 percent in 2030. The increased dependence has two major reasons. First, an attempt to decrease dependence on oil imports in last forty years resulted in increased gas demand that shot up from 17 bcm in 1973 to 77.8 bcm in 2011. Second, gas production decreased in time from 15.4 bcm in 1973 to 8.3 bcm.[282] Either Italian energy mix is at least unfavorable since oil and gas constitute 80percent of the total primary energy consumption with almost equal share. Italy's estimated import shares for 2010 were: Algeria (36percent), Russia (20percent), Libya (12.59percent), Netherlands (4.20percent), Norway (3.80percent) and other (23.11percent).[283]

Recent political upheavals in the Middle East and North Africa affected the energy security of the region and as well the EU, particularly Spain, France and Italy. With regard to Italy, the situation in Libya caused natural gas supply interruption, which means an almost 13percent gas loss. Although Italian primary energy company ENI has long-term gas contracts with Gazprom and Algerian Sonatrach, possible additional gas shortages threatens the Italian energy sector.[284] Besides the political climate in producer countries, Italy's over dependence on imported fossil fuels causes vulnerability to price variations, particularly in electricity generation.

A vital issue for Italy is diversification of energy mix. Emission levels and international climate change policy pointed to nuclear energy and renewable as alternative sources. However, the case of nuclear energy is problematic. Italy decided to phase out its nuclear power plants a year after the Chernobyl disaster and the last

[282]OECD/IEA,'Monthly Natural Gas Survey,' February 2012, p. 4, available at: http://www.iea.org/stats/surveys/natgas.pdf (accessed on March 15, 2012) and OECD/IEA,'Oil and Gas Security Emergency Response of IEA Countries 2010, Italy,' 2010 France,p. 12, available at: http://www.iea.org/papers/security/italy_2010.pdf (accessed on March 15, 2012).

[283]Energy Delta Institute,'Italy,' available at: http://www.energydelta.org/mainmenu/edi-intelligence-2/our-services/country-gas-profiles/country-profile-italy#reference-dbsource_1 (accessed on March 15, 2012).

[284]Stephen Jewkes, 'Italy's Gas Dependence to Rise after Nuclear Vote,' *Reuters,* June 15, 2011, available at: http://www.forexyard.com/en/news/Italys-gas-dependence-to-rise-after-nuclear-vote-2011-06-15T164023Z (accessed on March 15, 2012).

nuclear power plant shut down in 1990. The former center-right coalition, headed by S. Berlusconi, attempted to bring nuclear energy back. According to the coalition's proposal, nuclear energy should have had a 25percent share in primary energy consumption. Another 25percent should have belonged to renewables. Yet, this idea was vetoed in referendum on July 2011.[285] The Fukushima accident and discussion in Germany supposedly affected the referendum result in Italy. For the time being, Italy's over-dependence seems to have remained unchanged and gas demand will rise since the alternative of renewables is expensive and cannot cover the prevailing share in the energy mix in the near future. The secretary general of Italy's associations of energy traders and suppliers, AIGET, Paolo Ghislandi commented that, "Renewable energy sources will get a boost from the nuclear vote, but they are intermittent and that means gas is indispensable -- especially since clean coal technology has not taken off yet."[286]

The Italian-Russian relations and South Stream project should be examined in light of the above-mentioned information, though; historical linkage also plays a significant role. Contrary to other European heavily dependent countries, Italy does not perceive Russia as a threat, but as a guarantee of European security. Italian–Russian energy relations regarding oil imports date back to 1931 and continued even in the harsh Cold War period and when the U.S. was set against such relations. After signing the first natural gas agreement with the USSR in 1969, additional deals in 1976, 1986 and 1996 were made and relations strengthened.[287] In 1999, ENI signed a strategic agreement of great importance with Gazprom on the Blue Stream, 16 bcm

[285]Environment News Service,'Italy Says Goodbye to Nuclear Energy,' May 15, 2011, available at: http://www.ens-newswire.com/ens/jun2011/2011-06-15-03.html (accessed on March 15, 2012).

[286]Stephen Jewkes, *op.cit.*

[287] Alessio Bini, 'The Italian–Russian Energy Partnership and the European Energy Security: The South Stream Case,' *Equilibri,* May 2011, p. 4, available at: http://www.equilibri.net/nuovo/sites/default/files/focus_bini_italianpercent20russianpercent20energypercent20partnership.pdf (accessed on March 15, 2012).

capacity trans-Black Sea pipeline running from Russia to Turkey.[288] In November 2006, during Prodi's government, counterparts signed a long-term agreement constituting a strong alliance. The gas sales to Italy extended to 2035 and both parts agreed to jointly own major projects, which include midstream, downstream, upstream and technological cooperation. Subsequently, in June 2007, both parties signed a Memorandum of Understanding on the South Stream, as a pipeline designed to circumvent troublesome transit countries and that is meant to supply gas to Italy.[289]

With the government change in November 2011, accompanied by President Girogio Napolitano's comment that relations between Russia and Italy should not be based on personal relations[290] indicates close relations between former Italian Prime Minister S. Berlusconi and Putin that undoubtedly contributed to the enhancement of economic relations of the two states. However, these relations, similar to German ones, rose from interpenetrating economic interests developed over years and do not seem to change since Italy's dependence, power and stance within the EU differs from Germany.

In sum, interests are mutual. Russia is one of Italy's main energy suppliers and the South Stream project gives an opportunity to enhance Italy's energy hub position. Italy, in a politically stable environment, is able to bring Libyan energy supplies via the Greenstream and Algerian gas via the Transmed pipeline; furthermore, the GALSI pipeline is in progress and will enhance the capacity of future supplies from Algeria. There also is the possibility to reroute circa 15 bcm gas flows from the Transitgas and Trans-Austria gas pipelines due to reverse flow. In this

[288]Gazprom,'Blue Stream,' available at: http://www.gazprom.com/about/production/projects/pipelines/blue-stream/(accessed on March 15, 2012).

[289] Alessio Bini, *op.cit,* p. 4.

[290]Marco Siddi, 'Leaders Change Business Does Not: Italy-Russia Economic Relations in 2012,' *Világgazdasági Intézet,* April 16, 2012, available at: http://vilaggazdasagi.blog.hu/2012/03/16/leaders_change_business_does_not_italy_russia_economic_relations_in_2012 (accessed on May 5, 2012).

regard, the European Southern Corridor and Russian South Stream, both improve Italy's position in the energy network, thus are seen as complementary projects. Increased supplies to Italy would mean satisfaction of growing domestic gas demand and the possibility of re-export to the gas poor CEE region. From the Russian point of view, Gazprom's cooperation with ENI makes common projects lucrative, offsets the project costs and facilitates the implementation of the project's offshore components. Italy also is a strategically important partner that paves the way to profitable energy markets, for instance, the Libyan one.[291]

3.5 Conclusion

The liberalization process within the transition period accompanied by the openness to Europeanization in return for financial support was emphasized in the Russian state of affairs in initial period after the collapse of the Soviet Union. The first ten years thus presented the greatest opportunity for Europe to secure its energy supplies from Russia under its own terms. However, the EU did not take this opportunity and the economic strengthening of the Russian Federation along with leader change in 2000 brought a new concept of state policy and energy strategy. In contrast to the transition period headed by B. Yeltsin, V. Putin succeeded re-monopolization and consolidated increased state control over the energy sector, pillar of the Russian economy. A close connection between the energy sector and the state has meant increased bargaining power and prioritization of the state interest. Thus, strategy and policy are not based on variables and interests of private companies, as is the situation in Europe.

Some features of the Russian energy policy and strategy remained unchanged though evolved. First of all, energy has been used as a reliable tool in Russian foreign relations since the Soviet era. Today, the threats and cut offs are done in a

[291] Nicoló Sartori, 'The Southern Gas Corridor: Needs, Opportunities and Constraints,' *Instituto Affari Internazionali,* June 2011, p. 14, available at: http://www.iai.it/pdf/DocIAI/iai1108.pdf (accessed on May 5, 2012).

more diplomatic manner; however, the essence is unchanged, which is to gain the desired outcome.

On the other hand, the EU became a victim of its own inability to create a common energy policy, which primarily was caused by fragmented interests, needs and perception within the EU. In the first stage, the EU aimed to break Russian state control over the energy sector by de-monopolization and liberalization, mainly to facilitate European companies' penetration into the market and securitization of the energy flows to Europe. When this plan failed, bilateral relations with Russia strengthened. This time, European actors started to support diversification policies and provide technology supplies to Russia. In exchange, Germany and Italy demand to become the natural gas hub of Europe, increasing their leverage with re-exportation of Russian gas. The strategy of the latter two European countries became an example for other EU Members to follow, even if such attitude undermined the European overall goals and energy security in general.

As a bold approach and strong political involvement strengthen the hand of the Russian Federation, fragmentation of the EU and leadership of energy companies weaken the hand of the EU. For the time being, it seems that the EU has failed in its pursuance of source diversification caused by a lack of assertive political involvement to devise a common energy policy, political instability in the Middle East and North Africa, underdeveloped energy structure in Iraq and loss of the Caspian region in favor of Russia. The position of energy companies within the European energy market is another aspect influencing outcomes. In sum, the Nord Stream and South Stream projects should be perceived more as business driven projects from the view of involved states and companies, mainly Germany and Italy or E.ON Ruhrgas AG, Wintershall Holding GmbH and ENI S.p.A, instead of strategically favorable ones. Nord Stream provides Germany and related companies the opportunity to become a European energy manager since its natural gas demand is contrary to the expectations of decline. Italy bets on good relations with Russia to secure its growing natural gas demand, with the desired side effect of becoming an energy hub in Southern Europe with additional flows from North African suppliers.

CHAPTER 4

THE VISEGRAD GROUP'S RESPONSES TO NORD STREAM AND SOUTH STREAM GAS PIPELINE PROJECTS

4.1 Introduction

The strengthening of Italian-Russian and German-Russian relations along with Russian investments in other related countries has caused a growing regional dependence on one supplier, especially for those countries with overwhelming or full dependence on Russian sources, particularly the CEEC, which has peculiar relations with Russia. From a broader perspective, the Nord Stream and South Stream projects had increased Russian leverage over Europe since Russia has become a decision maker on routes, gas volume and conditions. Hence, Russian dominance in the European energy market as a supplier with diversified route options results in competition within the EU affecting not only but mainly the energy poor CEEC.

This chapter aims to explore to what level the Nord Stream and South Stream projects have affected the CEEC, particularly the Visegrad Group and what strategies to overcome the situation. First, the Visegrad Group's establishment and its energy outlook during the transition period will be examined, with a focus on natural gas. Subsequently, the member states' energy strategies will be analyzed separately within the Visegrad Group and EU.

4.2 Visegrad Group and the Region's Energy Outlook

The political changes in the CEE region after the dissolution of the Eastern bloc brought new regional formations, including the Visegrad Group, which was established in February 1991 when newly elected democratic leaders of the Czechoslovak Republic, Poland and Hungary first met. The initial aim of the group was to overcome historic animosities among members through cooperation during the transition period and Euro-Atlantic integration process. From 1991 to 1993, the

then Visegrad Troika effectively negotiated with the European Community (EC) and the North-Atlantic Treaty Organization with the support of the United States.[292]

Peaceful separation of the Czechoslovak Republic on January 1, 1993 meant not only extension of the group to Visegrad Four (V4), but also group consensus diminishment. From then on, Slovakia's Prime Minister Vladimír Mečiar sought to strengthen relations with Russia rather than to join the Western institutions and Czech Prime Minister Václav Klaus, known as a euro-sceptic, declared the idea of "self-help" for his country. The support of the V4 waned from 1993 to 1998 when each country pursued its own goals separately, but was revitalized in 1998 by the presidents of the Czech Republic, Hungary and Poland. Although many analysts assumed that the group would dissolve after joining the EU and NATO due to the internal competition and disputes among members, the group remained functional. Despite Poland's attempts to lead the V4 and play a major role within the EU amidst charges of neglecting its close neighbors and the dispute between Slovakia and Hungary over minorities, people of the region ultimately supported the initiative.[293] A 2003 public survey conducted just before the EU accession revealed that more than one half of Slovaks (75 percent), Poles (62 percent), Hungarians (52 percent) and almost one half of Czechs (46 percent) expressed their willingness to continue the cooperation.[294] The initiative has continued its cooperation in various areas such as culture and education regardless of bilateral disputes. However, after joining the EU, the group's axis shifted to interregional cooperation, including states with common history, strategic position or being in the same region. Recent residency programs of all members pay special attention to the European Neighborhood Policy's (ENP) eastern dimension (Eastern Partnership, see below), Western Balkans, Ukraine, etc.

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[292]The Visegrad Group,'About the Visegrad Group,' available at: http://www.visegradgroup.eu/about (accessed on July 1, 2012).

[293] Ilona Teleki, 'Visegrad at 20,' in Janusz Bugajski (ed.), *Central-East European Policy Review 2011,* Center for Strategic and International Studies, Washington D.C. 2011, pp. 45-47.

[294] Mateusz Falkowski, Patrycja Bukalsa and Grzegorz Gromdazki, 'Yes to Visegrad,' *Analyses and Opinions No. 16,* Institute of Public Affairs, November 2003, p. 5.

Russia's assertive foreign politics in the late 2000s, including energy disputes and the revised moderate U.S. foreign policy toward Russia, increased V4's security concerns and revitalized the group. The EU was passing through fundamental changes that came with adoption of the Lisbon Treaty at the same time. The voting mechanism within the European Council changed in a way that allowed Germany and France to promote policies without unanimity while also providing an opportunity for regional formations to promote their interests through cooperation.[295] The V4 has now same votes as Germany and France; as such, it can serve as a counterweight within the EU's Council of Ministers, to the displeasure of both countries.[296]

Visegrad Four's Energy Policy in Transition

The energy policies constituted a significant part of the transition period primarily due to inherited economic and industrial structures. The main priority of the Eastern bloc's integrated economy was to compete with Western countries and afford an economic growth with increased production volumes. The CEEC had access to low priced energy sources imported from the major ally, Soviet Union, where the natural gas was used as a commodity to maintain Eastern blocs structures. Thus, the price, source, and even the intensiveness and efficiency were not a matter of concern.

After the democratic revolution, the V4 countries faced challenges related to their great dependence on primary energy source imports from Russia, particularly oil and natural gas and increasing energy prices with a remaining large share of energy intensive industries.[297] The structural reforms implemented during the

[295] See, Treaty of Lisbon, *Official Journal of the EU,* December 17, 2007, pp. C306/103, C306/14 and Treaty on the Functioning of the EU, *Official Journal of the EU,* May 9, 2008, pp. C115/153, C115/154.

[296] Ilona Teleki, *op.cit,* p. 47.

[297]Vaclovas Miskinis, Jurgis Vilemas and Inga Konstantina Viciute, 'Analysis of Energy Consumption and Energy Intensity Indicators in Central and Eastern European Countries,' *Energy Studies Review,* Vol. 14, Is. 2, Article 6, 2006, pp. 172-173.

transition, such as industrial restructuring and privatization,[298] induced economic recession especially between 1991 and 1993 in all CEEC except Poland. Since 1993, the V4 countries have experienced positive growth except for the Czech Republic in 1998. In 2009, only Poland managed to grow during the global crisis.[299]

Along with the economic decline in the economy during the first years of the transition, the primary energy consumption and final energy consumption started to decrease as well, mainly due to invoiced market prices causing a decrease of natural gas consumption in years 1989-1992 by 42 percent. The rebound in natural gas usage was observed in 1995 and 1996, pointing to the fact that economic recovery and modernisation encouraged changed patterns of energy usage, despite the gas market decline in 1997, when the production dropped by 10 percent and imports decreased by 11 percent.[300] Considering the V4 countries separately from other CEEC countries, especially the Baltic States, V4's recovery went smoothly. In 2002, Hungary's and Slovakia's gas consumption was just 1.4 times lower than in 1991. Poland's consumption even increased. The Czech Republic was as the only V4 country that faced a sharp decrease, of 5.5 times lower, which was similar to Baltic States average of 6.5 times lower consumption.[301]

Despite the commonalities affecting energy security of the V4 countries, on which the regional cooperation can be based, all four countries followed different paths regarding energy policies and strategies that resulted in the current state of affairs and energy mixes. One of these common concerns is dependency. All four

[298]It is worth mentioning that particularly privatization of the energy sector served Russia's purpose to control the energy market of the region since private companies are solely profit-driven unlike state controlled companies. This step, contrary to the aim of the policy, made post-communist states more vulnerable.

[299]OECD data available at: http://www.oecd.org/document/3/0,3746,en_2649_34109_2483901_1_1_1_1,00.html (accessed on July 1, 2012).

[300] Directorate General for Energy, 'Central and Eastern Europe,'in *Energy in Europe - 1999 Annual Energy Review,* European Commission, Brussels January 2000, pp. 117-119.

[301]Vaclovas Miskinis, Jurgis Vilemas and Inga Konstantina Viciute, *op.cit,* pp. 176-178.

countries are highly dependent on imported energy resources, particularly oil, natural gas and nuclear fuels. The Russian Federation has the world's biggest reserves (44.6 tcm at the end of 2011)[302] and as discussed in Chapter 2, has a direct pipeline connection with the region. Until the dissolution of the Soviet Union, the CEEC under the Warsaw Pact and in the COMECON did not have the opportunity or, in a way, a reason to pursue source and manner diversification. The dissolution changed the nature of relations and the V4 countries faced at least two interconnected challenges concerning supply security: transit disputes and Russian diversification attempts that circumvented current end users themselves.

Energy Indicators

Energy indicators of V4 countries provide a compact view on development of the energy sector in the region and are essential regarding understanding current policies. The chosen indicators point either to a common matter of concern, such as energy intensity (Table 4), or natural gas dependency (Table 5). The latter is accompanied by a total energy dependence to give a general dependency level of analyzed countries. Information about the share of total primary energy consumption by fuel (Table 6) actually shows energy mixes and thus reveals the extent of natural gas usage. Some of the most essential information concerning this study lay in table revealing natural gas import amounts and the level of dependency on the Russian natural gas. This information constitutes grounds for understanding the policy of each country.

The main characteristic of V4 countries' energy sector was its energy intensiveness and high share of energy usage in industry. In the early 1990s, the economic downturn and increasing energy prices forced V4 countries to take measures concerning efficient usage of energy and reorganization of their energy mixes. Yet, the major improvement occurred after the EU accession in line with EU regulations (Table 4). However, V4 countries still belong to the eight most energy

[302] British Petrol,*BP Statistical Review of World Energy,*London, June 2012, p. 20.

intensive EU economies and to reach competitive levels requires a way to go,[303] especially considering that one of the most controversial processes within the EU has been the liberalization of the energy market, pressed by European Commission since the early 1990s to create a common European energy market. The liberalization process corresponded to the privatization of power utilities and political transition. This process has allowed Russia to gain control over the energy market in the region. The controversy of this policy arose from this point since the aim was to foster market independence but it instead fostered the creation of monopolies. Today, the implementation of market principles goes on mainly under European regulations and national energy strategies are composed under EU strategies, even if in some cases the general strategies hurt national interests.[304]

Table 4: [305]

Total energy intensity	**Index 1995=100**						**Annual average change**	**Annual average change**
	2000	**2005**	**2006**	**2007**	**2008**	**2009**	**1995-2009**	**2005-2009**
Czech Republic	91.9	84.0	80.4	75.7	72.0	70.4	-2.5percent	-4.3percent
Poland	69.0	61.4	60.7	56.6	54.8	51.9	-4.6percent	-4.1percent
Hungary	80.5	72.7	69.6	67.8	66.8	67.6	-2.8percent	-1.8percent
Slovakia	84.7	70.8	64.7	55.4	53.8	51.6	-4.6percent	-7.6percent

Source: EEA

[303] Andrej Nosko, Anita Orbán, Wojciech Paczyński, Filip Černoch and Jakub Jaroš, 'Policy Paper on Energy Security – The Visegrad Group,' *Slovak Atlantic Commission,* Bratislava 2010, p. 2.

[304] Prof. Dr. František Janíček, PhD. Mgr. Miroslava Smítková and PhD. Ing, Juraj Kubica, 'Energy Mix in Central European Countries of the V4 Group: The Quest for Stability,' *XXI*st *World Energy Council,* Montreal 2010, available at: http://www.worldenergy.org/documents/congresspapers/310.pdf (accessed on July 1, 2012).

[305] European Environment Agency, 'Total Energy Intensity (index 1995=100), Relative Energy Intensity (as PPS) and Per Capita Consumption,' published April 11, 2012, available at: http://www.eea.europa.eu/data-and-maps/figures/total-energy-intensity (accessed on July 1, 2012).

Another indicator to examine is the V4 countries' energy dependence, which varies regarding total and natural gas import dependency. Table 5 shows that the Czech Republic is less dependent on imported energy sources than its neighbors (for a detailed explanation, see 4.3.2). However, the level of natural gas dependency is significant in all four countries. Here arose the significance of the consumption level, energy mix and source diversification that reveals how vulnerable this dependence makes each country.

Table 5: [306]

Energy Dependence
Total percent

	2000	2004	2005	2006	2007	2008	2009	2010
Czech Republic	23	25.71	28.25	27.8	25.04	27.9	26.97	25.6
Poland	10.64	14.59	17.6	20.03	25.6	30.57	31.67	31.51
Hungary	55.18	60.96	63.17	62.69	61.32	63.37	58.72	58.26
Slovakia	64.97	67.85	65.42	63.86	68.37	64.57	66.43	63.13

Energy Dependence
Natural Gas percent

Czech Republic	99.76	91.09	97.81	104.46	93.39	98.66	104.37	85.38
Poland	66.34	68.34	69.73	70.73	66.02	72.61	67.34	69.3
Hungary	75.41	79.22	81.09	82.2	79.94	88.13	85.63	78.71
Slovakia	98.8	103.26	97.48	96.56	97.86	96.31	108.58	99.92

Source: Eurostat

As Table 3 indicates, the primary energy source in Poland and the Czech Republic is coal mainly due to indigenous production. On the other hand, natural gas constitutes the main primary energy in Hungary and Slovakia. The commonality of

[306]Eurostat (June 2012).

these four countries is a consistent rise in natural gas consumption, which may be assumed to continue.

Table 6:

Share of total primary energy consumption of fuel type in 2009[307] and 2011[308]	**Czech Republic**		**Poland**		**Hungary**		**Slovakia**	
	2009	**2011**	**2009**	**2011**	**2009**	**2011**	**2009**	**2011**
Coal/Peat	40.7	43.6	54.3	58.2	10.5	12	23.3	19.3
Oil	21.1	20.7	25.6	25.58	27.6	28.7	20	21.6
Natural gas	**15.6**	**17.3**	**12.7**	**13.42**	**37.5**	**40.2**	**26.6**	**32.7**
Nuclear	16.5	15.5	-	-	16.5	15.5	22.4	19.9
Hydro	0.5	1.4	0.2	0.6	0.1	0.4	2.3	5.3
Renewables	5.6	2.5	7.2	2.1	7.7	3	5.4	0.6
Total (mtoe)	**42**	**44**	**94**	**102.8**	**25**	**22.6**	**17**	**17.1**

Source: OECD/IEA

One major challenge faced by V4 countries is source and route dependence. Trade movements by pipeline reflect the source dependence level shown in Table 7. According to 2011 data, the Russian Federation remains the main supplier of natural gas to the Visegrad Group countries. The import dependency rate varies within the group since Slovkia is 100 percent dependent on Russian supplies, whereas Czech Republic's dependence is below 60 percent.

The peculiarity is that total V4 imports almost equal Germany's imports in 2011. The Russian Federation exported 140.6 bcm of natural gas to the EU; 27.2 bcm (19.3 percent of total imports to the EU) went to CEEC, whereas Germany imported 30.8 bcm (21.9 percent of total EU imports). This implies that regional cooperation can counterbalance Germany's significant position as Russia's trade partner (see Table 7).

[308]Source: Calculated from statistics in BP Statistical Review of World Energy, June 2012.

Table 7: [309]

2011 Natural Gas Imports *bcm*	Russian Federation	Norway	Other Europe	Total Imports	Dependence on RF (percent)
Czech Republic	6.9	3.9	1.3	**12.0**	**57.5**
Poland	9.3	-	1.6[310]	**10.8**	**86.1**
Hungary	5.7	-	1.0[311]	**6.7**	**85.1**
Slovakia	5.3			**5.3**	**100**

Source: BP, June 2012

4.3 Position of Visegrad Group Members toward Nord Stream and South Stream Gas Pipeline Projects

The Nord Stream and South Stream projects were designed to diversify energy routes from Russia to Europe. The former, constitutes a direct Russian-German connection and provides energy supply without transit risks and transit fees. The latter is a project to develop energy and trade linkages between Russia and transit countries. As a result of this strategy, Russia creates a sphere of influence and control in the region.

Both projects avert traditional East-West energy routes, making the CEE highly dependent on imports from the Russian Federation and thus affecting V4

[309]British Petrol, *BP Statistical Review of World Energy,* June 2012. However, 2011 Gazprom data differs significantly. According to those, total gas supply to the EU in 2011 was 150 bcm, 34.02 bcmto Germany, 10.25 to Poland, 7.59 to the Czech Republic, 6.26 to Hungary and 5.89 to Slovakia. In this scenario, the total of V4 imports is 30 bcm. This may change the balance between Germany and V4 Group as Gazprom's energy clients. See, Gazprom,'Gazprom in Foreign Markets,' available at: http://eng.gazpromquestions.ru/index.php?id=4 (accessed on July 25, 2012).

[310]Germany Provides the Other Part of Natural Gas Demand in Poland. See, Piotr Szlagowksi, 'Energy Policy of Poland,' in Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011, p. 36.

[311]Small amounts of natural gas flow from Turkmenistan, France and Germany as well as from Austria and Ukraine. See, International Energy Agency, 'Hungary,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris 2012, p. 17.

countries. The attitude of the V4 Members and the group as a whole is a matter of interest since industry and households along with economy and international competitiveness are primary concerns of the energy vulnerability. With regard to these conditions, this section aims to specify position of each V4 Member toward Russia's diversification projects, namely Nord Stream and South Stream.

4.3.1 Polish Position

Poland is the biggest economy in the region, covering almost 60 percent of its primary energy consumption with indigenous coal reserves. This energy consumption structures creates a discrepancy within the EU that aims to limit emissions from coal generators. As for natural gas and oil consumption, Poland is still coping with a Soviet infrastructural heritage that is outdated and constitutes high dependence on Russian resources. However, it should be noted that Poland is the only V4 Member with notable natural gas reserves.[312] Yet, Poland covers only one-third of its own consumption, regardless of the deposits.

Natural gas usage in Poland started in the beginning of the 1950s, yet natural gas' share in primary energy consumption remained quite limited until the 1960s, when the decreased coking plant gas production was replaced mainly by natural gas. However, real gasification occurred along with market-oriented economic reforms in the late 1980s and in the beginning of the 1990s, which coincided with the perception of Russia as a reliable supplier of natural gas and oil. Socio-political and economic changes in the region brought change in relation to patterns of debt and energy payments. Political changes in the region created new challenges between Russia and its former satellites.[313]

With respect to the estimated increase in natural gas demand and scarce sources, Poland set a three-way strategy regarding natural gas imports. The official

[312]The natural gas reserves in Poland were exploited around the time of World War II in Carpathian Mountains. See, Adam Gwiazda, 'Poland's Natural Gas Utilisation and Import Policy,' *OPEC Energy Review,* Vol. 21 Is. 2, June 1997, p. 137.

[313]Adam Gwiazda, *op.cit,* p. 133.

program of oil and gas import diversification was adopted in 1992 by the Council of Ministers and relied upon sources from Russia, the UK, Norway and OPEC countries.[314]

The most viable and then undertaken strategy counted on continues with the Russian-Polish energy partnership. The first step in this regard was taken in 1993 with signing an agreement pertaining to the construction of the transit Yamal-Europe Gas Pipeline. This new pipeline was meant to by-pass Ukraine and provides additional gas supplies to Poland.[315] At the same time, Poland pressed to make a long-term contract with Russia to secure its supplies. In 1996, the 25-year agreement, called 'Gas Yalta,' bound gas supplies with the construction of the new pipeline. This step on the one hand increased dependence on Russian sources; on the other, it gave Poland leverage over regional energy relations. In addition, it brought Poland revenues from transit fees. The pipeline was operationalized in 1999 (fully in 2006) but created disputes between Poland and Russia due to several reasons, such as financing and the amount of gas to be purchased. The project counted on high levels of gas consumption (250 bcm in total[316] counting on l7-28 bcm consumption in 2010) deduced from relatively high estimations of Polish economic growth (5 percent per year) and Russia forced Poland to purchase the agreed amount. These developments resulted in two strategy changes. Poland resisted building second line of the projected pipeline and Russia annoyed by Polish attitude announced construction of a new pipeline going under the Baltic Sea, the Nord Stream.[317]

Poland's energy strategy in the 1990s also included source and route diversification with regard to reserves in the North Sea, particularly those under

[314]Adam Gwiazda, *op.cit, p.* 146.

[315]*Ibid,* pp. 140-141.

[316]Piotr Naimski, 'Energy Diversification Strategy for Poland,' *Columbia University,* September 17th 2007, p. 5.

[317]Stefan Bouzarovski and Marcin Konieczny, 'Landscape of Paradox: Public Discourses and Policies in Poland's Relationship with the Nord Stream Pipeline,' *Geopolitics,* Vol. 15 Is. 1-21, 2010, pp. 8-9.

British and Norwegian jurisdiction. The negotiations held on imports from the North Sea have continued since 1993. Especially those on gas supplies from the British shelf were held by Poland, Germany, the Czech Republic and Slovakia. Both sources - Norway and the UK - face depletion of reserves and these projects are considered as expensive. In the case of Norway, additionally, imports depend on Norway's relations with Russia, since both sides have their interests in the Barents Sea. According to Adam Gwiazda, "Russia can always use the fishing rights argument for that area to influence Norway's decision concerning the supply of a given amount of gas to Poland and other Central and East European countries."[318]

Another proposition considered LNG imports from OPEC countries, particularly Algeria, Iran, Nigeria and Qatar. This option was perceived as rational mainly because Polish ports enable easy access for exports of LNG from OPEC countries, even though it is still rather expensive.

The transition period of the Polish energy sector also is significant due to active participation of Russian Gazprom in the market. Gazprom holds half the shares in Europol-Gaz, a joint venture managing the Yamal-Europe Pipeline and second largest gas distributor on the Polish market, Gas Trading Company.[319] This and the above mentioned long-term contract show Gazprom's and/or Russia's control over the Polish gas market.

Despite all diversification attempts, Poland did not manage to escape over-dependency on one supplier and as a consequence of the Russo-Ukraine crises, experienced a 26-day natural gas supply interruption in 2006 and another in 2009. The first interruption caused a 9 percent decrease in natural gas consumption and downturn in industrial production. This experience accelerated the source and manner diversification quest of the country. Piotr Naimski, Secretary of State at the Polish Ministry of Economy, indicated in his speech at Columbia University that

[318] Adam Gwiazda, *op.cit,* p. 141.

[319] *Ibid,* p.145.

Poland's two diversification projects, the Baltic Pipe carrying Norwegian gas via Denmark and LNG terminal, should have secured gas supplies in an amount of at least one third of energy consumption estimated for the year 2012. Yet, construction of the first pipeline was postponed to the end of the year 2011 and the LNG terminal, to be built in the western part of Poland's Baltic coast (Świnoujście), is rescheduled for completion in June 2014.[320]

Russia's Nord Stream project, partially initiated by Poland's policies, is a threat to Poland since it would decrease the role of the Yamal-Europe Pipeline and increase leverage over the CEE region. The most vulnerable countries are namely V4 countries except Hungary, the Baltic States and Ukraine. Especially Poland, Sweden, Lithuania and Estonia raised concerns mainly about the environmental impact of the project. Finland and Latvia have similar concerns; yet they have subdued expressing their views most likely due to their close energy relations with Russia.

Initially, the Polish audience regarded declarations about the Nord Stream project as political bluff, mainly due to high costs and technical difficulties of the project. Thus, the Memorandum of Understanding signed in 2005 knocked Poland for a loop. The media and experts started to search for reasons behind the project often fell back on historical experiences related to the German, Russia and Poland triangle with respect to Polish national identity and security concerns. Some perceived the project as a punishment for Poland for its involvement in the Ukrainian Orange Revolution. However, a major concern seems to be concentrated around the leverage that Russia can gain since it would choose which country the gas would flow to and decrease energy security not only of Poland but of Europe as a whole. The left-leaning liberal minded disagreed with the overwhelming negative attitude. This approach, echoed by former Polish President Aleksandar Kwasniewski, held

[320]Hydrocarbons-Technoogy,'Swinoujscie LNG Gas Terminal, Poland,' available at: http://www.hydrocarbons-technology.com/projects/swinoujscie/ (accessed on July 18, 2012).

that joining the project could provide steady energy supplies to Poland. Yet, both the opposition and government criticized this idea. [321]

The impact of the project on foreign relations of the country was significant as well. Related states started use the Nord Stream as an implementation instrument in their relations. First Russia banned the meat imports from Poland and Poland vetoed the EU-Russia Partnership Agreement. In addition, the project did not influence only relations between Poland and Russia; it also accelerated an old territorial dispute between Poland and Denmark related to maritime boundary, which ended up by planned route change.[322]

As a consequence, Poland's diversification projects, including the LNG Terminal in the Świnoujście Port, Baltic Pipeline and nuclear power plant, gain a new impetus. Further, Poland re-focused on its own coal reserves. However, this strategy hits the EU buffer since the EU's energy policy includes a decrease of CO_2 emissions from coal by 20 percent and increases the share of renewables by 20 percent, both by 2020. These goals clearly affect Poland, especially due to its dependence on coal and low energy security regarding natural gas and oil import dependency. Naimski summarized the situation as such:

> …the European Commission and the leaders of the European countries should have presented a more nuanced approach, assigning environmental obligations to member states only after considering the specific repercussions for the economies. The more developed countries of 'Old Europe' should certainly understand that the indiscriminate acceptance of those obligations by the new members of the European Union will bring an end to the fast economic growth, which enables them to bridge the wealth gap – the fundamental difference in the standard of living that was created with the division of Europe by the iron curtain after World War II.[323]

[321] Stefan Bouzarovski and Marcin Konieczny, *op.cit*, pp. 10, 11.

[322] *Ibid*. 7, 11-12.

[323] Piotr Naimski, *op.cit,* p. 11.

After Donald Tusk's election victory in 2007, Poland started to be more active in energy diversification strategies. The new foreign policy placed importance on regional cooperation. The Amber Pipeline is one of Poland's regional projects designed to create alternative transit routes. The project was initially proposed in 2002 to bring gas from Denmark to Poland and Lithuania. Later, Poland suggested filling the pipeline with Russian gas. The project constituted an alternative to the Nord Stream that was planned to circumvent all countries related to Amber, namely Latvia, Lithuania and Poland.

Stefan Bouyarovski and Marcin Konieczny assert that the Tusk government often has relied on the informal EU Musketeers Pact, which holds that parties should operate under a 'one for all and all for one' credo.[324] Hence, Poland bets on EU support with regard to energy security and enhanced energy interconnections within the EU, while attempting to develop regional cooperation. In this regard, Piotr Naimski's appeal to three concepts - diversification, solidarity and cooperation – also constitutes Poland's international energy policy.[325]

Today, shale gas[326] exploration appears as the most promising option for Poland's energy security. The exploration concessions started to be given as late as2007. Although the data about shale gas reserves are still insufficient to calculate exact amount of reserves, the 2011 estimations of the U.S. Energy Information Agency refers to the presence of 5.3 tcm of recoverable gas.[327] This means Poland possesses the largest shale gas reserves in Europe and exploration of this gas would enhance security of both Poland and the EU. Poland took advantage of shale gas possession extensively. In July 2012, the Polish government declared its commitment

[324]Stefan Bouzarovski and Marcin Konieczny, *op.cit,* p. 14.

[325]Piotr Naimski, *op.cit,* pp. 15-18.

[326] Shale gas, also called unconventional gas is natural gas in shale formations.

[327] Pavel Poprawa, 'Resources and Potential of Unconventional Gas in Poland,' in Izabela Albrycht (ed.), *Unconventional Gas – a Chance for Poland and Europe,* The Kosciuszko Institute, Krakow, June 2011, pp. 111, 113.

to developing indigenous technologies for extraction of unconventional gas. The €235 million project aims to reduce drilling costs, accommodate national companies with indigenous technologies and also become a shale technology provider. Jerzy Gora, the deputy head of the Agency for Industrial Development indicates the possibility for Poland to become the next major producer of shale gas after the U.S.[328]

However, Poland is still dependent on natural gas imports, at least until shale gas potential transfers to actual production of a sufficient amount. Currently, Poland seeks to enhance natural gas supply security of the region through European attempts to create a highly connected network in the region. In this regard, Poland has one interconnector with Germany, called Lasów,that was upgraded in 2011 from an initial 900 mcm per annum to 1.5 bcm per annum. The 0.5 bcm capacity Czech-Poland Stork interconnector recently has been developed and other interconnections are being developed, particularly with Lithuania and Slovakia.[329]

In sum, besides source diversification projects (LNG, Norway) Poland focuses on the development of nuclear power plants and clean coal technology that should enhance competitiveness of the Polish energy sector in medium and long-term perspective since "making clean coal technologies economically efficient may take more than until the year 2020."[330] However, further exploration of shale gas reserves would change all conditions regarding Poland, V4 and EU.

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[328]Natural Gas Europe,'Poland Committed to Development of Shale Gas Technologies,' July 17, 2012, available at: http://www.naturalgaseurope.com/poland-committed-to-development-of-shale-gas-technologies (accessed on July 19, 2012).

[329] Jan Chadam, 'Public Hearing on Energy Infrastructure Priorities,' *GAZ-SYSTEM S.A. Presentation,* 15.02. 201, Brussels, available at: http://www.europarl.europa.eu/document/activities/cont/201103/20110315ATT15671/20110315ATT15671EN.pdf (accessed on July 19, 2012).

[330]Piotr Naimski, *op.cit,* p. 11.

Poland's Role within the EU and V4

Poland aims to be one of the major players within the EU and a coordinator, if not leader, in the CEE region. Even France and Germany see Poland as regional power already and have started strengthening their relations being aware of CEE countries' power to outvote Franco-German coalition in the EU's Council of Ministers. The Weimar Triangle formation, an unofficial policy setting platform set among Germany, France and Poland is one the outcomes of new strategies within the EU. However, this independent attitude of aforementioned countries was not well received by other EU Members. Poland's close ties with 'Old Europeans,' ambition to become a regional power and major player in the EU and strengthening ties with Russia raise concerns among other CEE countries. Critics of the Tusk government's recent foreign policy perceive Poland's approach as detachment from its regional alliances, claiming Krakow neglects energy diversification projects with its smaller neighbors in favor of close relations with Moscow. Yet, Poland defends itself saying that Krakow's intent is to acquire influence in the EU to have an impact on the EU's decision-making and draw attention to CEE's common interest.[331]

At least two factors affect Polish-Russian rapprochement, that of Poland's strengthening position within the EU and its potential to become a gas competitor with Russia. As mentioned above, Russia aims to control and manage energy market of the Euroasian region and 5.3 tcm gas reserves in Poland position the country at the center of interest. Increasing business and energy relations with Poland may also facilitate negotiations between the two countries regarding Poland's well-known resistance to the EU-Russia initiatives. An example of Russian-Polish reconciliation is the recent agreement between energy giants of both sides, PGNiG and Gazprom on the long-disputed transit tariff and long-term gas transit contract for 2020-2045. In exchange for increased transit volumes, Poland offered to reduce the transit tariff,

[331] Janusz Bugajski, 'Poland,' in Janusz Bugajski (ed.), *Central and Eastern European Policy Review 2011,* CSIS, Washington D.C.,October 2011, pp. 55-57.

which has been a matter of dispute since 2006. According to the agreement, 28 bcm of Russian gas annually will be transited through the Yamal-Europe Pipeline.[332]

However the U.S. dimension should not be neglected. After Barack Obama's election to the U.S. presidency, the U.S. foreign policy toward CEE and Russia changed. The new phase of détente with Russia disappointed CEE countries, particularly the Czech Republic and Poland betting on being a part of the U.S. National Missile Defence System to be built in those two countries. Obama's visit to Poland in May 2011 drew attention on forthcoming economic relations in the energy sector, particularly in the fields of nuclear energy and shale gas exploration and mining. The U.S. companies are almost the only ones with practical and technological expertise in shale gas mining and exploration and the U.S. government is willing to build ties with Poland in this strategic field. The U.S. presence in Poland's energy sector would enhance its energy independence, but also would bind Poland with U.S. technology in strategic fields.[333]

4.3.2 Czech Position

The Czech Republic has been an example of an economic transition success story reaching 80 percent of GDP per capita compared to the EU-27 average in 2010. This made the Czech Republic the second richest post-communist country in the CEE after Slovenia. Despite recent economic crises, the Czech Republic still leads V4 countries.[334] Energy security of the country also is at a relatively high level in comparison with other CEE countries.

The Czech Republic successfully broke the Russian supply monopoly in the 1990s by diversification of suppliers and routes. Today, its import dependence is

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[332] Yuri Lushin, 'Russia, Poland to Sign New Gas Transit Contract for 2020-2045,' *Ria Novosti,* 10 November 2010, available at: http://en.rian.ru/business/20101110/161275412.html (accessed on July 1, 2012).

[333]Stratfor,'Obama's Visit to Poland,' May 26, 2011, available at: http://www.stratfor.com/sample/analysis/obamas-visit-poland (accessed on July 1, 2012).

[334]Eurostat, July 2012.

relatively low in comparison to the EU average since state energy policy relies mainly on indigenous brown coal reserves and uranium deposits. Power generation in the country is covered predominantly by brown coal fired power plants, nuclear plants and hydro power plants. The EU's goal concerning the share of renewable sources is perceived at least ambitious and the Czech Republic's possibilities are limited. Currently, the greatest potential has the biomass[335] and further development in this field will depend on effectivity of calculations. Revision of the Czech energy concept up to 2030, adopted in 2010, reveals increasing significance of nuclear energy.[336] There also is broad political consensus on nuclear energy, except with the Green Party.

One of the Czech Republic's major challenges in the energy sector is vast usage of brown coal. This creates a discrepancy with EU regulations and goals to decrease CO_2 emissions. One of two possibilities related to emission-free sources is hydropower, which cannot be further extended and the other is nuclear energy. In case of continuous usage of brown coal, the country will face an energy deficit beginning in 2015,[337] related to depletion of reserves and an increase in demand caused by economic growth.[338] The current net electricity exporter may become net importer. High energy intensity and aged infrastructure inherited from the Soviet era are other challenges. The deliveries from Russia still are conducted through the Brotherhood Pipeline and needs modernization investment.

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[335] Alexandr Vondra, 'Bezpečnostní dimenze energetické politiky České republiky (Security Dimension of Czech Energy Policy),' in Řetislav Dančák and Jan Závěsecký (ed.), *Energetická bezpečnost a zájmy České republiky (Energy Security and the Czech Republic's Interests),* IIPS, Brno 2007, p. 52.

[336] Aktualizace státní energetické koncepce České republiky (Actualisation of State Energy Concept of the Czech Republic), *Ministry of Industry and Trade of the Czech Republic,* Prague, February 2010, pp. 93-94.

[337] Jiří Mohelník, 'Výzvy a vize energetické bezpečnosti střední Evropy a problematika zabezpečení dodávek energie (Central Europe's Challenges and Vision of Energy Security and Problematic of Energy Supply Security),' in Řetislav Dančák and Jan Závěsecký (ed.), *Energetická bezpečnost a zájmy České republiky (Energy Security and the Czech Republic's Interests),* IIPS, Brno 2007, pp. 80, 82.

[338] Alexandr Vondra, *op.cit*, p. 51.

The situation concerning natural gas is rather about dependency and strategic leverage. At first, it is worth noting that the Czech Republic has its own, albeit small, natural gas reserves producing 1-2 percent of annual consumption, yielding approximately 8-9 bcm (8.4 bcm in 2011). Remaining demand was imported from Russia in the early 1990s. When the primary fuel mix diversification process started in order to decrease the country's dependency level, other CEE countries were rather surprised because Russian sources at that time were still well-priced. The main point of that strategy was to decrease dependence on Russian natural resources. In this regard, Czechs managed to increase the share of Norwegian gas in the Czech import basket up to 27 percent until 2002. In 2011, 57.5 percent of the natural gas came from Russia, 32.5 percent from Norway and 10 percent from Germany.[339] However Norwegian gas is not physically delivered; it is swapped for Russian gas flowing to Germany via the Yamal Pipeline. This gas is reserved for emergency situations, as was the case in the 2009 Russo-Ukrainian gas crisis when it was physically delivered through the German NETRA/OTRAS Pipeline.[340]

The Czech Republic intends to maintain its transit leverage in relations with Russia since 40 percent of natural gas directed to Germany transited Czech territory. Czechs are aware of at least one fact, that Russia will not disrupt supplies to Germany. Ambassador-at-large for energy security Václav Bartuška said the following in an interview to Interfax in 2007 (cited by Ryan R. Miller):

> It is in our strategic interest to remain a transit state to Germany and elsewhere… we want to preserve this not just for income from transit but also for the Czech Republic's security of supply because, frankly, if there is ever Russian gas switched off going to Europe, the last country where that will happen is it to Germany.[341]

[339] British Petrol, *BP Statistical Review of World Energy,* June 2012.

[340] Petr Binhack and Jakub Jaroš, 'Energy Policy of the Czech Republic,' in Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,* the Kosciuszko Institute, Krakow, 2011, p. 41.

[341] Ryan R. Miller, *Central Europe's Energy Security Schism*, CEPA, July 2008, pp. 24, 25.

Indeed, Russia has never intended either to disrupt supplies to Germany or to circumvent a route leading to its major European partner. However, it does not prevent it from circumventing CEE countries, including the Czech Republic. Czechs, unlike the Polish, took a positive stance on the Nord Stream, arguing that the new pipeline would enhance the energy security of the state regardless of the possible future dispute with Poland and the Baltic states.[342] Finally, Net4Gas, the independent gas transmission system operator in the Czech Republic, previously state owned company and now subsidiary of the German leading energy company RWE, designed the 470 km Opal/Gazelle Pipeline to directly connect the Nord Stream with the Czech gas market. In 2008, the Czech government approved the construction and the pipeline tapped the Nord Stream as early as in November 2010. A year later, the EU Commission declared Opal/Gazelle's exemption from European revenue and third-party access regulations for 23 years.[343] This line will secure supplies to the Czech Republic in case of disruptions in regular lines. Although there were concerns that the Nord Stream could weaken the role in transiting the Russian gas further to the West, Czechs rather count on altering their transit leverage. When disruption occurs in lines coming from Ukraine, Czechs plan to supply the gas from Nord Stream to other CEE countries, including Slovakia, Poland and Hungary, yet, only in case Russia enables re-exportation of its gas.

The Czech Republic secures its gas supplies via a combination of various measures. Among these are long-term supply contracts, high gas storage capacities, appropriate safety standards of the supply infrastructure, flexibility in gas networks (reversibility of gas flows) and developing interconnectors with its neighbors. For instance, in 2009 the Czech Republic and Poland signed an agreement on the Stork Interconnector with an annual capacity of 0.5 bcm, which should enable the Czech Republic's access to the Polish LNG Terminal Świnoujście and Croatian LNG Terminal Adria. This connection, inaugurated in 2011, will be extended with

[342] *Ibid,* p. 26.

[343] Hydrocarbons Technology,'Gazelle Natural Pipeline, Czech Republic,' available at: http://www.hydrocarbons-technology.com/projects/gazelle-pipeline/ (accessed on July 19, 2012).

connections to Slovakia and Lithuania until 2018.[344] In April 2012, the governments of Poland and the Czech Republic announced a new 100 km interconnector with an annual capacity of 8-10 bcm. Construction is scheduled to 2017.[345]

These energy security measures are connected to the Czech Republic's reserved attitude toward Russia, which is openly declared in the official documents of the government, including the Concept of the Czech Republic's Foreign Policy adopted by the Parliament on 20 June 2011.[346] However, it should be noted that the Czech-Russian warmness and cooperation level is usually dependent upon the party in power. The right wing conservative party, Civic Democratic Party (ODS), has a rather more pro-American approach with a discreet stance toward Russia. On the other hand, the Social Democrats have stronger Russian relations and are reserved on unconditional support for the U.S. Thus, the current coalition led by ODS would rather see a strong EU stance to avoid a Russian strategy based on bilateral relations strengthening Russian leverage.[347]

4.3.3 Slovak Position

In the first years of the transition period, particularly after the split up with the Czech Republic, Slovakia experienced international isolation due to authoritarian political regime established by Prime Minister Vladimír Mečiar. Strengthening relations with Russia at the expense of relations with the EU, NATO and cooperation within the V4 is the specificity of the period from 1993-1998. The election of Slovak Democratic Coalition (SDK), formed by five opposition parties in 1998, appointment

[344]Natural Gas Europe,'Polish-Czech Interconnector Launched,' September 14, 2011, avaiable at: http://www.naturalgaseurope.com/polishczech-interconnector-launched (accessed on July 19, 2012).

[345]Stratfor, 'Poland's Growing Regional Energy Impoartance,' published at The Azeri Times, May 04, 2012,available at: http://www.theazeritimes.com/en/default/2/989.html (accessed on July 19, 2012).

[346]Koncepce Zahraniční Politiky České Republiky (Foreign Policy Concept of the Czech Republic),*The Ministry of Foreign Affairs of the Czech Republic,* July 20, 2011, pp. 5, 14, available at: http://www.mzv.cz/file/675937/koncepce_zahranicni_politiky_2011_cz.pdf (accessed on July 19, 2012).

[347]David Král, 'Czech Republic,' in Janusz Bugajski (ed.), *Central and Eastern European Policy Review 2011,* CSIS, Washington D.C., October 2011, p. 76 and Ryan R. Miller, *op.cit,* p. 24.

of Mikuláš Dzurinda as spokesman of the coalition and his rule over two election periods until 2006 brought a paradigm shift to the state policy. As a result, Slovakia recovered its economy and entered the EU and NATO in 2004. In 2006 Direction-Social Democracy (SMER-SD) won the elections and established leftist-populist coalition government that alienated the former U.S. inclination to build strong ties with Russia, even at the expense of V4 Partners. Party leader, Fico conveyed his position clearly with his first official visit to Russia in 2007 criticizing Poland and the Czech Republic's support of U.S. National Missile Defense system.[348]

The swift shifts of the Slovak foreign policy constitute a significant element of energy policy, both in the transition period and later on. Despite Slovakia not possessing significant energy sources like the Czech Republic and Poland, it has not diversified its energy imports. The Slovak energy policy after the Czechoslovak split was focused on the development of the domestic gas network, increase of the transit capacity, market building and regulatory reforms. Energy supply security and emergency were not matters of great concern since all governments perceived Slovakia as a major transit route to Western Europe. There was no accomplished infrastructure or supply diversification project when energy assets' privatization occurred. Andrej Nosko and Peter Ševce in their comparison of states that shared 75 years of history, Slovakia and the Czech Republic, put the major difference as follows:

> It is easier to take diversification decisions when the energy infrastructure is solely owned by the state, as was the case of diversification in Czech Republic during the nineties. Nonetheless, if government pays sufficient attention to energy security, further diversification is possible even after the assets are privatized. This is what the Czech government has done.[349]

[348]Alexander Duleba, 'Slovakia,' in Janusz Bugajski (ed.), *Central and Eastern European Policy Review 2011,* CSIS, Washington D.C., October 2011, pp. 77, 84, 86.

[349]Andrej Nosko and Peter Ševce, 'The Evolution of the Energy Security in the Slovak Republic,' *JES,* September 29, 2010, available at: http://www.ensec.org/index.php?option=com_content&view=article&id=262:the-evolution-of-

Slovakia is a net importer of oil, natural gas, solid fuels and nuclear fuel. With respect to natural gas, it produces less than 2 percent of its own natural gas demand (100 mcm in 2010) and production is predicted to drop to one-third of 2010 production by 2014. Total demand is expected to increase over 8.1 bcm by 2020.[350] As a result, Slovakia is almost by 100 percent dependent on Russian gas flows, not only as a consumer, but also as a transit country. Slovakia's natural gas imports flow from Russia via Ukraine, which positions Slovakia among the most vulnerable EU Members in terms of energy security because the major dependent in this triangle is Russo-Ukrainian relations regardless of special Slovak relations with Russia, as Prime Minister Fico tends to call them. As a result, Slovakia lost €1 billion over the 2009 Russo-Ukrainian crises being out of gas for 13 days during the winter. The fact that natural gas is predominantly used in domestic and industrial heating along with its usage in electricity production implies the level of vulnerability that is not limited only to industrial production. It is worth noting that EU commitments may most likely increase the importance of natural gas in electricity production in the near future,[351] which will increase natural gas in the energy mix and decrease the state's energy security. In case this step is taken, gas supply security will have direct impact on electricity production, distribution and thus on the country's entire economy.

Slovakia based its energy policy on being a transit state of Russian gas flows to Western Europe. The Brotherhood Pipeline enters Slovak borders from Ukraine and exits at two points, to Austria and the Czech Republic. The annual transmission capacity is 90 bcm,[352] but is not used fully. However, the situation changed since the 2009 gas crisis. New infrastructure developments, such as Nord Stream, indicate that

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energy-security-in-the-slovak-republic&catid=110:energysecuritycontent&Itemid=366 (July 19, 2012).

[350]International Energy Agency, 'Slovak Republic,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris 2011, p. 14.

[351]Petr Ševce, 'Energy Policy of Slovakia,' in Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries.How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011, pp. 42, 45, 46.

[352]Alexander Duleba, *op.cit,* p. 45.

the CEE transit route will most probably lose significance with the Nord Stream becoming operational. As such, Slovakia may lose 10 bcm per year. Slovakia understands that reliance on one source and supply route does not pay off. Yet, it still insists on maintaining its energy transit route this time via supporting the New European Transmission System (NETS)[353] initiated by Hungary's energy company MOL in 2007 and designed to improve energy security of the Central and South Europe by creation of an efficient regional gas market and strengthening of natural gas transmission networks.

As energy security, including diversification of routes and sources, gained importance in Slovakia, by the 2009 crisis, new connections with Poland and Hungary were planned (there are connections with the Czech Republic and Austria). Such plans, like the EU North South Gas Corridor initiative, were designed to strengthen the regional energy network.

The Slovak Hungarian Interconnector is planned to be a 115 km pipeline with reverse flow and an annual capacity of 5 bcm. The pipeline is financially backed (€30 million out of €150 million budget) by the European Energy Program for Recovery (EEPR) and is scheduled to be operational in 2015. The Memorandum of Understanding was initially signed between Hungarian FGSZ and Slovak transmission operator Eustream in 2009. The former company withdrew from the project in 2011 and the new partner became state owned Hungary's National Electric Transmission Line (OVIT).[354] The interconnector between Poland and the Slovak Republic is far more new and the conclusion of feasibility study is not yet public. The pipeline was incorporated into the Trans European Energy Networks (TEN-E) list; however, the decision on construction shall be taken in 2012. The letter of intent

[353] Ryan R. Miller, *op.cit,* p. 34.

[354] Alena Žáková, 'Infrastructure Priorities of the Slovak Republic,' *Ministry of Economy,*Presentation at High-Level Conference on the topic 'Competitive and Integrated Energy Market as a Guarantee of the UE Energy Security' held on October 11, 2011 in Krakow.

is signed between Polish Gaz System and Eustream. In case of construction, Slovakia will have access to the Polish LNG terminal Świnoujście.[355]

According to Alena Žáková, director of International Energy Relations at Slovak Ministry of Economy, both interconnectors will have a key role within the North South Gas Corridor, planned to strengthen CEE energy security. Second, both lines enhance Slovakia's energy security and provide new market connections, including connections between natural gas storage facilities in Poland and Hungary. Last, but not least, these lines in the future will provide access to LNG terminals in Poland and Croatia (respectively Świnoujście and Adria), a connection to the projected Baltic Pipeline and Nabucco and access to shale as reserves in Poland.[356]

Slovakia undertook several measures to increase energy security at governmental and private levels. According to new legislation, in case of crises, gas suppliers have to guarantee at least 30 days of supplies to their clients. Additionally, the accesses to gas storages were regulated and the Ministry of Economy took the right to devote part of gas storage capacity for emergency (in the preparation phase). Gas storage capacities accounting for approximately 3.3 bcm are to be extended.The Slovak Gas Company (SPP) is storing approximately a third of annual gas consumption (domestic market coverage). SPP's combination of measures includes modification of the pipelines going to the Czech Republic and Austria to ensure reverse flow. The possibility of German supplies, through the Czech Republic that were used for the first time during 2009 crises gained importance. SPP also undertook commercial diversification measures and signed two contracts with E.ON Ruhrgas and GDF Suez, SPP shareholders to secure Western gas supplies (up to 1 bcm) in case of Russian gas disruption.[357]

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[355] Alena Žáková, *op.cit* andLNG World News,'Gaz System and Eustream Research the Feasibility of a Poland-Slovakia Gas Pipeline,'January 14, 2011, available at: http://www.lngworldnews.com/gaz-system-and-eustream-research-the-feasibility-of-a-poland-slovakia-gas-pipeline/ (accessed on June 19, 2012).

[356]Alena Žáková, *op.cit.*

[357]Alexander Duleba, *op.cit,* pp. 46- 47.

4.3.4 Hungarian Position

Hungary shared the left-right political discrepancy like other V4 Members. However, the energy sector in Hungary differs from its allies significantly. Above all, its share of natural gas in the total primary energy supply is the highest in the region and second highest within the EU (40 percent). The first place belongs to the Netherlands, which is a gas exporter while Hungary is not. Hungary's natural gas production has been more or less stable since 2007, accounting for 2.5-2.6 bcm per annum, which corresponds to 25 percent of the total consumption. A substantial part of the remaining gas consumption is supplied by Russia, as Hungary has not been able to cover its domestic production since the beginning of the 1980s.[358] According to the international association for natural gas Cedigaz, reserves in 2010 were around 95 bcm enabling natural gas production for a further 38 years. The government believes that current production level may be maintained until 2020, when it starts to decline if no new sources will be developed. There is shale gas potential, yet exploration is still in preliminary stages.[359]

The second most significant factor is usage of natural gas. Residential and transformation sectors covered 75 percent of the consumption in 2010. The major share within the residential sector posses heat generation (80 percent). Even the electricity is increasingly produced by gas (35 percent in 2010) and new gas-fired plants are planned or under construction. These circumstances and an eastward gas supply interruption, as experienced in 2006 and 2009, would affect mainly households.[360]

After the 2006 Russo-Ukrainian gas crisis, Hungary's parliament adopted a new law on the safety and stockpiling of natural gas to build strategic underground

[358]Endre Szolnoki and Melinda Farkas, 'Energy Policy of Hungary,' in Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe',* the Kosciuszko Institute, Krakow 2011, p. 49.

[359]International Energy Agency, 'Hungary,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris 2012, p. 16.

[360]Endre Szolnoki and Melinda Farkas, *op.cit,* p. 49.

storage capacities of 1.2 bcm. This amount would have secured 40-45 days of uninterrupted supplies in case of interruption from Russia. Government amended this law in June 2010 due to decrease in natural gas demand and decreased minimum strategic stocks to 0.92 bcm. Other storage facilities, in total five, have a working capacity of 5.43 bcm.[361]

Hungary pays attention to constructing a network of interconnection within the EU to enhance energy security and becoming an energy hub of the region. Regarding the former, there is an Austrian pipeline HAG, currently used to transport Russian gas, but able to carry Norwegian or Dutch gas. The interconnection with Romania and Croatia has been operational since 2010 and 2011, respectively. Other connections are planned with Slovakia and Slovenia.[362]

The above-mentioned interconnectors are as well part of the strategy to expand Hungary's role as a transit country and eagerness to become a regional energy hub. The Hungarian ambiguous political attitude arises at this point. Hungary seems to want extend pipeline interconnections within the EU, enhance the energy security of its region and to create a common European energy policy. Hungary proposed connecting its gas network with the Croatian LNG terminal to form a centralized information system to monitor gas supply and consumption in the region and the network among distribution and storage facilities. In addition, MOL, the Hungarian oil and gas company proposed the above-mentioned NETS concept (see 4.3.3.). Hungary also was perceived as a Nabucco (see Chapter 3) supporter since the representatives from the Ministry of Economy and MOL, Hungarian oil and gas corporation, negotiated with governments in the Caspian region to get support for the Nabucco project. At the same time, it was the Hungarian government that in winter 2008 drafted the intergovernmental agreement on Nabucco.[363]

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[361] International Energy Agency, 'Hungary,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris 2012, p. 19.

[362] *Ibid*, p. 18.

[363] Ryan R. Miller, *op.cit,* p. 31.

However, Hungary never switched off the green light to Russia. Despite high dependency, the Nord Stream and South Stream projects brought gas supply interruptions and infrastructural changes. In second half of the 2000s, Hungary supported Gazprom's plans concerning extension of the Blue Stream from Turkey to the CEE, getting an offer to become a pivotal transit point. Afterward, officials criticized Hungary's attitude claiming that Hungary undercuts not only the Nabucco pipeline project, but also the common EU energy policy objective. In response, the then Prime Minister Ferenc Gyrucsány said, as cited by R. R. Miller, that Nabucco "has been a long and old plan. But we do not need dreams. We need projects."[364] However, he changed his mind and soon after declared full support for the EU source diversification aims. Finally, Hungary entered the South Stream project in 2008[365] showing that national interests may prevail over the solidarity concept of the CEE and regional interests in general.

The lack of consistency in Hungarian foreign energy policy makes the country unpredictable and unreliable in terms of more for the EU-led projects than for Gazprom and thus Russia. However, this ambiguity can be more or less caused by owners of the MOL Corporation. As stated in Chapter 3, the Russian company Surgutneftgas acquired a majority stake in the MOL. It also is believed that Vladimir Putin stands behind the company and targeted MOL to undercut the Nabucco project since the company is also a member of the Nabucco consortium.[366]

Privatization of the CEE energy sector during the transition period naturally decreased the influence of the state to the business relations and decisions of the companies. This facilitates implementation of the Russian strategy (see Chapter 3) that aims to control the market, even by acquiring majority shares in key corporations. Although according to statements of government officials, even the

[364] *Ibid*, 32.

[365] *Ibid*,pp. 31-32.

[366] Daniel Freifeld, 'The Great Pipeline Opera,' *Foreign Policy,* Sept./Oct. 2009, available at: http://www.foreignpolicy.com/articles/2009/08/12/the_great_pipeline_opera?hidecomments=yes (accessed on March 5, 2012).

government is willing to strengthen cooperation with Gazprom. Hungary's desire to become Gazprom's main partner in the region and enhance its transit role with a current capacity of 12-15 bcm per annum[367] appears to be stronger than its European commitments and its own source diversification goal.

4.4 Visegrad Group's Gas Pipeline Strategy within the EU

The Visegrad Group's (V4) natural gas pipeline policies will be analyzed in two stages: the V4's cooperation on energy issues within the group and their strategies within the EU. The first part focuses on the V4 presidency programs, reports and declarations to examine the level of energy security's significance in the V4. The second part analyzes the V4 countries' approaches toward EU policies. One main aim is to explore whether or not V4 countries pursue complementary or contradictory policies under regional cooperation and within the EU. Another is to examine the V4's role in energy policy setting at the European level.

4.4.1 Energy Issue on Visegrad Group's Agendas

Today, the V4 is a non-institutionalized political platform based on rotating one-year presidencies and periodical meetings held by representatives at various levels. Each year the common agenda is set concerning regional cooperation or coordination of common interests at the European level. The priorities raised in the presidency programs of the last round seem to concentrate on cooperation with other regions such as the Western Balkans, a focus on the European Eastern Partnership Program developed under the European Neighborhood Policy (ENP) as a counterbalance to the France led Euro-Med, strengthening of transatlantic ties and increasing energy security. The only institution within the group is the International Visegrad Fund, established in 2000[368] to financially support the regional or inter-regional cooperation as in the case of contribution to the low budget European project.

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[367] International Energy Agency, 'Hungary,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris 2012, p. 19.

[368] The Visegrad Group, 'About the Visegrad Group,' *op.cit.*

Analysis of the V4 presidency programs and reports since 2007 reveals a changing perception of energy security. In 2007, when the Czech Republic took the presidency over, focus was on the interregional cooperation. In this regard, broader cooperation with the Baltic States satisfied with the energy security aspect. By cooperating with the Nordic Council of Ministers, the V4 aimed to deepen its advocacy for the ENP's eastern dimension. Despite the energy security concerns and aim to contribute to the development of the European common energy policy, the diversification issue was not regarded as a special matter of concern. As the Czech annual report reveals, the Czech Presidency sought to set up a V4 working group on energy, yet was unsuccessful due to lack of interest. On the other hand, the European Nuclear Energy Forum was established as a result of Czech-Slovak EU Initiative in the same period.[369]

Poland's presidency program can be regarded as more sensitive to transmission, supply security and regional priorities. Meetings or consultations on liberalization of energy markets and the EU's Second Strategic Energy Review were part of the plans. However, the major focus was on eastward interregional cooperation, including assistance to Ukraine on energy issues, particularly on liberalisation of the energy markets.[370] However, the 2008 Russian-Georgian crisis and 2009 Russian-Ukrainian energy crisis changed the agenda. The energy security became a prime topic of the V4 meetings and at the meeting of prime ministers it was decided to establish the Visegrad task group of governmental plenipotentiaries for energy security. Besides an agreement on cooperation on EU-led energy policies,

[369]The Visegrad Group, 'Activities of the Czech Presidency of the Visegrad Group (June 2007- June 2008),' available at: http://www.visegradgroup.eu/documents/annual-reports/2007-2008-czech-110412 (accessed on May 15, 2012).

[370]The Visegrad Group, 'Programme of the Polish Presidency of the Visegrad Group (July 2008-June 2009),' available at: http://www.visegradgroup.eu/documents/presidency-programs/2008-2009-polish-110412 (accessed on May 15, 2012).

Poland tabled particularly the issue of the EU's policies regarding the coal sector,[371] a major concern of its own energy sector.

On the contrary, Hungary paid special attention to the energy issue both in general and regarding the V4's relations with Belarus, Ukraine, Russia and the Nordic Council of Ministers. With respect to Belarus, Hungary aimed to strengthen dialogue on energy security, whereas relations with Ukraine were supposed to bring Ukraine closer to the EU. As a first and only V4 Member, Hungary specified deficiency in the EU-Russia relations as reinforced legally binding provisions. Thus, the role of the V4 in this regard would have been to contribute to the development of these comprehensive regulations. Interestingly, while relations with eastern `neighbours` is more or less focused on mentoring and becoming closer, relations with the Nordic Council of Ministers are meant to be rather educational for V4 Members. The energy issue separately is mentioned under sectoral cooperation and included in consultations and know-how transfer concerning market liberalization and harmonization of obligations. There was special focus on energy security with respect to source and route diversification, modernization of infrastructure, elaboration of European anti-crises and solidarity mechanisms, mentioning, for instance, the South Gas Corridor. Hungary, for the first time set point by point steps to be pursued in the energy field, including coordination of the V4 position on energy issues to obtain financial support for Central European Trans-European Energy Networks (TEN-E) projects and to incorporate CEE energy policy interests into the Second EU Energy Policy Action Plan.[372]

The Hungarian presidency contributed to strengthening the level of cooperation in the energy field by establishing the V4 High Level Energy Working Group. The first meeting of the working group was focused on the development of a

[371]The Visegrad Group, 'Executive Report on Polish Presidency in the Visegrad Group (July 2008-June 2009),' pp. 1, 3-4, available at: http://www.visegradgroup.eu/documents/annual-reports (accessed on May 15, 2012).

[372]The Visegrad Group, 'Program of 2009/2010 Hungarian Presidency,' pp. 4-6, 10-12, available at: http://www.visegradgroup.eu/documents/presidency-programs/2009-2010-hungarian-110412 (accessed on May 15, 2012).

common V4 energy policy, construction of North-South Interconnectors and LNG terminals in Poland and Croatia. The group also organized the V4+[373]Energy Security Summit, held on February 2010 in Budapest.[374] At the end of the summit, V4 Members and Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Serbia, Slovenia and Romania signed a declaration of energy cooperation, where signatories expressed their support on the integration of gas networks and diversification of supply routes and sources. Parties specified three interconnection priorities: the North-South Interconnection (through the V4 and with a connection to LNG terminals in Poland and Croatia), the Nabucco pipeline and NETS projects. In addition, the support was given to the Constanta LNG terminal (in Romania) and other LNG and compressed natural gas (CNG) projects in the Black Sea Region.

Interestingly, Bulgaria, Croatia, Hungary, Serbia and Slovenia needed to convey their commitment to the South Stream Project in the declaration's footnote. This statement and actual involvement in the South Stream project would be incorporated in the declaration either due to reservations toward Russia's possible reaction to the declaration or the aforementioned signatories perceive that in essence competing projects, the Nabucco and South Stream, are complementary.

The participants of the summit conveyed that the European Commission, not Germany and France, should lead up the crisis-management coordination responsibility so as to focus on strengthening mechanism based on V4+ Group national policies rather than company-level support mechanisms.[375] Furthermore, they agreed on cooperation to incorporate regional interest with regard to the Second Action Plan for EU Energy Policy and develop the EU Energy Security and

[373]Visegrad Plus or V4+ concept is used for cooperation with other countries or regional groups.

[374]The Visegrad Group, '2009/2010 Hungarian Presidency Annual Report,' available at: http://www.visegradgroup.eu/documents/annual-reports/2009-2010-hungarian-110412 (accessed on May 15, 2012).

[375] Ernst Wyciszkiewicz, 'Energy Summit in Budapest,' *PSIM Bulletin,* No. 38 (114), March 5, 2010, available at: http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=114380 (accessed on May 15, 2012).

Infrastructure Instrument to secure financing of priority projects. Finally, an agreement was reached on setting expert level working groups on different projects that should work on implementation proposals and coordination of cooperation within the EU decision-making process.[376]

The energy issue in Slovakia's presidency program was composed in accordance with the Budapest Declaration, including all above-mentioned measures. The document pays additional attention to enhancing the mutual interaction, development of a common position and strengthening the EU's Common Energy Policy.[377] Under Slovakia's presidency, the V4 Economy Ministers sent to the EU Commissioner for Energy, O. Oettinger, a joint letter about regional infrastructural projects. Meanwhile, the Energy Strategy for Europe 2011-2020 confirmed the significance of infrastructural development in the V4 region and provided for the possibility to finance the projects and the North-South Interconnections in Central Europe became one of the priorities announced in the Energy Infrastructure Priorities until 2020 and beyond. As a consequence, the Working Group on North-South Interconnections under European Commissions coordination was established.[378]

In addition, Energy minister of the V4 met during the Slovak presidency and released a declaration on January 25, 2011 confirming objectives for the Budapest declaration. This time participants came with more detailed specification of steps to be taken in the field of energy cooperation, especially about development of the North-South Interconnections. The document further acknowledges the need to

[376]Declaration of the Budapest V4+ Energy Security Summit, *Ministry of Foreign Affairs of the Republic of Hungary,* available at: http://www.kulugyminiszterium.hu/kum/en/bal/actualities/spokesman_statements/20100224_Kozos_nyilatkozat_V4_en.htm (accessed on May 15, 2012).

[377]The Visegrad Group, 'Program of the Slovak Presidency of the Visegrad Group (July 2010-June 2011): Efficient Visegrad-Continuity, Cohesion, Solidarity, Awarness,' available at: http://www.visegradgroup.eu/documents/presidency-programs/2010-2011-slovak-110412 (accessed on May 15, 2012).

[378]The Visegrad Group, 'Annual Implementation Report of the Program of the Presidency of the Slovak Republic in the Visegrad Group (1 July 2010- 30 June 2011),' pp. 4-5, 8-9, http://www.visegradgroup.eu/documents/annual-reports (accessed on May 15, 2012).

provide access for at least two alternative resources besides Russia and enhance research and development cooperation, particularly in nuclear energy and clean coal technologies.[379]

Energy security incentives seemed to have decreased in the Czech Republic's 2011-2012 presidency program with recapitulation of the V4 energy objectives of diversification and common European external energy policy. Particular focus at the EU level regarding the latter was given to the Southern Corridor, especially the Nabucco project and Caspian resources.[380]

One of the V4's most efficient tools to have an impact at European level has been the EU Council Presidency. A good example constitutes the cooperation between the Czech Republic and Hungary in 2009, when the Czechs led the EU and Hungary as V4 President gave an impetus to the energy security issue in the CEE region. In this regard, 2011 could have been a banner year for the V4 since Hungary and Poland took turns with the EU presidency, yet it was disadvantaged by economic crises.

4.4.2 Visegrad Group's Energy Perspectives within the EU

The energy issues have been at the core of the establishment since the EU was born from European Coal and Steel community, yet it lacks a common energy policy. The aim continuously has been declared since the beginning of the 2000s and despite accelerated efforts after eastward gas interruptions, the establishment still has not managed to find a common ground for energy issues. Many documents on energy security have been released recently such as the Green Paper (2008), Third Internal Energy Market Package (2009), Energy Strategy 2020 (2010), Regulation on Security of Gas Supply (2010), Energy Infrastructure Priorities for 2020 and beyond (2010), but the implementation has remained as another challenge to overcome.

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[379] *Ibid,* pp. 43-45.

[380] The Visegrad Group, 'Programme of the Czech Presidency of the Visegrad Group 2011-2012,' p. 2, available at: http://www.visegradgroup.eu/documents/presidency-programs (accessed on May 15, 2012).

The umbrella of the EU, the Lisbon Treaty, brought a new article, number 194, on energy to the Treaty on the Functioning of the EU. Article 194 appeals to the solidarity concept within the EU in compliance with ensuring the internal market's functioning, supply security, promoting energy efficiency and development of renewable energy and enhancement of the energy network by the development of interconnections.[381]

The need to focus on the energy network arose from several reasons. One is the fact that current energy routes have been designed in traditional east-west and south-north routes that are poor and limit free energy flow. Another reason is the aged infrastructure with low capacity. Both reasons have an impact especially on the CEE's energy security since most vulnerable countries on energy supply interruptions are situated in this region. Additionally, the EU has wanted to enhance its market integration, which cannot be managed without extending the network. Therefore, the EU came with an energy infrastructure package proposing new network connections, yet was aware that all proposed projects would not be implemented due to several problems, including financing, market and regulatory failures.[382]

Energy Infrastructure Package and V4

The above-mentioned guides for network development, especially the Energy Infrastructure Priorities for 2020 and beyond, include two significant projects related to the CEE region, particularly V4 countries: Southern Corridor and North-South Interconnections in the Central Europe. The Southern Corridor is meant to be the fourth branch of supply routes to the EU. Regardless the LNG shipments, the other three branches are the Northern Corridor from Norway, the Eastern Corridor from Russia and the Mediterranean Corridor from Northern Africa. The idea of the Southern Corridor is to directly connect the EU with the world's biggest natural gas

[381]Treaty on the Functioning of the EU,*Official Journal of the EU,* May 9, 2008, p. C115/134.

[382]European Energy Infrastructure Package Roadmap,*European Commission,* Brussels 2010, pp.1-2, available at: http://ec.europa.eu/governance/impact/planned_ia/docs/19_ener_energy_infrastructure_package_en.pdf (accessed on July 28, 2012).

reserves, in total estimated to be 108.9 tcm (see Table 8) that are situated in the Middle East and Caspian region. These deposits are also geographically nearer than Russian fields. The EU particularly counts on gas deliveries from Azerbaijan, Turkmenistan and Iraq and transit via Turkey and then the Black Sea Region and Eastern Mediterranean. The aim is to reach a supply of 45-90 bcm of natural gas per annum that corresponds to 10-20 percent of EU's estimated gas demand in 2020.[383] The South Corridor includes projects such as the Nabucco, Turkey Bulgaria Interconnector (ITB), Italy-Turkey-Greece Interconnector (ITGI) and Adriatic Pipeline (TAP). The main project seems to be the Nabucco pipeline with an uncertain future (see Chapter 3) caused by several factors that mostly are related to Russian policies. For instance, the Russian Federation has bound Azerbaijan and Turkmenistan to long-term natural gas contracts. Yet, Azerbaijan has been trying to use its leverage as owner of the reserves. Today, both Russia and Europe await the Azerbaijan's decision regarding gas sales. This decision would change the variables with respect to the South Stream and Nabucco projects, both relying on Azeri sources.

Yet, the current situation reveals Russia's dominance. For instance, although Russia obtained a small gas contract with Azerbaijan in 2009 and the EU was very satisfied with the Joint Declaration on Southern Gas Corridor made in January 2011,[384] Russia successively presses South Stream project, designed to compete with Nabucco. Even Nabucco partners such as Hungary have joined the Russian-led South Stream. Another challenge to be addressed by Europe is the fact that the reserves in the Middle East and Caspian region are spread out and belong to states with unstable political situations. Furthermore, for instance in Iraq, despite the natural gas reserves having been located, they are undeveloped and need investment.

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[383]COM(2010) 677 final, *Energy Infrastructure Priorities for 2020 and Beyond: A Blueprint for an Integrated European Energy Network,* Brussels, November 17, 2010, pp. 31-32.

[384]Joint Declaration on Southern Gas Corridor, Baku, January 13, 2011, *European Commission,* available at: http://ec.europa.eu/energy/infrastructure/strategy/doc/2011_01_13_joint_declaration_southern_corridor.pdf (accessed July 27, 2012).

Table 8: [385]

Natural Gas Reserves ***at the end 2011 (tcm)***					
Russia and Caspian Region		**Middle East**			
Russia	44.6	Iran	33.1	Kuwait	1.8
Turkmenistan	24.3	Qatar	25	Oman	0.9
Kazakhstan	1.9	Saudi Arabia	8.2	Yemen	0.5
Uzbekistan	1.6	United Arab Emirates	6.1	Bahrain	0.3
Azerbaijan	1.3	Iraq	3.6	Syria	0.3

Source: BP

The second project, the North-South Interconnections in Central Europe,[386] initiated by V4, would create a gas network among the Baltic Sea region, Adriatic and Black Sea region through interconnectors that connects gas markets, storages, LNG terminals and other pipelines. The possible connection to the Nabucco pipeline is planned as well. This network would enhance the internal market and make the energy flows in the CEE more free and flexible. Most importantly, North-South interconnections would improve the region's energy security and made the states less vulnerable to gas supply interruptions by Russia, Belarus or Ukraine.[387] V4 countries, Bulgaria, Slovenia, Austria, Germany, Croatia and European Commission signed a Memorandum of Understanding on November 2011. Croatia with Adria LNG terminal was invited as an observer; Austria's and Germany's participation is limited and does not include the gas sectors.[388] An action plan of the initiative was

[385]British Petrol, *BP Statistical Review of World Energy,* London, June 2012, p. 20.

[386] It is worth noting that North-South Interconnections include improvements in oil and electricity networks as well. However, this part of the project is excluded from the examination in this study since the study focuses on the natural gas network.

[387]COM(2010) 677 final, *Energy Infrastructure Priorities for 2020 and Beyond: A Blueprint for an Integrated European Energy Network,* Brussels,November 17, 2010, p. 33.

[388] Memorandum of Understanding on North-South Interconnections in Central-Eastern Europe, *European Commission,* November 23, 2011.

adopted two weeks after the Memorandum of Understanding's recognizing significance of Southern Gas Corridor projects, including Nabucoo, ITB, ITGI, TAP and suggesting 43 projects proposed by the Gas Working Group. Projects under construction and operations dating prior 2014 have not been included on the list. Most of these were mentioned above (see 4.3).[389]

European Neighborhood Policy: Eastern Partnership as an Indirect Energy Security Tool

Another foreign policy strategy originating in the CEE region is the Eastern Dimension of the European Neighborhood Policy's (ENP) aiming at bringing Europe's periphery into conformity with the acquis communautaire. This constitutes an indirect tool to strengthen the EU's energy relations with energy-rich countries in the Caspian region and transit routes in the CEE region. The first proposal came from Poland at the European Council in Copenhagen in 2002, but the regional cooperation in practice seemed to be narrowed only to Southern Mediterranean countries, because French government put emphasis of this region.[390] Germany proposed an ENP Plus concept during its presidency in 2006 as a first attempt at an improvement. Special attention was paid in this proposal to Moldova, Ukraine and Belarus. It also considered the South Caucasus countries such as Georgia and Azerbaijan. According to the new concept of the ENP, the concerned states have had to implement part of an *aquis communautaire*, especially those parts with overlapping interests, such as market, energy, transportation, justice and domestic affairs. However, the Commission kept reforms proposed in the ENP Plus within certain limits.[391] At the same time, regional cooperation initiatives complementing ENP, including Eastern Partnership, were developed.

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[389] For a detailed list of interconnections see, Action Plan for North-South Energy Interconnections in Central-Eastern Europe, *European Commission,* Brussels, November 26, 2011, pp. 15-20.

[390]Lale Delcour, 'A Missing Regional Dimension? The ENP and Region-Building in the Eastern Neighbourhood,' *International Issues & Slovak Foreign Policy Affairs,* XVII/4, 2008, pp. 45-46.

[391]Iris Kempe, 'The EU and its Neighbors: In Search of New Forms of Partnership,' *International Issues & Slovak Foreign Policy Affairs,* XVII/4, 2008*,* pp. 9-11.

France, as a state with a closer relationship with Northern Africa, proposed a Mediterranean Union. The launch of the Euromed in 2007, during the French Presidency, encouraged Poland, backed by Sweden, to propose the strengthening of the Eastern dimension of the ENP. However, the EU was reluctant to accept these strategies in their wide extent. The reasons of the EU`s core members' resistance include the fact that the discussed region was an area of 'frozen conflicts' in the sphere of Russia's influence. Furthermore, the focus was given to the Mediterranean region and funding reserves were insufficient. However, the Russia-Georgian War in August 2008 caused a change in international relations and became an impulse in the EU's eastern policy.[392] The subsequent 'gas crises' between Russia and Ukraine was a second accelerating motive.

As noted above, the proposal reforming ENP by strengthening the Eastern dimension came from Poland and Sweden before the aforementioned crises, in May 2008, during a foreign ministers' meeting in Brussels. This new approach, called the Eastern Partnership, aimed to gather neighbours in Eastern Europe and the South Caucasus, mainly states in the sphere of Russia's influence and on the strategic energy routes. The core members accepted as a policy paper with reservations was turned into a document approved by the European Commission in December 2008.[393] A Joint Declaration of the Prague Eastern Partnership Summit was signed at the end of the Czech EU presidency on May 2009.

Eastern Partnership is regarded as result of the V4's joint effort and finds its place in each presidency program of V4 Members. The Eastern Partnership's vitality arose from its potential to alter the energy supplies and enhance the energy security of the CEE and thus EU. However, success of the project depends on offers from the European side. Yet, Eastern Partnership does not offer clear and sufficient reasons to partners in order to persuade them to conform to the demands of the EU. There is no prospect to full membership, the EU assistance forms lack clarity and the budget

[392]TOL, 'Poland Was Right,' *Transition Online,* September 12, 2008, p. 4.

[393]Kempe, *op.cit.,*p. 13.

seems to be low to satisfy the needs of the Eastern Partnership members[394] and accomplish the expectations of the EU.

4.5 Conclusion: A Common Policy?

The Visegrad Group Members' energy-related experiences have been on common ground. All members had been part of the Warsaw Pact and COMECON, bound to Russian natural gas resources by fixed pipelines. Yet, after the collapse of the Soviet Union, paths of these four states started to differ. The Czech Republic pursued an immediate energy mix diversification to lessen dependence on one source. Slovakia, on the contrary, has remained fully dependent on Russian deliveries in belief in its own essentiality as a transit state. Poland took advantage of its coal reserves and positioned itself often against Russian policies, yet never gave up on energy cooperation with Russia in order to keep Poland as transit country. Hungary, aware of its own over-dependence, has developed and pursued contradictory strategies and now is waiting to see which will be accomplished.

Despite these differences, all V4 Members have met with common challenges regarding their energy security. High energy intensity (thus increased consumption), high one source and route dependence, liberalization of the energy market and an aged infrastructure are just some of them. In addition, all these states have enjoyed their transit position between Russia and Western Europe. However, this advantage has become a burden when natural gas supplies are being interrupted by Russia for different reasons. Households, industries and thus economies of V4 Members are affected.

Today, Russia, in cooperation with Germany and Italy, has devised new pipeline projects, particularly the Nord Stream and South Stream. Both circumvent the traditional CEE region and each V4 state separately was forced to revaluate its energy strategy. The Czech Republic has chosen to connect to the Nord Stream, but

[394]Tomas Valasek, 'Economic Crises and the `Eastern Partnership,' *Center for European Reform,* March 10, 2009, available at: http://centreforeuropeanreform.blogspot.com/2009/03/economic-crisis-and-eastern-partnership.html. (accessed on 06.02.2011).

still attempts to diversify its fuel sources giving importance to nuclear energy. Poland has attempted to develop clean coal and shale gas technologies. Hungary seems to be tracked since the government is backing the EU's energy security policies; however, private energy companies connected to Russian Gazprom cooperate on Russian-led projects at the expense of EU-led diversification projects. Finally, Slovakia is trying to position itself as a transit state in the new EU structures.

The question is whether V4 Members are able to set and pursue common energy policy in the region and at the European level as well. The 2009 natural gas supply interruption drew attention to the energy security issue that became a key topic on both the EU's and V4's agendas, resulting in cooperation being enhanced, official documents being released, new source and route diversification projects being born. However, V4 Members face two major challenges. First of all, market liberalization allowed Russia to gain control of European natural gas markets and energy is still more business than politics. Thus, in some cases, governments cannot interfere in decisions of profit-led companies and those then can make decisions against national interests. Second, it is difficult to enhance EU energy security, especially of the CEE region without common EU foreign energy policy. Yet, it is more difficult to develop common energy policy at the European level since energy interests of the EU Members differ significantly and some "Old Europeans" would not yield their strong positions to secure the energy needs of their poor(er) neighbors.

CHAPTER 5

CONCLUSION

Détente, alongside the economic conditions of the time, constitute a basis for the creation and further acceleration of the East-West energy trade relations. The Soviet Union explored natural gas as an export commodity and was willing to use it in exchange for needed hard currency income and technology. On the other side, the West Europeans sought alternative energy sources since the 1973 oil crisis had a strong effect on European economies. West Germany in particular pursued positive economic linkage with the Soviet Union not only to influence the behavior of the Eastern Bloc, but also for the sake of its own industry. On the contrary, the Soviet Union believed in decoupling in light of economic difficulties. Through US interventions, this relation evolved in time in mutual dependence, where one side started to be dependent on Soviet deliveries and the other on exports and payments from Western Europe.

The Central and Eastern European countries (CEEC) had a specific position of a buffer zone between the two blocs and starting energy relations assigned the region new geo-strategic importance to be used after the dissolution of the Soviet Union: an energy transit statute. The then significance of the region was primarily military-strategic. The CEEC's economic strategy based on intense growing required Western technology, payments and Soviet energy sources; the Soviet Union accepted the stable energy supplies as a reasonable cost for the maintenance of the Eastern Bloc. Additionally, energy commodities provided an effective political and economic tool for regional management. First, it was used mainly in case of political decisions to be made in favor of Soviet requirements. Second, it was managed by pricing mechanism and energy trade negotiation strategies. Yet, in the late 1980s, with Gorbachev's glasnost and perestroika policy, the political affiliations within the

Eastern Bloc started to loosen. The CEEC was left politically free but without the financial support of Soviet Russia.

The collapse of the Soviet Union brought economic, structural and institutional change with a specific common feature: liberalization and openness to Europeanization in return for financial support. The first decade after the dissolution thus meant a chance for Europe to bind Russia and secure its energy supplies under its own terms. Yet, European procrastination, Russia's economic strengthening and leader change in 2000 prevented European goals. Vladimir Putin came into office with his own concept of state policy and energy strategy. As a result, the energy sector faced a sharp re-monopolization and increased stated control; state interests in foreign energy deals became priorities and Russia gained bargaining power.

Although the sense of rule changed, some features of energy policy are reproduced and others evolved under new conditions. Energy commodities have been used as a political tool since the Soviet era up to the present; these manoeuvres are used more wisely and diplomatically. The diversification concept, on the other hand, has been implemented since the beginning of the 1990s to increase exported volumes to Europe or to circumvent problematic transit countries. Yet, today, Russia is aware that it cannot be that dependent on a single market and a commodity (liquified natural gas) and market diversification, such as Far East, Asia Pacific, and Latin America. The last significant part of Russian strategy is to control markets and infrastructures through upstream and downstream investments that have been made since the late 1980s in Europe, but also in the Caspian region and in Latin America. Today, the Russian state can control a significant part of the European energy sector and plans through private ownerships.

The Russian Federation aims to become an energy manager of the Euroasian region and manages its aim by re-integration, control and diversification concepts. Russia attempts to re-integrate energy- rich CIS, control the energy routes and diversify markets, clients and commodities. The European branch of this project includes the Nord Stream and South Stream projects. The Nord Stream directly has

connected Russian gas fields with Germany, its main client, thus avoiding transit problems and diversifying its clients with the UK, Belgium, Denmark, the Netherlands and France. The South Stream, on the other hand, is a project developed to undermine or even prevent the European source diversification attempt, the Nabucco pipeline. In this case, Russia managed to make a deal with Nabucco partners in the CEE region, including Hungary and Austria, through generous offers such as becoming an energy gas hub of the region or investments in the energy sector. The South Stream even provides another route diversification option to Southern Europe, including Italy and beyond.

In contrast to Russia,the EU representatives have been far from showing determination on decisions made on the European level, such as source diversification attempts. Fragmented interests, needs and perceptions have prevented the EU from development of the aimed common foreign energy policy that would strengthen its bargaining position. The European energy sector is thus managed by variables and interests of private companies, than solely by national or regional interests, which facilitate Russia's attempts to control the European market and transmission system via acquisitions.

As a result, the extended infrastructure connecting one supplier to the entire European market has not been creating security for customers, but suppliers whose bargaining position strengthens and leverage increases. Finally, if Russia manages to diversify its routes earlier than the EU does, which seems highly probable, European customers would become constrained by three branches (north, east and south), increasing their dependence on one supplier with respect to natural gas.

The most affected region would be the CEE due to its high dependence on Russian natural gas deliveries and its status of a traditional transit region. The challenge for V4 countries started after the dissolution of the Soviet Union. Countries in the region inherited an aged Soviet infrastructure, energy intensive industry and high dependence on energy sources from one supplier. Then the CEE countries

realized that there would be no return to the Soviet era when the region benefited from best prices and took different paths.

Examination of the national strategies indicateson the differences among the V4 countries. The Czech Republic diversified its energy mix as early as the 1990s to decrease its dependence on Russia and focused on alternatives such as nuclear energy. Yet, the latter step could be problematic in the future because both neighbors Austria and Germany hold a reserved position toward nuclear energy. Poland has maintained its coal based energy mix and attempts to develop clean coal technologies in accordance with EU regulations. However, Poland's main advantage does not reside in conventional energy sources, but shale gas since it possess the largest reserves in Europe and can become a natural gas exporter in the future. Hungary, highly dependent on natural gas, lost control of its private company MOL in favor of a Russian company close to the Russian government. Thus, the official pro-European declarations and efforts may have been wish-full thinking. For example, the Hungarian energy company MOL came to an agreement with Gazprom on South Stream project, competitor of the EU-led Nabucco. Lastly, Slovakia has maintained its high dependence and reliance on Russia believing in its strong transit state position and now faces the threat of being disconnected by Russian diversification projects, thus refuges to the EU.

Although there are different strategies at national level, the V4 share a common objective, namely to preserve their transit state status within the EU and/or in cooperation with Russia. The Czech Republic directly connected its infrastructure with the Nord Stream; Hungary promised cooperation on Nabucco and agreed on cooperation with the South Stream; Slovakia started to rely on the EU's infrastructure projects connecting storage facilities and sources along with other members and Poland while exploring its own sources deepens cooperation with Russia.

While the effort to keep transit position continues, at the national level, the regional effort to diversify transit routes continues. All four countries affected by

natural gas interruptions in 2006 and 2009 joined forces under the Visegrad umbrella, enhancing inter-regional cooperation, relations with Caspian region as a source of alternative energy supplies and construction of interconnections that will provide a extended natural gas network and increasing the energy supply security of the region.

The Lisbon Treaty and rotating EU presidencies have provided leverage for V4 countries within the EU, yet this leverage cannot be fully utilized since the energy trade is based rather on company to company relations instead of state policies. Hence, V4 countries struggle for common EU foreign energy policy and are aware of the fact that only this kind of cooperation will bring success with Russian policies and with respect to energy security. Yet, this goal is far from being achieved.

All in all, examination of the materials indicates that despite the differences and disputes, the V4 countries are able to set common strategies especially in critical times. However, only policies at the regional level, based on solidarity and cooperation, such as the construction of an extended network of interconnectors and those that do not interfere in relations with Russia have the chance to succeed. In the current state of affairs, the CEE's and even EU's energy security is commonly sacrificed for the sake of short-term national interests, mainly due to lack of common European energy policy. The latter is prevented not only by Russia, but also by the EU's larger actors, namely Germany, Italy and France. Finally, this thesis shows that the V4 countries are able to agree on a common strategy though trapped by dependency on Russia's and the EU's larger actors' stances to argue that from the V4's perspective, only the creation of a common European energy policy can be regarded as a success.

REFERENCES

Published Reports, Documents and Statistics

Action Plan for North-South Energy Interconnections in Central-Eastern Europe, *European Commission,* Brussels, November 26, 2011.

Agreement on Partnership and Cooperation, Establishing a Partnership between the European Communities and their Member States, of One Part, and the Russian Federation, of the Other Part, *Official Journal of the European Communities L327/3,* November 28, 1997, available at: http://ec.europa.eu/world/agreements/downloadFile.do?fullText=yes&treatyTransId=643 (accessed on March 15, 2012).

Aktualizace státní energetické koncepce České republiky (Actualisation of State Energy Concept of the Czech Republic), Ministry of Industry and Trade of the Czech Republic, Prague, February 2010.

British Petrol, *BP Statistical Review of World Energy,*London, June 2012.

British Petrol, *BP Statistical Review of World Energy,* London, June 2011.

CEERD, *Analysis of Energy Trends in the European Union & Asia to 2030,* January 2009, available at: http://eeas.europa.eu/energy/events/asem_energy_2009/eu_asia_energy_trends_en.pdf (accessed on May 15, 2012)

Central Intelligence Agency, 'Imagery Analysis Memorandum, Subject: Construction Status of the Soyuz Gas Pipeline, USSR,' *National Foreign Assessment Center Office of Imagery Analysis*, October 13, 1978.

Central Intelligence Agency,'The Soviet Gas Pipeline in Perspective,' *FOIA*, September 21,1982, available at: http://www.foia.cia.gov/Reagan/19820921.pdf (accessed on May 5, 2012).

COM (2006) 105 final, *Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy,* March 8, 2006, Brussels.

COM (2007) 529 Final, *Proposal for a Directive of the European Parliament and of the Council Amending Directive 2003/55/EC Concerning Common Rules for the Internal Market in Natural Gas,* September 19, 2007, Brussels, available at:http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0529:FIN:EN:PDF (accessed on March 15, 2012).

COM (2011) 539 Final, *On Security of Energy Supply and International Cooperation – "The EU Energy Policy: Engaging with Partners beyond Our Borders,"* September 7, 2011, Brussels, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0539:EN:HTML:NOT (accessed on March 3, 2012).

COM (2010) 677 final, *Energy Infrastructure Priorities for 2020 and Beyond: A Blueprint for an Integrated European Energy Network,* Brussels, November 17, 2010.

Common Rules for the Internal Market in Natural Gas, *Official Journal of the European Union,* L 211, Brussels, August14, 2009, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:en:PDF (accessed on March 3, 2012).

Conceptual Approach to the New Legal Framework for Energy Cooperation (Goals and Principles), *President of Russia Official Web Portal,* available at: http://archive.kremlin.ru/eng/text/docs/2009/04/215305.shtml (accessed on March 3, 2012).

Conference on Security and Cooperation in Europe Final Act, Helsinki 1975.

Country Strategy Paper National Indicative Progamme 2002-2003 Russian Federation, *European External Action Service,* September 2, 2001, available at: http://eeas.europa.eu/russia/docs/02-06_en.pdf (accessed on March 3, 2012).

Declaration of the Budapest V4+ Energy Security Summit, *Ministry of Foreign Affairs of the Republic of Hungary,* available at: http://www.kulugyminiszterium.hu/kum/en/bal/actualities/spokesman_statements/20100224_Kozos_nyilatkozat_V4_en.htm (accessed on May 15, 2012).

Comments of the European Community on the Amendments of 22 June 1982 to the U.S. Export Regulations,August 12, 1982.

Directive of the European Parliament and of the Council of 13 July 2009 Concerning Energy Strategy of Russia for the Period up to 2030, *Ministry of Energy of the Russian Federation,* Moscow 2010.

Energy Roadmap 2050, *European Commission,* available at: http://ec.europa.eu/energy/energy2020/roadmap/doc/roadmap2050_ia_20120430_en.pdf (accessed on May 15, 2012).

Eurogas, *Natural Gas Demand and Supply, Long Term Outlook to 2030*, Spring 2007, available at: http://www.eurogas.org/uploaded/Eurogaspercent20longpercent20termpercent20outlookpercent20topercent202030percent20-percent20final.pdf (accessed on May 15, 2012)

European Energy Infrastructure Package Roadmap, *European Commission,* Brussels 2010, available at: http://ec.europa.eu/governance/impact/planned_ia/docs/19_ener_energy_infrastructure_package_en.pdf (accessed on July 28, 2012).

European Environment Agency, *Total Energy Intensity (index 1995=100), Relative Energy Intensity (as PPS) and Per Capita Consumption,* published April 11, 2012, available at: http://www.eea.europa.eu/data-and-maps/figures/total-energy-intensity (accessed on July 1, 2012).

Eurostat, *Energy Production, 1999 and 2009,* available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Energy_production,_1999_and_2009_(million_tonnes_of_oil_equivalent).png&filetimestamp=20111123174647#filehistory (accessed on April 4, 2012).

Eurostat, *Natural Gas Consumption Statistics,* May 2012, available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Natural_gas_consumption_statistics (accessed on June 22, 2012)

EU-Russia Energy Dialogue Synthesis Report, Brussels/Moscow, September 2001.

EU-Russia Relations on and the Diversification of Gas Supply Routes, *the European Council on Foreign Relations,* available at: http://ecfr.ideasoneurope.eu/2012/05/09/eu-russia-diversification-of-gas-supply-routes-to-europe/ (accessed on May 15, 2012).

International Energy Agency, 'Hungary,' *Oil and Gas Security Emergency Response of IEA Countries,*Paris2012.

International Energy Agency, 'Slovak Republic,' *Oil and Gas Security Emergency Response of IEA Countries,* Paris2011.

International Monetary Fund, *World Economic Outlook,* April 2012, Washington DC, available at: http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf (accessed on May 5, 2012).

Joint Declaration on Southern Gas Corridor, *European Commission,* Baku, January13, 2011, available at: http://ec.europa.eu/energy/infrastructure/strategy/doc/2011_01_13_joint_declaration_southern_corridor.pdf (accessed July 27, 2012).

Kantor, *Market analysis and priorities for future development of the gas market and Infrastructure in Central-Eastern Europe under the North-South Energy Interconnections initiative (Lot 2),* January19, 2012.

Koncepce Zahraniční Politiky České Republiky (Foreign Policy Concept of the Czech Republic),*The Ministry of Foreign Affairs of the Czech Republic,* July 20, 2011, available at: http://www.mzv.cz/file/675937/koncepce_zahranicni_politiky_2011_cz.pdf (accessed on July 19, 2012).

Law on Strategic Foreign Investment*, Russian Law News,* available at: http://www.russianlaws.com/newsdetail.aspx?news=7054 (accessed on March 15, 2012).

MacEachin, Douglas J., 'US Intelligence and the Polish Crises 1980-1981', *Central Intelligence Agency,* available at: https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/us-intelligence-and-the-polish-crisis-1980-1981/index.htm(accessed on January 25, 2012).

MEMO/08/703, 'EU Energy Security and Solidarity Action Plan: 2nd Strategic Energy Review,' Brussels, November 13, 2008, available at: http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/703&format=HTML&aged=0&language=en&guiLanguage=en (accessed on March 3, 2012).

Memorandum of Understanding on North-South Interconnections in Central-Eastern Europe, *European Commission,* November 23, 2011.

Mott MacDonald, *Final Report: Supplying the EU Natural Gas Market*, November 2010 available at: http://ec.europa.eu/energy/international/studies/doc/2010_11_supplying_eu_gas_market.pdf (accessed on May 15, 2012)

OECD/IEA, 'Italy,' *Oil and Gas Security Emergency Response of IEA Countries 2010,* France 2010,available at: http://www.iea.org/papers/security/italy_2010.pdf (accessed on March 3, 2012).

OECD/IEA,'Monthly Natural Gas Survey,' February 2012, available at: http://www.iea.org/stats/surveys/natgas.pdf (accessed on March 3, 2012).

The Summary of the Energy Strategy of Russia for the Period of up to 2020, *Ministry of Energy of the Russian Federation,* Moscow 2003, available at: http://ec.europa.eu/energy/russia/events/doc/2003_strategy_2020_en.pdf (accessed on March 15, 2012).

Treaty of Lisbon, *Official Journal of the EU,* December 17, 2007.

Treaty on the Functioning of the EU, *Official Journal of the EU,* May 9, 2008.

Whist, Bendik S., 'Nord Stream: Not Just a Pipeline,' *Fridtjif Nansens Institut,* November 2008, available at: http://dspace.cigilibrary.org/jspui/bitstream/123456789/26584/1/FNIpercent20R15-08percent20-percent20Nordpercent20Streampercent20notpercent20justpercent20apercent20pipeline.pdf?1 (accessed on March 15, 2012).

Witterung drückt Energieverbrauch auf niedrigsten Wert seit der Wiederverinigung, *Arbeitsgemeinschaft Energiebilanzen (Working Group Energy Balances – AGEB),* available at: http://www.ag-energiebilanzen.de/viewpage.php?idpage=62 (accessed on June 5, 2012).

Books, Articles and Presentations

Abonyi, Arpad and Sylvain, Ivan Y., 'CMEA Integration and Policy Options for Eastern Europe: A Development Strategy of Dependent States,' *JCMS*, Vol. 16, Is. 2, December 1977.

Angelli, Giovanni, 'East-West Trade: A European View,' *Foreign Affairs*, Vol. 58, Is. 5, Summer 80.

Aslund, Anders, 'Russia's Energy Policy: A Framing Comment,' *Euroasian Geography and Economics*, Vol. 43 Is. 3, 2006.

Baran, Zeyno, 'Security Aspects of the South Stream Project,' *European Parliament,* October 2008.

Binhack, Petr and Jaroš, Jakub, 'Energy Policy of the Czech Republic,' in Swiatkowska, Joanna (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011.

Bouzarovski, Stefan and Konieczny, Marcin, 'Landscape of Paradox: Public Discourses and Policies in Poland's Relationship with the Nord Stream Pipeline,' *Geopolitics,* Vol. 15 Is. 1, Routledge 2010.

Bugajski, Janusz, 'Poland,' in Bugajski, Janusz (ed.), *Central and Eastern European Policy Review 2011,* CSIS, Washington D.C.,October 2011.

Chadam, Jan, 'Public Hearing on Energy Infrastructure Priorities,' *GAZ-SYSTEM S.A. Presentation,*Brussels, February 15, 2011, available at: http://www.europarl.europa.eu/document/activities/cont/201103/20110315ATT15671/20110315ATT15671EN.pdf (accessed on July 19, 2012).

Cleutinx, Christian and Piper, Jeffery, 'The EU-Russia Energy Dialogue,' in Katynka Barysch (ed.), *Pipelines Politics and Power,* Centre for European Reform, London 2008.

Cohen, Ariel, 'The North European Gas Pipeline Threatens Europe's Energy Security,' *Backgrounder,* No. 1980, October 26, 2006.

de Jong, Sijbren and Wouters, Jan, 'European Energy Security Governance: Key-Challenges and Opportunities in EU-Russia Energy Relations,' *Leuven Centre for Global Governance Studies,* June 2011.

Delcour, Lale, 'A Missing Regional Dimension? The ENP and Region-Building in the Eastern Neighbourhood,' *International Issues & Slovak Foreign Policy Affairs,* XVII/4, 2008.

Duleba, Alexander, 'Slovakia,' in Janusz Bugajski (ed.), *Central and Eastern European Policy Review 2011,* CSIS, Washington D.C.,October 2011.

Dusseault, David, 'Europe's Triple By-pass,' *Asia Europe Journal,* Vol. 8, Is.3, Singapore 2010.

Ehrstedt, Stefan and Vahtra, Peeter, 'Russian Energy Investments in Europe,' *Pan-European Institute,* 4/2008, available at: http://www.tse.fi/FI/yksikot/erillislaitokset/pei/Documents/Julkaisut/Ehrstedt_Vahtra_42008.pdf (accessed on April 22, 2012).

Falkowski, Mateusz; Bukalsa, Patrycja and Gromdazki, Grzegory, 'Yes to Visegrad,' *Analyses and Opinions No. 16,* Institute of Public Affairs, November 2003.

Fredholm, Michael, 'The Russian Energy Strategy and Energy Policy: Pipeline Diplomacy or Mutual Dependence?,' *Conflict Studies Research Centre,* Defence Academy of the United Kingdom,Oxford,September 2005.

Freifeld, Daniel, 'The Great Pipeline Opera,' *Foreign Policy,* Sept./Oct. 2009, available at: http://www.foreignpolicy.com/articles/2009/08/12/the_great_pipeline_opera?hidecomments=yes (accessed on March 5, 2012).

Götz, Roland, 'The North European Pipeline,'*SWP,* September 2005.

Grigoryev, Yuli, 'The Russian Gas Industry, Its Legal Structure, and Its Influence on World Markets,' *Energy Law Journal,* Vol.28, Is.125, Washington D.C. 2007.

Gustafson,Thane, *Soviet Negotiating Strategy: The East-West Gas Pipeline Deal, 1980-1984,* Santa Monica, The Rand Corporation, February 1985.

Gwiazda, Adam, 'Poland's Natural Gas Utilisation and Import Policy,' *OPEC EnergyReview,* Vol. 21 Is. 2, June 1997.

Janíček, František; Smítková, Miroslava and Kubica, Juraj, 'Energy Mix in Central European Countries of the V4 Group: The Quest for Stability,' *XXIst World Energy Council,* Montreal 2010, available at: http://www.worldenergy.org/documents/congresspapers/310.pdf (accessed on July 1, 2012).

Jarosiewicz, Aleksandra, 'Azerbaijan Will Decide the Shape of the Southern Gas Corridor,' *OSW Centre for Erastern Studies,* available at: http://www.osw.waw.pl/en/publikacje/eastweek/2011-01-19/azerbaijan-will-decide-shape-southern-gas-corridor (accessed on March 5, 2012).

Kempe, Iris, 'The EU and its Neighbors: In Search of New Forms of Partnership,' *International Issues & Slovak Foreign Policy Affairs,* XVII/4, 2008.

Král, David, 'Czech Republic,' in Janusz Bugajski (ed.), *Central and Eastern European Policy Review 2011,* CSIS, October 2011.

Larsson, Robert L., 'Nord Stream, Sweden and Baltic Sea Security,' *FOI Defence Research Agency,* Stockholm, March 2007, available at: http://www.foi.se/upload/english/reports/foir2251.pdf (accessed on April 22, 2012).

Leuers, William H., 'The U.S. and Eastern Europe', *Foreign Affairs,* Vol. 65, Is. 5, Summer 1987.

Loskot-Strachota, Agata, 'Nabucco vs. South Stream – Rivalry over Balkan Gas Pipelines,'*OSW Centre for Eastern Studies,* Warsaw, March 2008, available at: http://www.osw.waw.pl/en/publikacje/osw-commentary/2008-03-20/nabucco-vs-south-stream-rivalry-over-balkan-gas-pipelines (accessed on March 5, 2012)

Maddock, Rowland, 'Energy and Integration: The Logic of Interdependence in the Soviet Union and Eastern Europe,'*JCMS*, Washington D.C., Vol. 19, Is. 1, September 1980.

Merkin, Victor, 'Intra-COMECON Bargaining and World Energy Prices: A Backdoor Connection?,'*Comparative Economic Studies,* Vol. 30, Is. 4, Winter 1988.

Miller, Ryan R., *Central Europe's Energy Security Schism*, CEPA, Washington D.C., July 2008.

Milov, Vladimir; Coburn, Leonard and Danchenko, Igor, 'Russian Energy Policy 1992-2005,'*Euroasian Geography and Economics,* Vol.47, Is. 3, 2006.

Miskinis, Vaclovas; Vilemas, Jurgis and Konstantina V., Inga, 'Analysis of Energy Consumption and Energy Intensity Indicators in Central and Eastern European Countries,' *Energy Studies Review,* Vol. 14, Is. 2, Article 6, 2006.

Mohelník, Jiří, 'Výzvy a vize energetické bezpečnosti střední Evropy a problematika zabezpečení dodávek energie (Central Europe's Challenges and Vision of Energy Security and Problematic of Energy Supply Security),' in Dančák, Řetislav and Závěsecký, Jan (ed.), *Energetická bezpečnost a zájmy České republiky (Energy Security and the Czech Republic's Interests),* IIPS, Brno 2007.

Monaghan, Andrew, 'Russia and the Security of Europe's Energy Supplies: Security in Diversity?,' *Defence Academy of the UK Conflict Studies Research Center,* January 2007,available at: http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=44087 (access on January 29, 2011)

Naimski, Piotr, 'Energy Diversification Strategy for Poland,' *Columbia University,* September 17th 2007, available at: http://www.columbia.edu/cu/ece/academics/regional/conf/Piotr_Naimski_at_Columbiapercent20University070917_.pdf (accessed on July 19, 2012).

Newnham, Randhal, 'Economic Linkage and Willy Brandt`s Ostpolitik: The Case of Warsaw Treaty*,' German Politics*, Vol. 16, Is. 2, June 2007.

Nies, Susanne, *Oil and Gas Delivery to Europe: An Overview of Existing and Planned Infrastructures*, IFRI, Paris 2008.

Nosko, Andrej and Ševce, Peter, 'The Evolution of the Energy Security in the Slovak Republic,' *JES,* September 29, 2010, available at: http://www.ensec.org/index.php?option=com_content&view=article&id=262:the-evolution-of-energy-security-in-the-slovak-republic&catid=110:energysecuritycontent&Itemid=366 (accessed on July 19, 2012)..

Nosko, Andrej; Orbán, Anita; Paczyński, Wojciech; Černoch, Filip and Jaroš, Jakub, 'Policy Paper on Energy Security – The Visegrad Group,' *Slovak Atlantic Commission,* Bratislava 2010.

Paltsev, Sergey, 'Russia's Natural Gas Export Potential up to 2050,' *MIT CEEPR,* Cambridge, July 2011.

Pirani, Simon, 'Ukraina: A gas dependent state,' in Simon Pirani (ed.), *Russian and CIS Gas Markets and Their Impact on Europe*, Oxford Institute for Energy Studies, Oxford 2009.

Poprawa, Pavel, 'Resources and Potential of Unconventional Gas in Poland,' in Izabela Albrycht (ed.), *Unconventional Gas – a Chance for Poland and Europe,* The Kosciuszko Institute, Krakow, June 2011.

Riley, Alan, 'Nord Stream: An Economic and Market Analysis of the North European Pipeline Project,' Brussels, available at: http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/peti20080129_economicanalysisriley_/PETI20080129_EconomicAnalysisRiley_en.pdf (accessed on April 22, 2012).

Roosa, R.V.; Matsukawa, M.; Gutowski, A., *East-West Trade at a Crossroads,* New York University Press, New York 1982.

Saprykin, Volodymyr, 'Gazprom of Russia in the Central Asian Countries,' *Razumkov Centre,*Kiev, May 1, 2004, available at: http://www.razumkov.org.ua/eng/article.php?news_id=348 (accessed on March 15, 2012).

Sartori, Nicoló, 'The Southern Gas Corridor: Needs, Opportunities and Constraints,'

Instituto Affari Internazionali, June 2011, available at: http://www.iai.it/pdf/DocIAI/iai1108.pdf (accessed on May 5, 2012).

Ševce, Petr, 'Energy Policy of Slovakia,' in Swiatkowska, Joanna (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011.

Smith, Keith C., 'Russia and European Energy Security,' *CSIS,* Washington D.C.,October 2008, available at: http://csis.org/files/media/csis/pubs/081024_smith_russiaeuroenergy_web.pdf (accessed on March 3, 2012).

Socor, Vladimir, 'Gazprom, the Prospects of a Gas Cartel, and Europe's Energy Security,' in Cornell, Svante E. and Nilsson, Niklas (ed.), *Europe's Energy Security,'* Central Asia – Caucasus Institute & Silk Road Studies Program, Singapore 2008.

Socor, Vladimir, 'RAD Background Report/ 100 (Eastern Europe), Extensive Romanian Commitments to CMEA Joint Projects in USSR,'*Radio Free Europe Research,* July 1986, available at: http://www.osaarchivum.org/files/holdings/300/8/3/text/69-6-52.shtml (accessed on January 16, 2012).

Stent, Angela, *From Embargo to Ostpolitik, The Political Economy of West German-Soviet Relations 1955-1980,* Cambridge University Press, Cambridge 1981.

Stern, Jonathan, 'Natural Gas in Europe – Importance of Russia,' *Oxford Institute for Energy Studies*, available at:http://www.centrex.at/ru/files/study_stern_e.pdf (accessed on December 26, 2011).

Stern, Jonathan, 'The Russian-Ukrainian gas crises of January 2006,'*Oxford Institute for Energy Studies,* January 2006.

Suchý, Petr, *Reagan a Říše Zla (Reagan and Empire of the Evil),* CDK, Brno 2004.

Swieboda, Pavel, 'Putting Flesh on the Bones of Energy Solidarity', in Katynka Barysch (ed.), *Pipelines, Politics and Power,* Centre for European Reform, London, October 2008.

Szlagowksi, Piotr, 'Energy Policy of Poland,' in Swiatkowska, Joanna (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe,'* the Kosciuszko Institute, Krakow 2011.

Szolnoki, Endre and Farkas, Melinda, 'Energy Policy of Hungary,' in Joanna Swiatkowska (ed.), *Energy Security of the V4 Countries. How Do Energy Relations Change in Europe*,'the Kosciuszko Institute, Krakow 2011.

Teleki, Ilona, 'Visegrad at 20,' in Bugajski, Janusz (ed.), *Central-East European Policy Review 2011,* Center for Strategic and International Studies, Washington D.C. 2011.

Trzeciakowski, Witold, 'Energy: Prospects and Policy Issues in Intra-CMEA Relations,'*International Institute for Applied Systems Analysis,* Austria, August 1982.

Türkeş, Mustafa, 'Contested Hegemonies in the Black Sea Region,' *Current Problems of InternationalRelations*, in L. V. Hubersky (ed.), Vol. 61, Part 1, Kiev National University "Taras Shevchenko" Institute of International Relations, Kiev 2006.

Valasek, Tomas, 'Economic Crises and the `Eastern Partnership,' *Center for European Reform,* March 10, 2009, available at: http://centreforeuropeanreform.blogspot.com/2009/03/economic-crisis-and-eastern-partnership.html. (accessed on February 6, 2011).

Victor, David G. and Victor, Nadejda M.,*The Belarus Connection: Exporting Russian Gas to Germany and Poland*, James A Baker III Institute for Public Policy, Stanford University, May 2004.

Vondra, Alexandr, 'Bezpečnostní dimenze energetické politiky České republiky (Security Dimension of Czech Energy Policy),' in Dančák, Řetislav and Závěsecký, Jan (ed.), *Energetická bezpečnost a zájmy České republiky (Energy Security and the Czech Republic's Interests),* IIPS, Brno 2007.

Wright, Lindsay, 'Pipeline Politics: Russia's Natural Gas Diplomacy,' *Pipeline and Gas Journal*, August 2009, Vol. 236 Is.8, available at: http://www.pipelineandgasjournal.com/pipeline-politics-russiapercentE2percent80percent99s-natural-gas-diplomacy (accessed on February 22, 2012).

Wyciszkiewicz, Ernst, 'Energy Summit in Budapest,' *PSIM Bulletin,* No. 38 (114), March 5, 2010, available at: http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=114380 (accessed on May 15, 2012).

Yafimava, Katja, 'Belarus: the domestic gas market and relations with Russia,' in Pirani, Simon (ed.), *Russian and CIS Gas Markets and Their Impact on Europe*, Oxford Institute for Energy Studies, Oxford 2009.

Žáková, Alena, 'Infrastructure Priorities of the Slovak Republic,' *Ministry of Economy.* Presentation at High-Level Conference on the topic 'Competitive and Integrated Energy Market as a Guarantee of the EU Energy Security' held on October 11, 2011 in Krakow.

News and Electronic Sources

A Meeting on the General Scheme for Natural Gas Sector Development for a Period Up to 2030, *Government of Russia,*Moscow 2010, available at: http://premier.gov.ru/visits/ru/12528/events/12539/ (accessed on April 22, 2012).

Bini, Alessio, 'The Italian–Russian Energy Partnership and the European Energy Security: The South Stream Case,' *Equilibri,* May 2011, available at: http://www.equilibri.net/nuovo/sites/default/files/focus_bini_italianpercent20russianpercent20energypercent20partnership.pdf (accessed on March 15, 2012).

Catan, Thomas and Warner, Tom, 'Russia and Ukraine Reach Gas Agreement,' *Financial Times*, January 4, 2006, available at: http://www.ft.com/cms/s/0/6ea768c4-7c8c-11da-936a-0000779e2340.html#axzz1rq6EpQsL (accessed on March 15, 2012).

Dempsey, Judy, 'If Gas Talks Fail, Europe Has Backup Plan,' *New York Times,* January 9, 2012, available at: http://www.nytimes.com/2012/01/10/world/europe/10iht-letter10.html?_r=1 (accessed on April 22, 2012).

Dempsey, Judy, 'Time to Bury Nabucco,' *Carnegie Endowment,* March 26, 2012, available at: http://carnegieendowment.org/2012/03/26/time-to-bury-nabucco/a53a (accessed on May 5, 2012).

E.ON Ruhrgas, 'Company Development Highlights 2003,' available at: http://www.eon-ruhrgas.com/cps/rde/xchg/SID-396B1B92-D123AA9E/er-corporate/hs.xsl/3867.htm (accessed on April 22, 2012).

Economist, 'Russia, Ukraine and Gas: Pipe Down,' January 28, 2009, available at: http://www.economist.com/node/12903050 (accessed on March 3, 2012).

Energy Charter, Russia, available at: http://www.encharter.org/(accessed on March 3, 2012).

Energy Delta Institute, 'Italy,' available at: http://www.energydelta.org/mainmenu/edi-intelligence-2/our-services/country-gas-profiles/country-profile-italy#reference-dbsource_1 (accessed on March 3, 2012).

Environment News Service, 'Italy Says Goodbye to Nuclear Energy,' May 15, 2011, available at: http://www.ens-newswire.com/ens/jun2011/2011-06-15-03.html (accessed on March 3, 2012).

EU Business, 'Putin Advances South Stream Pipeline Building to 2012,' December 30, 2012, available at: http://www.eubusiness.com/news-eu/russia-gas-energy.ec0 (accessed on March 3, 2012).

Euroactive, 'Třetí liberalizační balíček v energetice (Third Liberalization Package in Energy),' July 21, 2009, available at: http://www.euractiv.cz/energetika/link-dossier/liberalizace-unijni-energetiky-000055 (accessed on January 29, 2011).

European Dialogue, 'EU-Russian Gas Relations in Perspective: Challenges and Opportunities,' February 15, 2012, available at: http://eurodialogue.org/EU-Russian-Gas-Relations-in-Perspective-Challenges-and-Opportunities (accessed on April 22, 2012).

European Environment Agency, 'Total Energy Intensity (index 1995=100), Relative Energy Intensity (as PPS) and Per Capita Consumption,' published April 11, 2012, available at: http://www.eea.europa.eu/data-and-maps/figures/total-energy-intensity (accessed on July 1, 2012).

Gazprom, '40th Anniversary of Gas Supply to Austria,' available at: http://www.gazprom.com/about/history/events/40years/(accessed on December 24, 2011).

Gazprom, 'About Gazprom, History, Chronicle, 1989-1995,'available at: http://www.gazprom.com/about/history/chronicle/1989-1995/ (accessed on March 3, 2012).

Gazprom, 'Blue Stream,' available at: http://www.gazprom.com/about/production/projects/pipelines/blue-stream/(accessed on March 3, 2012).

Gazprom, 'Gazprom in Foreign Markets,'available at: http://eng.gazpromquestions.ru/?id=4#c320 (accessed on April 22, 2012).

Gazprom, 'Gazprom to Increase Operating Gas Reserve in Russian UGS Facilities to 66.28 Billion Cubic Meters by Forthcoming Winter,' April 26, 2012, available at: http://gazprom.com/press/news/2012/april/article134221/ (accessed on April 28, 2012).

Gazprom, 'Nord Stream Finalize Second Line Ahead of Schedule,'April 18, 2012, available at: http://www.gazpromexport.ru/en/presscenter/news/537/ (accessed on April 22, 2012).

Gazprom, 'Nord Stream History,' available at: http://gazprom.com/about/production/projects/pipelines/nord-stream/spg-history/ (accessed on April 22, 2012).

Gaz-System, 'Gaz-System and Eustream Research the Feasibility of a Poland-Slovakia Gas Pipeline,'January 14, 2011, available at: http://www.lngworldnews.com/gaz-system-and-eustream-research-the-feasibility-of-a-poland-slovakia-gas-pipeline/ (accessed on June 19, 2012).

Ghosh, Palash R., 'Russia Gains Full Control of Berlarus Gas Pipeline,' *International Business Times,*November 25, 2011, available at: http://www.ibtimes.com/articles/256213/20111125/moscow-gas-pipeline-belarus-putin-lukashenko.htm (accessed on March 15, 2012).

Gosden, Emily, 'UK Gas Imports Outstrip Production for First Time since 1967,' *The Telegraph,* March 29, 2012, available at: http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/9173373/UK-gas-imports-outstrip-production-for-first-time-since-1967.html (accessed on April 4, 2012).

Hydrocarbons Technology, 'Gazelle Natural Pipeline, Czech Republic,' available at: http://www.hydrocarbons-technology.com/projects/gazelle-pipeline/ (accessed on July 19, 2012).

Hydrocarbons-Technology, 'Świnoujście LNG Gas Terminal, Poland,'available at: http://www.hydrocarbons-technology.com/projects/swinoujscie/ (accessed on July 18, 2012).

Jewkes, Stephen, 'Italy's Gas Dependence to Rise after Nuclear Vote,' *Reuters,* June 15, 2011, available at: http://www.forexyard.com/en/news/Italys-gas-dependence-to-rise-after-nuclear-vote-2011-06-15T164023Z (accessed on March 15, 2012).

Kulikova, Nina, 'Trans-Baltic Pipeline Moves Ahead,' *Russia Profile,* November 28, 2005, available at: http://russiaprofile.org/business/a1214.html (accessed on October 9, 2011).

Lang, Mathias, 'Clear Bundestag Majority for 2022 Nuclear Phase-Out and Coalition Party Approval for Energy Package,' *German Energy Blog,* available at: http://www.germanenergyblog.de/?p=6677 (accessed on May 15, 2012).

LNG World News, 'Gaz System and Eustream Research the Feasibility of a Poland-Slovakia Gas Pipeline,'January 14, 2011, available at: http://www.lngworldnews.com/gaz-system-and-eustream-research-the-feasibility-of-a-poland-slovakia-gas-pipeline/ (accessed on June 19, 2012).

Lushin, Yuri, 'Russia, Poland to Sign New Gas Transit Contract for 2020-2045,' *Ria Novosti,* November 10, 2010, available at: http://en.rian.ru/business/20101110/161275412.html (accessed on July 1, 2012).

Nabucco, 'Facts & Figures,' available at: http://www.nabucco-pipeline.com/portal/page/portal/en/press/Factspercent20_Figures (accessed on March 5, 2012).

Natural Gas Europe, 'Poland Committed to Development of Shale Gas Technologies,' July17, 2012, available at: http://www.naturalgaseurope.com/poland-committed-to-development-of-shale-gas-technologies (accessed on July 19, 2012).

Natural Gas Europe, **'**Polish-Czech Interconnector Launched,' September 14, 2011, available at: http://www.naturalgaseurope.com/polishczech-interconnector-launched (accessed on July 19, 2012).

Net4Gas, '40 let tranzitu zemního plynu přes území České republiky (40 Years of Natural Gas Transit Through the Area of the Czech Republic),'Prague 2011, available at: http://www.net4gas.cz/cs/media/tiskove-zpravy/N4G-40_NGTA-brozura-web.pdf (accessed on December 24, 2011).

Neukirch, Ralf and Schepp, Matthias, 'German-Russian Relations Enter a New Ice Age,' *Spiegel Online,* May 30, 2012, available at: http://www.spiegel.de/international/germany/german-and-russian-relations-are-at-an-impasse-a-835862.html (accessed on June 5, 2012).

Nikolski,Aleksei, ' Russia's Gas Reserves as Austria Joins South Stream Project,' April 24, 2010, *Ria Novosti,* available at:http://en.rian.ru/world/20100424/158729140.html. (accessed on March 5, 2012).

Nord Stream AG, 'Golden Weld Joins Nord Stream's Firs Line to the European Pipeline Network,' *Facts,* Is. 19, September 2011, available at: http://www.nord-stream.com/press-info/library/?q=&type=9&category=&country= (accessed on April 22, 2012).

Nord Stream AG, 'Nord Stream Pipeline Project – Fact Sheet,' April 2012, available at: http://www.nord-stream.com/press-info/library/ (accessed on April 22, 2012).

Nord Stream AG, 'Response to Questions Asked, and Inaccurate Statements Made during the Public Hearing of the Committee on Petitions "The Nord Stream Pipeline and Its Impact on the Baltic Sea,'" European Parliament, Brussels, January 29, 2008, available at: http://www.envir.ee/orb.aw/class=file/action=preview/id=988582/TpercentE4iendavad+vastused.pdf (accessed on April 22, 2012).

Nord Stream AG, 'The Pipeline – Nord Stream AG,' available at: ww.nord-stream.com/pipeline (accessed on April 22, 2012).

OMV, 'Milstones of the OMV Success Story,' available at: http://www.omv.com/portal/01/com/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gDf1OLQC9HZyNXA3dPD18PI09DAwgAykdiypsaG8Dk8esOTs3T9_PIz03VL8iNKAcAt0TIfA!!/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfTTA5SEZJVTJVQTRJMEJSNVQ5NTAwMDAwMDA!/ (accessed on March 5, 2012).

Siddi, Marco, 'Leaders Change Business Does Not: Italy-Russia Economic Relations in 2012,' *Világgazdasági Intézet,* April 16, 2012, available at: http://vilaggazdasagi.blog.hu/2012/03/16/leaders_change_business_does_not_italy_russia_economic_relations_in_2012 (accessed on May 5, 2012).

Smith,Geoffrey T. and Horobin, William, 'OECD Slashes Euro-Zone Growth Forecast,' *The Wall Street Journal,* May 22, 2012 available at: http://online.wsj.com/article/SB10001424052702303610504577419563963545538.html?mod=googlenews_wsj (accessed on May 22, 2012).

Socor, Vladimir, 'Azerbaijan-Russia Gas Agreement: a Wakeup Call to Brussels and Washington,' *Euroasia Daily Monitor,* Vol. 6 Is.127, July 2, 2009, available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=35216 (accessed on March 15, 2012).

Socor, Vladimir, 'Sourcing the Nabucco Pipeline to Prevail against South Stream,' *Euroasia Daily Monitor,* Vol. 5, Is. 25, February 8, 2008, available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=33365 (accessed on March 5, 2012).

Socor, Vladimir, 'South Stream: Gazprom's New Megaproject,' *Eurasia Daily Monitor,* Vol. 4, Is. 125,June 25, 2007, available at:http://www.jamestown.org/single/?no_cache=1&tx_ttnewspercent5Btt_newspercent5D=32826 (accessed on March 5, 2012).

South Stream AG, '5 Questions About South Stream,' available at: http://south-stream.info/index.php?id=30&L=1 (accessed on March 5, 2012).

South Stream AG,'New Gas Pipeline Routes in Russia,' available at: http://south-stream.info/index.php?id=10&L=1 (accessed on March 5, 2012).

South Stream AG, 'Project History,' available at: http://south-stream.info/index.php?id=13&L=1(accessed on March 5, 2012).

South Stream AG, 'Significance,' available at: http://south-stream.info/index.php?id=9&L=1 (accessed on March 5, 2012).

Stratfor, 'Obama's Visit to Poland,' May 26, 2011, available at: http://www.stratfor.com/sample/analysis/obamas-visit-poland (accessed on July 1, 2012).

Stratfor, 'Poland's Growing Regional Energy Impoartance,'*The Azeri Times*, May 4, 2012,available at: http://www.theazeritimes.com/en/default/2/989.html (accessed on July 19, 2012).

Taylor, Paul, 'U.S. Throws Weight behind EU's Nabucco Pipeline,' *Reuters,* February 22, 2008, available at: http://uk.reuters.com/article/2008/02/22/eu-energy-usa-idUKL2212241120080222 (accessed on 24.06.2011).

The Visegrad Group,'2009/2010 Hungarian Presidency Annual Report,' available at: http://www.visegradgroup.eu/documents/annual-reports/2009-2010-hungarian-110412 (accessed on May 15, 2012).

The Visegrad Group, 'About the Visegrad Group,' available at: http://www.visegradgroup.eu/about (accessed on July 1, 2012)

The Visegrad Group,'Activities of the Czech Presidency of the Visegrad Group (June 2007- June 2008),' available at: http://www.visegradgroup.eu/documents/annual-reports/2007-2008-czech-110412 (accessed on May 15, 2012).

The Visegrad Group, 'Annual Implementation Report of the Program of the Presidency of the Slovak Republic in the Visegrad Group (1 July 2010- 30 June 2011),' available at: http://www.visegradgroup.eu/documents/annual-reports (accessed on May 15, 2012).

The Visegrad Group,'Executive Report on Polish Presidency in the Visegrad Group (July 2008-June 2009),'available at: http://www.visegradgroup.eu/documents/annual-reports (accessed on (accessed on May 15, 2012).

The Visegrad Group,'Program of 2009/2010 Hungarian Presidency,' available at: http://www.visegradgroup.eu/documents/presidency-programs/2009-2010-hungarian-110412 (accessed on May 15, 2012).

The Visegrad Group, 'Program of the Slovak Presidency of the Visegrad Group (July 2010-June 2011): Efficient Visegrad-Continuity, Cohesion, Solidarity, Awareness,' available at: http://www.visegradgroup.eu/documents/presidency-programs/2010-2011-slovak-110412 (accessed on May 15, 2012).

The Visegrad Group, 'Programme of the Czech Presidency of the Visegrad Group 2011-2012,' available at: http://www.visegradgroup.eu/documents/presidency-programs (accessed on May 15, 2012).

The Visegrad Group, 'Programme of the Polish Presidency of the Visegrad Group (July 2008-June 2009),' available at: http://www.visegradgroup.eu/documents/presidency-programs/2008-2009-polish-110412 (accessed on May 15, 2012).

Time, 'Go-ahead for the biggest East-West deal ever', July 12,1981, Vol. 118, Is. 23.

TOL, 'Poland Was Right,' *Transition Online,* September 12, 2008.

Verbundznetz Gas AG, *VNG Chronicle*, available at: http://www.vng.de/VNG-Internet/en/1_Unternehmen/geschichte/chronik/ (accessed on January 3, 2011)

Weir, Fred, 'Nord Stream Pipeline Gives Russia Edge in European Gas Wars,' *CSMonitor,* September 8, 2011, available at: http://www.csmonitor.com/World/Europe/2011/0908/Nord-Stream-pipeline-gives-Russia-edge-in-European-gas-wars (accessed on March 3, 2012).

Whitmore, Brian, 'Azerbaijan Could Scuttle Nabucco over Turkey-Armenia Deal,' *Radio Free Europe Liberty,* October 19, 2009, available at: http://www.rferl.org/content/Azerbaijan_Could_Scuttle_Nabucco_Over_TurkeyArmenia_Deal/1855784.html (accessed on March 3, 2012).

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YAZARIN

Soyadı : Şenterzi
Adı : Zahide Tuğba
Bölümü: Uluslararası İlişkiler

TEZİN ADI (İngilizce) : Visegrad Group Facing The Nord Stream and South Stream Gas Pipeline Projects

TEZİN TÜRÜ: Yüksek Lisans [X] Doktora [ ]

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. [X]
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. [X]
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