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*The Energy Security Debate in the Baltic Sea Region:
A Comparison between Energy Policies in Poland
and the Baltic States*

Monica Ogrodowski

Master of Arts MIREES
Interdisciplinary Research and Studies on Eastern Europe

AWARDED MASTER THESIS

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Awarded Master thesis
in
National Political Movements in East-Central Europe

Supervisor Professor Rytis Bulota

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FOREWORD

The International Master in Interdisciplinary Research and Studies on Eastern Europe (MIREES) was launched in 2004 at the School of Political Sciences-Forlì Campus in cooperation with Europe and the Balkans International Network (EBIN). In 2008 it developed as a second cycle degree program, which currently delivers a joint MA awarded by the four full partner Universities of Bologna, Vytautas Magnus at Kaunas, Corvinus of Budapest and St. Petersburg State University, together with the universities of Ljubljana and Zagreb. The program is carried out with the additional support of the associate partners, as the MIREES International Alumni Association (MAiA), the Institute of East-Central and Balkan Europe (IECOB) in Forlì, the NATO Centre of Excellence for Energy Security in Vilnius, and the Institute for Democracy 'Societas Civilis' - IDSCS - in Skopje, and more recently enjoys the cooperation with the Visegrad Fund.

MIREES is an innovative graduate programme focusing on interdisciplinary and in-depth study of the post-socialist Countries in transition, the new EU member States, as well as the New East-European Neighbor Countries. Providing courses in history, politics, economics as well as cultural and anthropological studies, MIREES stimulates multifaceted approaches to the study of Central, Eastern and Southern Europe. The program combines an academic approach with mobility in one of the partner Universities and professional training pursuing the goal of forging potential insightful consultants, analysts or managers, to become area experts for international agencies, public administrations, private and public companies, and NGOs, while also offering a solid basis for further academic studies at the PhD level.

MIREES graduates who successfully defended a thesis deemed of a commendable standard are awarded the possibility to publish their research on the Portal for Central-Eastern and Balkan Europe (PECOB). The peer review and publication of the selected MA theses is carried out through a cooperation between MIREES, MAiA and IECOB which resulted in a set of MIREES/MAiA Volumes published by PECOBS with ISBN code.

Remarkable and diverse academic works, truly representative of MIREES' intrinsic interdisciplinary and multifaceted approach are made available through such cooperation. These innovative, in-depth and insightfully drafted analyses testify the authors' dedication and MIREES' competence in training outstanding researchers and analysts.

All members of the MIREES, MAiA and IECOB network congratulate the authors on their achievements.

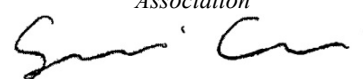
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I never let schooling interfere with my education

Mark Twain

To my Family

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List of Acronyms

BEMIP Baltic Energy Market Interconnection Plan

BSR Baltic Sea Region

EU European Union

EC European Commission

ISO Independent System Operator

ITO Independent Transmission Operator

LNG Liquefied Natural Gas

NPP Nuclear Power Plant

Measurements

bcm (gas) billion cubic meters

tcm (gas) thousand cubic meters

TWh terawatt hours

Chapter 1. Introduction

1.1 Research object, aims and tasks

The object of this research is the energy security situation and possible future developments in the Baltic Sea Region. The goal is to explore the energy security situation in the region by comparing the energy policies of the three Baltic States and Poland in the context of contemporary issues of energy security and wider EU-Russia relations. The task is to then identify potential and assess already-existing areas of cooperation in the energy sector within the framework of the EU and show that a concerted regional approach to strengthening energy security can lead to a more unified EU energy policy. The main analytical framework will be Barry Buzan's *Regional Security Complex Theory* as it applies to the securitization of energy dependence in the BSR; theories of interdependence will factor into the discussion on the wider context of EU-Russian energy relations.

It will be argued that although all the three Baltic States and Poland all have access to the Baltic Sea – and therefore are key actors in the regional debate on energy security – they each have their own respective energy dependence structures, as well as differing national interests, priorities regarding EU Energy Policy and relations with Russia. Furthermore, Poland as a transit country holds more weight in the energy relations between Russia and the wider EU, which provides it with more room for maneuvering in negotiations with Russia. By analyzing and comparing the energy policies of the Baltic States with that of Poland, areas for cooperation will be found and prospects for a unified regional approach will be presented. This regional approach could prove to be the first step towards a unified EU approach, since it could serve as an example of balancing national, regional and EU-wide goals in energy policy. It will be argued that through a concerted effort, Baltic regional energy security can ultimately be strengthened, particularly if the available tools within the EU's framework are applied.

The main research aims of this work are to:

1. describe how “energy security” is understood within the BSR;
2. apply a historical and analytical framework to explain the high level of securitization of energy dependence within the region;
3. describe the geopolitical context of energy trade within the region;
4. explore what factors influence energy security strategies and policy formulation in the BSR;

5. describe and compare how these factors influence policy formulation in Poland, Lithuania, Latvia and Estonia;
6. explore the impact of energy security on other sectors of security in the region;
7. assess the key initiatives for regional energy cooperation, the challenges associated with these projects and future prospects; and
8. explore how this regional approach can contribute to a more unified EU Energy Policy.

Although the national energy policies of the Western EU Member States differ from those of the Baltic and Central-Eastern European countries, the energy policies within the BSR differ among themselves as well. A particular combination of geographic, geological, sociopolitical, economic and historical factors unique to each country create inconsistencies in energy policy formulation within the BSR. These specific factors are based on national energy mixes and domestic sources of energy; sociopolitical history; import dependence structures; energy infrastructure and interconnections (or lack thereof); available resource technologies; and national interests. These factors condition each country's respective energy strategy and ultimately account for the inconsistencies in policy that exist within such a geographically concentrated area. It is no wonder then, given the size and diversity of the EU, that a common EU Energy Policy that satisfies all 27 EU Member States has yet to be crafted. Based on pursuing the research aims of this thesis, the following prognosis will be made: that *regional cooperation in the BSR can serve as an example for wider cooperation in the EU energy sector*.

1.2 Relevance of topic and newness of approach

Although there is plenty of literature and academic work on the topic of energy security within the Baltic Sea Region, developments in the energy sector are fluid and constantly changing. This work is relevant because it explores possible future developments and makes certain prognoses based on current events and trends in the region's energy sector.

Energy security in this particular region is also important for the rest of the EU, as it is a main corridor for Russian energy supplies to the rest of Europe. The seemingly isolated oil and gas cut-offs to Ukraine (in 2006 and 2009) and Belarus (in 2010), however, not only revealed the degree to which Europe has become interconnected through its energy supply corridors, but also sparked concern over the reliance on Russia for energy supplies. Recent events associated with the unstable situation in North Africa and the 'Arab Spring' have increased Russian energy exports to Europe by 20% as a result of the EU's embargo on Iran, with a majority of natural gas being transitted through the NordStream pipeline which runs across the Baltic Sea. It is clear that Russia will continue to be a key source of energy supplies to Europe. This is especially true for natural gas, since the disaster at the Fukushima NPP has ignited fear over nuclear energy and may trigger a dramatic shift to gas in the future.

When taken together, these recent events illustrate the relevance and timeliness of the energy security debate in the BSR, given its impact on the entire EU. Furthermore, EU Energy Policy has been significantly shaped by lessons learned from these incidents since they raised questions about the EU's policies, its future relations with external energy suppliers and the cohesion and functionality of its internal market.

What makes the energy security debate in the BSR particularly interesting within the framework of the MIREES program is how a complex set of energy policy priorities has emerged as a result of historical, political, economic and even social factors within the Post-Soviet and post-Communist space. De-securitization of energy policy is unlikely to occur so long as Russia remains the dominant energy supplier to the region and continues to use its energy resources as political leverage over its former sphere of influence¹ – which includes Lithuania, Latvia, Estonia and Poland.

It will be argued that the negatively-perceived dependence on Russia can be lessened through the wider interconnection of the three Baltic States to the West primarily through Poland (but also to the Nordic countries). This would allow for the possibility to diversify supplier and supply routes and to develop technology for new viable sources of energy, which could result in decreased imports of energy supplies. Furthermore, it would demonstrate a more unified posture when approaching Russia in energy trade negotiations. In this way, Baltic regional cooperation in the energy sector will be used to illustrate how the balance of national, regional and EU-wide priorities can serve as an example for other regions in the EU.

1.3 Research design

1.3.1 Methodology

The aforementioned research aims will primarily be pursued through a comparative analysis of the main trends in the strategies and key features of the Polish, Lithuanian, Estonian and Latvian energy policies, as well as their respective approaches to regional cooperation in energy projects. A descriptive approach will explain the history of the BSR and will highlight the different post-Soviet and post-Communist trajectories of development which account for the high degree of securitization of energy dependence within the region. The analytical approach of Barry Buzan and the Copenhagen School – namely, the *Regional Security Complex Theory*², as well as Buzan's notions of historical *amity* and *enmity*³ – will

1 Delyagin, M. (2007) "Energy Security: Real and Fictional Problems." International Issues & Slovak Foreign Policy Affairs, No.1.

2 Buzan, Wæver & de Wilde. (1998) *Security: A New Framework for Analysis*.

3 Buzan, B. (1991) *People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era*.

serve to frame this discussion and present conclusions based on the historical background of the region. Methodological approaches associated with the concept of energy security, like interdependency theories, will help place the regional energy security debate in the BSR within a larger geopolitical context, as it crucial to remember that geopolitical processes are from being isolated. The overall aim is to provide a comprehensive analysis of the complex energy relations within the BSR and place them within the wider context of Eurasian energy trade, with all its economic, geopolitical and security implications.

1.3.2 Sources

Both *primary* and *secondary* sources will be used to support the above-stated research aims. The primary sources will consist of national and EU-wide policies and strategies guiding energy policy formulation, as well as the agreements, frameworks and projects that have framed and regulated EU-Russian energy relations and Baltic regional efforts at cooperation. In regards to the former, particular attention will be paid to agreements and treaties between Russia and the EU concerning both their general relationship as well as their relations in the energy sector. In terms of the latter – Baltic regional efforts at cooperation – agreements and projects in the energy sector between the countries of the BSR will be analyzed.

A set of *interviews* with experts and energy policy insiders will give perspective and insight into prospects of Baltic regional energy cooperation within the gas, oil, electricity and nuclear sectors. Opinions about the viability of emerging energy sources, like nuclear power, shale gas and LNG will also be presented. Mr. Miroslaw Lewinski, Advisor to the Minister at the Department of Atomic Energy of the Polish Ministry of Economy, graciously agreed to an email interview relating to Poland's nuclear program as outlined in Poland's Energy Policy until 2030. He also answered questions regarding prospects of cooperation with Lithuania on the building of a NPP in Visaginas and the potential regional effects of the NPPs in Kaliningrad and Belarus, which are both being designed and constructed under Russian influence.

Andrew Savchenko, a former professor of mine and Principal at Eurasia Energy Consultants, LLC. in Providence, RI was invaluable in the writing of this thesis. His great knowledge of the region's history, clear direction and valuable input and suggestions were instrumental in the completion of this work. Dr. Arunas Molis, Chief of Research and Analysis at the Energy Security Center under the Ministry of Foreign Affairs of the Republic of Lithuania and lecturer at Vytautas Magnus University and Vilnius University, is an expert in the field of energy security in the BSR. His insights and direction were likewise helpful in the writing of this thesis. Furthermore, during the various conferences I attended through my internship at the Energy Security Center – which was conducted under the supervision of Dr. Molis – I was able to formally and informally gain the insight of contacts at the US Embassy in Vilnius, the Polish Embassy in Vilnius, as well as various Lithuanian ministries and officials. Although these individuals must be left unnamed given their ties to the diplomatic community, my discussions

with them gave valuable perspective to this work. Furthermore, the research I carried out while co-authoring a book chapter on the security implications of Russian energy policy as seen from a Baltic perspective for the Swedish Research Defence Agency (FOI) was an invaluable experience and greatly influenced the way this thesis was written, structured and edited.

Given the fact that the Energy Security Center was established as a NATO Energy Security Center of Excellence (NATO ENSEC COE) on July 10, 2012, I was also able to explore the military and security dimension of energy security and apply some of these ideas to this work. This insight was particularly helpful in exploring the impact of energy security on other sectors of national and regional security in the third chapter. At the “Second Memorandum of Understanding Conference on the Establishment of the NATO ENSEC COE” which took place in Vilnius from April 2-4, 2012, I had the honor of interviewing Colonel (ret.) Mike Anderson, Chief of J9 – Interagency Partnering for US European Command (US EUCOM), who gave me his personal opinion regarding the role of Russia in the geopolitics of the European continent. During the NATO Workshop on “Sustainable Cities and Military Installations” in Hella, Iceland, which I was fortunate enough to attend with the support of the US Embassy in Vilnius, I participated in the Working Group on Energy and was able to contribute a section on the social and political dimension of energy sustainability to a book being published on the conference proceedings. I gained much insight from the various representatives of the military, industry and academia who attended and participated in this NATO Workshop on sustainability. A particularly important contact I made was Colonel Paul Roege, Director of Operational Energy for the US Army, who since then has shown an interest in supporting the Energy Security Center and the NATO Energy Security Center of Excellence, which will become operational in 2013. My formal interviews and casual discussions with these various contacts were invaluable in the shaping and writing of this thesis.

Besides the primary sources cited in this work, the primary group of sources that will be referenced consists of *secondary sources*. They include academic literature on concepts relating to energy security, regional security complex theories, interdependence theories and the securitization of energy dependence. Other secondary sources, including books, working papers, published journal articles and newspaper articles will relate to the political economy of energy trade in Eurasia; historical relations of the Baltic countries with Russia; the Russian approach to energy policy; the EU-Russia relationship; EU Energy Policy; the individual energy strategies of Poland, Lithuania, Estonia and Latvia; the impact of Russia’s energy policy on the security of the Baltic countries; the dynamics of Baltic regional energy cooperation; and the latest developments in energy cooperation initiatives in the BSR.

1.4 Structure and description of chapters

Chapter 1 will introduce this thesis by presenting the research aims and hypothesis; the methodology and sources, as well as the structure and description of the chapters.

Chapter 2 – *Contemporary issues of energy security: the BSR in Eurasian Energy Relations* – will attempt to place the countries of the BSR within the larger geopolitical context of contemporary issues of energy trade. First, a working definition for energy security as it is understood within the BSR will be presented. This will be followed by a discussion of the theoretical and analytical approaches of securitization of energy dependence in the region and interdependence that underpin this work.

Chapter 3 – *A Comparison of Polish and Baltic energy policies* will get to the heart of the matter: comparing the different energy security strategies of Poland, Lithuania, Estonia and Latvia within the above-mentioned theoretical and analytical frameworks. The impact that energy security has on other sectors of security will be analyzed; regional cooperation will be presented as a realistic and promising way to increase the energy security of the BSR. Possible game-changers will also be discussed within this context.

Chapter 4 – *Conclusions* will summarize the main aims of the thesis and present findings. Conclusions based on the hypothesis – that *regional cooperation in the BSR will not only increase regional energy security, but the energy security of the entire European Union* – will be presented.

Chapter 2. Contemporary Issues of Energy Security: The Baltic Sea Region in EU-Russia Energy Relations

The aim of this chapter is to a) define energy security as a concept and present the theoretical-analytical framework of this research and b) to place the countries of the BSR within a larger geopolitical context, touching upon key issues of EU-Russia energy relations and their impact on regional/EU energy security. Diverging national interests, varying levels of securitization of energy dependence, different priorities and objectives regarding EU Energy Policy, and inconsistencies in implementation methods will place the BSR within the larger context of EU-Russian energy relations and serve to explain the lack of one voice with which to approach Russia. The *Regional Security Complex Theory*, as well as theories of interdependence and securitization, will serve as a framework for analysis, helping to explain the varying levels of securitization of energy dependence within the EU and the particularly high securitization among the countries of the BSR.

2.1 Historical and analytical framework

The Baltic Sea Region has always been a geopolitically strategic and historically symbolic area. Bearing the brunt of imperialistic inclinations for centuries, the three Baltic States along with Poland finally regained their independence in 1990 and 1989, respectively. The Baltic States went on to become the only post-Soviet countries to have joined NATO and the European Union – both in 2004. Poland joined NATO in 1999 and the European Union in 2004. Since the integration of these countries into Western security and political structures, their direct access to the Baltic Sea and location along key Eurasian energy transit routes have propelled them into the regional energy security debate, which has larger implications for the entire EU.

With an ever-increasing European dependency on Russian energy imports, the Baltic nations together with the countries of Central and Eastern Europe find themselves in a vulnerable position given their reliance on the single supplier to the region: Russia. They are almost entirely dependent on Russian energy imports and are intricately linked via infrastructure (particularly gas pipelines), long-term contracts, and tactical investments in regional projects and private companies by Russian state-owned conglomerates. Some of these countries (like Poland) are transit countries and are caught between Russian energy supplies to

the East and the lucrative markets of Western Europe. Furthermore, they have found themselves caught between two different (and conflicting) concepts of governance and regulation, making energy trade a hotly debated topic from both sides.

Also having Baltic coastlines, Russia (including the Kaliningrad exclave), Poland, Germany, Finland and Sweden also contribute to the energy security environment in the region. Although Norway is not a Baltic nation per se, it factors heavily into regional energy dynamics because of its considerable hydrocarbon production and is often included in discussions related to energy security as an alternative source of energy supply. The diverging interests and different energy situations of all these actors have contributed to the emergence of a complex web of power relations within the region. Particularly important to the discussion at hand is the emergence of the phenomenon of *securitization of energy dependency* among the Baltic littoral countries: Poland, Lithuania, Latvia and Estonia. Their common history and shared security interests have created a Regional Security Complex, which includes energy security.

2.1.1 *Securitization of Energy Dependency*

Following Barry Buzan's *Regional Security Complex Theory*, the BSR can be considered "a group of states whose primary security concerns link together sufficiently closely, so that their national securities cannot realistically be considered apart from each other."⁴ Although the respective energy situations of Lithuania, Latvia and Estonia differ, the overarching common denominator – a high dependence on Russia for energy supplies – links their security concerns together so that, as Buzan argues, their national securities must also be considered together. By further applying Buzan's notions of historical *amity* and *enmity*,⁵ it can be argued that energy dependency becomes securitized more easily if it is linked to controversy or conflicts, since energy dependency is perceived as either *positive* or *negative*. If this theory is applied to the three Baltic States and Poland⁶, the perceived *negative dependency* on Russian energy is undeniably linked to historical issues, primarily Russian occupation.⁷ As a result, the energy policies of these countries have become indelibly linked with security issues. This is especially true in the case of the Baltic States, since Soviet-era infrastructure and energy price setting have become the new means by which Russia can – and has – exerted its influence over the region.

The recent oil and gas cut-offs to Ukraine (2006 and 2009) and Belarus (2010) demonstrated how energy has become a tool of political pressure on nations which fall within Rus-

4 Buzan, B. (1991) *People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era*. Second Edition. Harvester Wheatsheaf: Hertfordshire.

5 Buzan, et al. (1998) *Security: A New Framework for Analysis*. Lynne Rienner Publishers: Boulder, Colorado.

6 Mikko Palonkorpi's draft paper "Energy Security and the Regional Security Complex Theory" was central in applying Buzan's theory to the Baltic Sea Region.

7 It can also be argued along these lines that recent conflicts regarding the rights of Russian-speaking minorities in the Baltic States (particularly Latvia and Estonia) as well as the dominant presence of Russian state-controlled energy companies in the Baltic internal market continue to influence the *negative* energy dependency which characterizes the securitization of these countries' energy dependence.

sia's former sphere of influence. These seemingly isolated developments have had wider implications, however, affecting the EU as a whole. They revealed the degree to which Europe has become interconnected through its energy supply corridors. The gas cut-offs to Ukraine in January 2009 (ostensibly over unresolved debts of the previous year) reverberated across all of Europe, spiking prices, causing serious shortages of import demands, and throwing Europe into a deep freeze in the middle of winter.

This dramatic incident – which demonstrated Russia's use of energy as a political tool and the impact it has on Europe as a whole – highlighted the EU's need to secure its external energy supply sources and to begin diversifying its energy suppliers and transit routes. It is clear, however, that since Russia will continue to dominate the upstream side of the Eurasian energy chain (having the largest known natural gas reserves and the eighth largest oil reserves in the world, as well as a monopoly over pipelines and other energy infrastructure), it clearly has the power to force its hand. But as long as the EU remains the largest net importer of Russian energy supplies, with a 60% dependence on Russian gas (which is said to rise to 70-80% by 2030⁸) and a 40% dependence on Russian oil, energy trade will continue to dominate EU-Russian relations. Furthermore, the recent events in the Middle East associated with the “Arab Spring” – which caused a 20% increase in Russian energy exports to Europe (particularly through the NordStream pipeline which traverses the Baltic Sea) after an EU oil embargo on Iran – have demonstrated that Russia will continue to be a key source of energy supplies, given its geographic proximity to Europe, competitive pricing and relatively predictable political environment.⁹ Furthermore, these recent events illustrate the relevance and timeliness of the energy security debate in the BSR and its impact on the entire EU.

Though the interdependence between the EU as a whole and Russia is largely perceived as *positive*, as opposed to the conflictual nature of the Baltic or Central-European energy dependency, some theorists (particularly neorealists) argue that any sort of dependency leads to conflict and suspicion,¹⁰ making it a challenge to find an agreement suitable for both sides. However, the EU's growing need for affordable and reliable energy supplies corresponds to Russia's need for a stable and predictable market. As the president of the European Commission Jose Manuel Barroso has said himself¹¹,

if we need a flow of energy from Russia, namely gas, I believe that it is also in interests of Russia to have a stable market and a stable relationship with such an important customer as the European Union.

8 European Commission (EC) (2005) “Report on the Green Paper on Energy - Four years of European initiatives”, cited in Mauring, L and Schaer D. (2006) “The Effects of the Russian Energy Sector on the Security of the Baltic States.” *Baltic Security and Defence Review* 8.

9 Although regional conflicts (particularly in the Caucasus) and geopolitical disputes between Russia and transit countries are likely to result in sporadic short-term interruption of supplies.

10 Kenneth Waltz has argued that “mutuality of dependence, which is a feature of multipolar systems, compels each state to observe others with suspicion.” Mearsheimer has argued that “if interdependence is high, there are many occasions in which the states can come into conflict.”

11 *International Herald Tribune* (2006) Dempsey, J. “EU urges an energy pact with Russians – But Poland objects and offers plan that excludes Moscow.”

So, although the dialogue is riddled with inconsistencies and misinterpretations (stemming from two conflicting systems of corporate and legislative governance), the commercial and economic interests on each side of this *positive interdependence* will continue to dominate discussions between Brussels and Moscow. This, however, leaves the new EU member states – those who consider historical relations as a deciding factor in their relations with Russia – to their own devices. These devices are oftentimes more futile when compared with the multilateral tools available through the EU. Furthermore, the influence of these countries on Russian policies is much smaller if compared to the concerted action possible through a unified EU approach.

The protests of the Baltic and Central-Eastern European nations are widely viewed within the EU as part of a greater historical *enmity*.¹² The defensive nature of these countries' policies towards Russia is perceived as overly antagonistic and efforts have been made to diversify supply routes away from these highly politicized territories, making notions of concerted action more difficult. One such project, the Nord Stream pipeline from Vyborg, Russia to Greifswald, Germany, has especially caused uproar in the region.¹³

However, since the sale of crude oil and natural gas constitutes the basis of Russia's exports as well as a large portion of its GDP, industrial production, federal budget, and currency reserves, Russia will continue to search for ways to diversify transit routes and avoid paying transit fees to its neighboring countries – as was the goal of the Nord Stream pipeline.

The three Baltic States together with Poland, however, argue that Nord Stream was strategically constructed in order to bypass the former Soviet bloc countries. This would ensure against a disruption of energy supplies to Western Europe if Russia decides to exert political pressure on its former sphere of influence by using energy as its 'weapon of choice.' According to these countries, bypassing their territory would reduce their role as transit countries and decrease their leverage on, and importance to, Russia. Any attempts to counterbalance their dependence through the control over the transit of energy would be thwarted. So, it can be argued that while Russia still remains the main source of gas supplies to the countries of Eastern Europe and the Baltics and since rapid diversification away from Russia is impossible due to the current nature of gas transport, the key priority of these countries has been, and will continue to be, *a counterbalance through increasing their role as transit countries and expanding their own distribution networks*.¹⁴ This explains their vehement resistance to the Nord Stream pipeline. As long as these countries remain dependent on Russia for energy supplies, they will continue their efforts to control the transit of these supplies to Western Europe, while simultaneously reaping the economic and political benefits of such practices. The analysis of these countries' energy security policies reveals strategies which support this hypothesis. The main underlying component of these strategies is to increase pressure on Russia through international cooperation, primarily through EU instruments.

International cooperation in the energy sector is also key to the energy security strategy of states like Poland, which acts as a link between Russian supplies and European consumer

12 Vahtra, P. and Ehrstedt S. (2008) "Russian Energy Supplies and the Baltic Sea Region." Electronic Publications of Pan-European Institute.

13 Radek Sikorski, former Polish Minister of Defense, called the deal between Germany and Russia to construct Nord Stream "the new Molotov-Ribbentrop Pact."

14 Unge et al. (2006) "Polish-Russian Relations in an Eastern Dimension Context." Swedish Defence Research Agency (FOI).

markets. By association, these transit countries have become major players in EU-Russian politics. In order to counteract the Russian unilateral approach to energy trade, it has become clear that the Baltic countries and Poland can most effectively work multilaterally through the EU's framework in order to exert more pressure on Russia. By firmly interconnecting Eastern European infrastructure with that of the EU (such as linking Polish gas pipelines to Germany and in turn, building gas interconnections with Lithuania), the security of energy supply to the entire EU will increase dramatically.¹⁵ Any disruption in supply could be countered by a flow of resources from neighboring states. LNG terminals are also an important step towards diversification of energy supply. Poland, with its 328 mile (528 km) coastline and well-developed port infrastructure, is well placed to become a major LNG distribution center in the region. Both Lithuania and Latvia are also planning LNG terminals along their Baltic coast.

Although the diversification of energy supplies is a main policy goal of the EU, dependence on cheap energy supplies from Russia continues (and is likely to continue) to shape EU-Russian relations, propelling Poland into the discussions, since it is a transit country for energy supplies. Furthermore, since Poland is less dependent on Russian energy (as compared to neighboring countries) and because it receives the backing of Brussels, Poland has some leverage in relations with Russia.¹⁶

It can be argued that the specific geopolitical location of these countries, coupled with their particular political, economic and social history, have contributed to the high securitization of their energy dependencies. Furthermore, the fluid economic and political environment of these post-Socialist nations in transition, the symbolic value of the region, as well as the location between two different and inconsistent systems of governance and regulation have all contributed to the rift between the rest of the EU and the countries of the BSR.

What is also important to point out is that the EU and Russia take a different approach to energy policy. The main goal of Russia's energy strategy for the period up to 2020 is to ensure the growth of the Russian economy. This economic growth is geared towards ensuring security and foreign policy leverage in order to promote Russian interests abroad. The idea of economic independence – while using energy to ensure the continued dependence of nations on Russian energy supplies – is central to Russia's energy strategy. Energy resources are seen as the means to increase economic growth and international influence and to guarantee economic independence.¹⁷ This runs directly counter to the European Union's energy strategy, which includes decreasing energy dependence and serves as a justification for the securitization of energy dependence.

15 Loskot-Strachota, A.(2009) "Gazprom's Expansion in the EU – in cooperation or domination?" Warsaw: Center for Eastern Studies.

16 Grzeszak, A. (2004) "Iwan I gazurka" (Ivan and the gas pipeline), *Polityka*, nr 50, 11 December.

17 Unge et al. (2006) "Polish-Russian Relations in an Eastern Dimension Context." Swedish Defence Research Agency (FOI).

2.1.2 Challenges to a unified EU energy policy

One of the main challenges facing the EU today is the need to increase the security of its energy supply. The recent events associated with the Arab Spring in the Middle East – particularly the latest developments with Iran banning oil exports to the EU – have shown that energy issues are increasingly becoming intertwined with wider security issues on the continent. Security of supply has become indispensable to maintaining the security of the EU amid global political instability and social unrest. With the dependence of European nations on energy imports growing exponentially and regions like the Middle East experiencing turmoil, Russia will remain an important partner in energy relations. Although there are differences in approach to energy policies (namely, the fact that Russia is unwilling to let in foreign investments into its state-controlled gas sector and has refused to sign the Energy Charter Treaty because of its provision regarding market rules of transit – Transit Protocol), the positive interdependence between Russia and the EU will continue to dominate energy trade within the EU, thrusting the BSR into EU-Russian energy relations.

The main challenge for the EU revolves around the lack of a single voice with which to approach Russia.¹⁸ The EU must develop an effective policy by integrating its own gas and power markets and defining its energy objectives abroad more clearly.¹⁹ Internal inconsistencies within the EU in regards to energy security priorities continue to pit unilateral agreements with Russia against a common unified approach. The difference in dependence structures as a result of geographic location and/or infrastructural interconnections; existing domestic energy sources and consumption trends; development prospects; and resource technologies have made it exceedingly difficult to craft a common EU energy policy that will meet the security needs and geopolitical interests of all EU Member States. It is clear, however, that the BSR, with its energy transit routes and potential as an alternative energy producer in the future, will continue to figure heavily in the larger EU energy security situation.

The significantly higher dependence of the Baltic nations on Russian energy supplies, coupled with their physical interconnection with Russia via state-controlled pipelines and economic connections via Russian investments into national and regional projects, markedly sets these nations apart from the rest of Europe (and even other Baltic Sea countries, for that matter). The three Baltic States are significantly more vulnerable to Russian maneuvers within the energy sector, as they are connected with Russia via pipelines. In one extreme case, Lithuania suffered a freeze over its oil imports from Russia in 2007 as a result of selling the Mazeikiu refinery to Poland's Orlen over one of Russia's state-controlled oil compa-

18 Vahtra, P. and Ehrstedt S. (2008) "Russian Energy Supplies and the Baltic Sea Region." Electronic Publications of Pan-European Institute.

19 Unge et al. (2006) "Polish-Russian Relations in an Eastern Dimension Context." Swedish Defence Research Agency (FOI).

nies.²⁰ The crude oil supplied to the refinery – transported via the Russian Druzhba pipeline – was coincidentally shut off after the Polish-Lithuanian deal.²¹ Instead of processing crude oil delivered by the Druzhba pipeline, Mazeikiu had to process crude oil that was delivered by sea and rail and export it back along the same route. This incident serves to illustrate why the countries of the BSR have securitized their energy policies: it is clear that Russia uses politically-motivated supply cuts to exert its influence in the region. Furthermore, it shows how even some prospects of regional cooperation are hindered by the overarching factor of Russian interference in the region.²²

2.2 Energy Security as a Concept

Energy security has become somewhat of a catch phrase in recent years. It is treated as so well-understood a concept that it requires no further description; however, there is still little consensus about what exactly constitutes “energy security.” The term itself is relatively new and was introduced to the theory of international relations and security studies by the Copenhagen School led by Barry Buzan in the early 1990s. Besides traditional military threats to security, the Copenhagen School also recognized political, economic, societal and environmental threats. A sufficient and stable supply of energy fits into this extended frame of security analysis, since it is crucial for ensuring the economic well-being and therefore, the “essential values,” of every state.²³

Even the European Commission’s 2007 Green Paper entitled “A European Strategy for Sustainable, Competitive and Secure Energy” – while identifying weaknesses in European internal policy and proposing the need for a unified external policy – never actually provided a working definition for energy security. Given the fact that the Green Paper was the first time the EC attempted to address the issue of energy security following Russia’s gas cut-off to Ukraine and Moldova in 2006, the lack of a clear explanation of the term indicated a larger trend among Western leaders. The absence of unanimity can be attributed to their view of energy extraction, transport and sale as a free market issue, rather than an issue of security.²⁴ Senior advisor on international energy and climate policy at the German Institute for International and Security Affairs (SWP) Friedemann Muller pointed out that in “continental European tradition energy policy is considered part of economic policy,” and that only recently political leaders have realized energy markets “are prone to crisis-like developments in

20 Cienski, Jan. “Oil and Politics, the Lithuania round.” GlobalPost.

21 Ironically, “druzhba” means “friendship” in Russian.

22 Unge et al. (2006) “Polish-Russian Relations in an Eastern Dimension Context.” Swedish Defence Research Agency (FOI).

23 Buzan, et al. (1998) *Security: A New Framework for Analysis*. Lynne Rienner Publishers: Boulder, Colorado.

24 Winchester, R. (2007) *European Energy Security: Wrestling the Russian Bear for Caspian Natural Gas*.

certain regions, threatening security.”²⁵ In light of the fact that Russia has on occasion used energy as a tool of political influence²⁶ and does not adhere to the same free market principles as the EU in the energy sector, it is argued that a more concerted EU effort at preventing threats must be taken while being supported with national efforts at providing energy security for their respective populations.²⁷

2.2.1 Defining “energy security” in the BSR

A common definition of “energy security” is the availability of reliable energy supplies at affordable costs; however, the Routledge Handbook of Energy Security lists 45 different definitions of the term and frames them according to five different categories: *scientific*, *economic*, *ecological*, *social welfare* and *political*. The *scientific* view maintains that energy “can be neither produced nor consumed, quantity is always conserved, quality is always declining, and energy security is a matter of understanding thermodynamics and physics.”²⁸ The *economic* view sees energy as a commodity and energy security is therefore “a matter of analyzing transactions between buyers and sellers and minimizing the external costs of these transactions.”²⁹ The *ecological* view prioritizes the values of sustainability, frugality and future choice and maintains that “energy security is a matter of recognizing that energy resources are finite and interdependent and that present use endangers the planet and future generations.”³⁰ The *social welfare* view focuses on the social necessity of energy and “energy security becomes a matter of distributing energy services to all social classes.”³¹ The *political* view focuses on the “geographical location of energy resources, the stability of producing and consuming countries, and availability of fuel substitutes.”³² This view sees energy security as “a key component of national security and correct policy becomes a matter of maintaining economic vitality and military strength.”³³

The *political* view is most in line with framing the energy security debate within the BSR, especially given the emergence of *securitization of energy dependence*, which indicates a clear political dimension to energy relations in the region. However, this *political* view of energy security is somewhat limited when applied to the BSR countries in the context of wider EU energy

25 Muller, F. (2007) “Energy Security: Demands Imposed on German and European Foreign Policy by a Changed Configuration in the World Energy Market.” Berlin, *Stiftung Wissenschaft und Politik* (SWP), cited in Winchester (2007).

26 Natural gas is Russia’s most commonly used lever for political purposes. As opposed to oil, there is no global market, nor global price for natural gas. As a result, gas prices are negotiated. Furthermore, these prices are not made public, leading to higher securitization. Given the pipeline-dependent transport of natural gas, the ability to rapidly adjust import and export patterns for natural gas is much more inflexible than oil.

27 Sovacool, B. (2011) *Routledge Handbook of Energy Security*, p. 28.

28 Ibidem, p. 25.

29 Ibidem.

30 Ibidem.

31 Ibidem.

32 Ibidem.

33 Ibidem.

relations with Russia, since it does not account for the differing interests and priorities of individual Member States which are not as dependent on Russian energy imports and which therefore prioritize according to other aspects of energy security. It is also worth noting that many of the aforementioned views are incompatible with each other. There is tension between those who believe in economic growth and those who advocate energy efficiency and sustainability. Similarly, those who see energy as a commodity and those who regard it as a public service have conflicting views and naturally have different approaches to the issue of energy security. Lastly, and most central to the discussion at hand, energy security is no longer merely a matter of national policy; the different categories of energy security extend far beyond the borders of individual states.

It is according to the categories mentioned above that different countries interpret the concept of energy security in their own way. Energy-exporting countries have different priorities than energy-importers. The former depend on *security of demand* since energy exports constitute a major portion of their government revenues; the latter stress *security of supply* since their energy-dependent economies rely on a stable supply of energy imports.³⁴ In this context, a useful approach to defining energy security is to match differing energy security dimensions with threats. As Director of Gas Research at the Oxford Institute for *Energy Studies*, Jonathon Stern's definition of the risks associated with energy import dependence is helpful in framing an understanding of energy security of countries that are dependent on imports. Based on his ideas about source and transit dependence, it can be argued that energy importers must seek to diversify their sources, as well as the transit routes along which they travel, so as to minimize the risk of disruption to those imports.³⁵ So, the focus for energy import dependent countries is on the threat of disruption and the main proposed solution is diversification.

Jonathan Elkind, Principal Deputy Assistant Secretary for Policy and International Affairs at the US Department of Energy, has gone even further and crafted a four-prong approach to defining energy security in a study conducted for the Brookings Institution. According to Elkind, energy security is composed of four elements: *availability*, *reliability*, *affordability*, and *sustainability*. *Availability* refers to the ability of consumers and users to secure the energy that they need and requires "an extensive commercial market, buyers and sellers trading goods, parties that agree on terms, as well as sufficient physical resources, investments, technology, and legal and regulatory frameworks to back them up."³⁶ *Reliability* concerns the extent to which energy services are protected from disruption and is contingent on a number of interconnected criteria including³⁷:

- diversification of sources of supply (various fuels and technologies);
- diversification of supply chains;
- resilience or the ability to handle shocks and recover from failures;
- reduction of energy demand to ease the burden on infrastructure;
- redundancy in case failures occur;
- distribution of timely information to markets.

34 Tichy, L. (2010) "Energy Security in the EU-Russia Relations." European Consortium for Political Research.

35 Sovacool, B. (2011) Routledge Handbook of Energy Security, p. 27.

36 Ibidem.

37 Ibidem, p.28.

Affordability involves reasonable (in relation to income), stable, and non-volatile prices for energy supplies. *Sustainability* refers to “minimizing the social, environmental, and economic damage that can result from long-lived energy infrastructure.”³⁸ Table 1-1 on the following page shows the correlation between each of the four elements of energy security as laid-out by Elkind and the different components and threats associated with them.

Given the high level of energy import dependence within the BSR, a working definition for energy security in the context of the discussion at hand should include Elkind’s interconnected dimensions of *availability*, *affordability*, *reliability*, and *sustainability*. While necessarily addressing the economic aspects of energy security, it should also underline the clear political dimension of contemporary energy relations within the BSR. Stern’s threat dimension to differing energy security situations is helpful in this regard. Lastly, the perspectives of both energy producers and consumers should be addressed.³⁹ This composite definition allows for the incorporation of various dimensions of energy production, use and transport.

For the purposes of the discussion at hand, energy security can be defined as *the security of sufficient quantities of energy at economically acceptable prices, from different and dispersed sources and transit routes*.⁴⁰ The main threats associated with this understanding of energy security would then include:

- An increase in prices of strategically important energy resources
- An insufficient supply of selected materials related to natural disasters or political situations
- The depletion of traditional resources and their late substitution by alternative sources⁴¹

To complement this working definition of energy security, Barry Buzan’s *Regional Security Complex Theory* and the securitization of energy dependence can address the interdependent nature of the BSR countries as energy-dependent importers and can serve to explain common and conflicting interests, interdependent behaviors and interconnected perceptions. Since energy dependence is perceived according to Barry Buzan, it can be argued that the interconnected perceptions within the region account for the common high level of securitization of energy dependence.

38 Ibidem.

39 Palonkorpi, M. (2010), p.4.

40 Groselj, K. (2009) Energy Security in EU-Russia Partnership, Politics in Central Europe, Vol. 5, June; cited in Tichy, L. (2010) “Energy Security in the EU-Russia Relations.” European Consortium for Political Research.

41 Prorok, V. (2008) “Energetická bezpečnost – pojetí a přístupy”, in *Energetická bezpečnost – geopolitické souvislosti* (Projekt Nadace ČEZ); cited in Tichy, L. (2010) “Energy Security in the EU-Russia Relations.” European Consortium for Political Research.

Table 1-1 Elements, components and threats to energy security

<i>Elements</i>	<i>Components</i>	<i>Threats</i>
Availability	<p>Physical endowment of producers</p> <p>Ability of producers, transit countries and consumers to agree on terms of trade</p> <p>Technological solutions for production, transportation, conversion, storage, and distribution</p> <p>Capital investment</p> <p>Visible legal and regulatory structures</p> <p>Compliance with environmental and other regulatory requirements</p>	<p>Exhaustion of reserves that can be extracted cost-effectively</p> <p>Limits on development opportunities such as resource-nationalist policies and state-to-state contracts</p> <p>Problems in siting infrastructure including NIMBY syndrome</p> <p>Financial, legal, regulatory, or policy environments that inhibit investment</p>
Reliability	<p>Robust, diversified energy value chain</p> <p>Adequate reserve capacity</p> <p>Protection from terrorist attacks and political disruptions</p> <p>Adequate information about global energy markets</p>	<p>Failure of energy systems due to severe weather and natural disasters</p> <p>Failure due to poor maintenance or underinvestment</p> <p>Attack or threat of attack by military forces and terrorist organizations</p> <p>Political interventions such as embargoes and sanctions</p>
Affordability	<p>Minimal price volatility</p> <p>Equitable prices</p> <p>Transparent pricing</p> <p>Realistic expectations about future prices</p> <p>Prices that reflect full costs</p>	<p>Exhaustion of reserves that can be extracted cost-effectively</p> <p>Energy prices that require lower income households to expend large shares of their income</p> <p>Excessive subsidies that distort prices</p> <p>Failure to institute sound pricing policies</p> <p>Failure to incorporate environmental and social costs to energy production and use</p>
Sustainability	<p>Low emissions of greenhouse gases</p> <p>Minimal contribution to local, regional and global forms of environmental pollution</p> <p>Protection of energy systems from climate change</p>	<p>Impacts of indoor and outdoor air pollution associated with energy use</p> <p>Impacts of a changing climate such as rises in sea level, storm surges, and severe weather even</p>

Source: Routledge Handbook of Energy Security, Elkind 2009

2.2.2 Regional Security Complex Theory and energy dependence in the BSR

As mentioned, Barry Buzan's *Regional Security Complex* model is useful in framing the perceptions within the BSR as regards energy security. The *Regional Security Complex* model rests on the intrinsic interdependence that exists among the national security interests of a geographically compact group of states – like that of the BSR. This regional, sub-system approach was one of the frames that the Copenhagen School described in its multi-level approach to international politics. The Copenhagen School distinguished between four main levels: international (system), regional (sub-system), national (unit) and internal (sub-unit).⁴² The main idea of the *Regional Security Complex* concept is that a group of states within such a confined geographic region necessarily share primary security concerns since their national securities cannot realistically be considered apart from one another.⁴³ The interdependence is determined by common and conflicting interests, interdependent behaviors and interconnected perceptions⁴⁴ and “represents the sphere of concern that any state has about its environment, the linkage between the intensity of military and political threats, and the shortness of the range over which concerns are perceived.”⁴⁵ It is argued that “because threats operate more potently over short distances, security interactions with neighbors will tend to have first priority.”⁴⁶

Since energy dependence can be perceived as a threat and since there have been clear instances of energy being used as a tool of political influence in the BSR, defining an *energy security complex* can be helpful in framing a more streamlined discussion of the energy security debate in the BSR that is still based on Buzan's *Regional Security Complex Theory*. Palonkorpi provides a definition of energy security complexes, stating that they “are formed by energy related interaction between two or more states in a limited geographical area, which includes an energy dependency relationship between the states involved and the perception of this dependency as a threat (*securitization*) [...] the energy interaction includes transactions such as production (export), purchasing (import) and transit of energy.”⁴⁷ Since long oil and gas pipelines link the BSR countries to the wider EU, the EU itself arguably falls into the same chain of energy interdependence and shares the consequences of disruptions as witnessed in the 2009 gas shut-off to Ukraine.

The difference between wider EU and regional dynamics lies in the relative energy dependence of individual Member States. These levels of dependence can be measured by analyzing such factors as energy trade balance, level of (domestic) energy resources and possi-

42 Belyi, A. (2003) “New Dimensions of Energy Security of the Enlarging EU and their Impact on Relations with Russia.” *European Integration*, Vol. 25(4), p.354.

43 Palonkorpi, M. (2010), p.4.

44 Buzan, B. (1991). *People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era*.

45 Eyvazov, J. (2012) “Some Aspects of The Theory of Regional Security Complexes as Applied to Studies of the Political System in the Post-Soviet Space” presented at “Conflicts in the Caucasus: History, the Present and Prospects for Resolution” Conference, Baku, 22-23 October.

46 Ibidem.

47 Palonkorpi, M. (2010), p. 3.

bilities for energy diversification.⁴⁸ In the BSR, this can be conceptualized by looking at the energy dependence of the three Baltic States and Poland on Russian gas, oil and electricity imports “measured against their ability to diversify energy imports from alternative sources or increase their own domestic energy production.”⁴⁹ It is important to note, however, that these measures only account for overall energy dependence on a specific exporting country (Russia) and do not take into account individual energy mixes. For example, a 100% dependence on Russian natural gas imports does not necessarily correlate to natural gas being the country’s primary source of energy consumption. Therefore, it is argued that regional energy security complexes should be “based upon aggregate energy dependencies”; alternately, it should be decided “whether it makes more sense to construct these [dependencies] along major energy sources (i.e. natural gas, oil, coal, electricity, renewables, hydro power or nuclear power).

Given the fact that the energy security of a state is treated as an aggregate whole and that different energy sources vary in their modes of transportation and market structure, this discussion will employ the aggregate energy dependence scheme. The relative dependencies of EU Member States on Russian imports of natural gas are presented in Table 2 on page 23. It is clear and rather expected that the Baltic States, as well as countries bordering Russia, are significantly more dependent on Russian natural gas given their geographical proximity and interconnections via pipeline infrastructure. Countries located further west are on average less dependent and “dependency regions” following an East-West axis can be observed, as Palankorpi points out. These energy dependence percentages have to be balanced out against the entire energy mix of the given country. Furthermore, according to Palankorpi, this energy dependence has to be articulated as a security threat (*securitized*) before an energy security complex may be formed with other energy-dependent countries in the region.⁵⁰ The market dependence levels of energy producers (Russia in this case) present the other side of the energy security equation.

Mutual perceptions of *amity* and *enmity* must also be weighed in when framing dynamics within a particular energy security complex. These factors shape how energy dependence is perceived: either as a mutually beneficial interdependence (*positive dependence*) or as an unequal, threatening dependence (*negative dependence*). The latter is a result of *enmity* – controversies and conflicts between states, which negatively influence perceptions of dependence. Kenneth Waltz has argued along these lines that “mutuality of dependence, which is a feature of multipolar systems, compels each state to observe others with suspicion;” similarly, John Mearsheimer has argued that “if interdependence is high, there are many occasions in which the states can come into conflict.”⁵¹ Antagonistic relations between states as a result of historical reasons, such as is the case within the BSR, unavoidably lead to a high degree of politicization of energy relations and the securitization of energy dependence. Therefore, it can be stated that perceptions of *enmity* and *amity* affect the extent to which energy relations are politicized and/or securitized within a particular region.⁵² Since the economic and

48 Buzan, B. (1991), p. 189.

49 Palonkorpi, M. (2010), p.4.

50 Ibidem, p.4.

51 Linklater, A. (1995) “Neo-realism in Theory and Practice” in Booth, K. and Smith (eds.) Cambridge: Polity Press, p. 247.

52 Palonkorpi, M. (2010), p. 7.

political dimensions of energy security are often combined in the BSR and the politicization and securitization of energy dependence is a common denominator within the region, it is clear that energy dependence on Russia is perceived as *negative*. This is somewhat different from the perception of the wider EU's dependence on Russia, which is generally perceived as a *positive interdependence*, in which Russia supplies a product for which the EU is willing to pay. However, since the increased politicization of energy relations as a result of the gas cut-offs in 2006, 2007 and 2009, this notion of *positive interdependence* is somewhat tentative.

2.2.3 The BSR in the context of EU-Russia energy relations

The analytical theory of *interdependence* helps to place the BSR within the larger context of EU-Russian energy relations, defining a framework of mutual relations, and complements the above-mentioned regional dimension of energy security. According to Joseph Nye and Robert Keohane, who defined the concept of *interdependence*, “where there are reciprocal (although not necessarily symmetrical) costly effects of transactions, there is interdependence.”⁵³ This definition implies that the actions of one state affect the options of at least some of the others.⁵⁴ According to Keohane and Nye, interdependent relations will always incur costs since autonomy is restricted in bargaining and an uneven distribution of costs and benefits create an asymmetrical interdependence which provides a source of power in the bargaining process for one side.⁵⁵

While Russia and the EU are both heavily interdependent on one other – the former for the stable and lucrative market of the EU, the latter for affordable and proximate energy supplies from Russia – an asymmetrical interdependence exists and it leans in favor of the EU. It can be argued that Russia's dependence is stronger since its financial reliance on the European market forms an essential part of the Russian budget and share of exports.⁵⁶ The qualitative and quantitative assessment of interdependence between the EU and Russia will be laid out in the next part of this chapter. Although it is true that the EU is heavily dependent on Russia for energy imports (particularly gas), it can be stated that, generally, the vulnerability of the EU is smaller relative to that of Russia. The EU has various other suppliers for diversification (Norway, North Africa, Libya, Saudi Arabia) and can replace consumption with other sources of energy (nuclear, renewable, LNG). On the other hand, not all states within the European Union enjoy these high levels of diversification for various reasons (geographic, political, economic, etc). Many EU Member States remain overwhelmingly dependent on Russian strategic energy supplies and therefore constitute a bloc within the EU that is asymmetrically dependent on Russia; a supply cut-off from Russia would prove disastrous to their national economies and the living standards of their populations.

53 Keohane and Nye (2001) pp. 9.

54 Tichy, L. (2010) “Energy Security in the EU-Russia Relations.” European Consortium for Political Research.

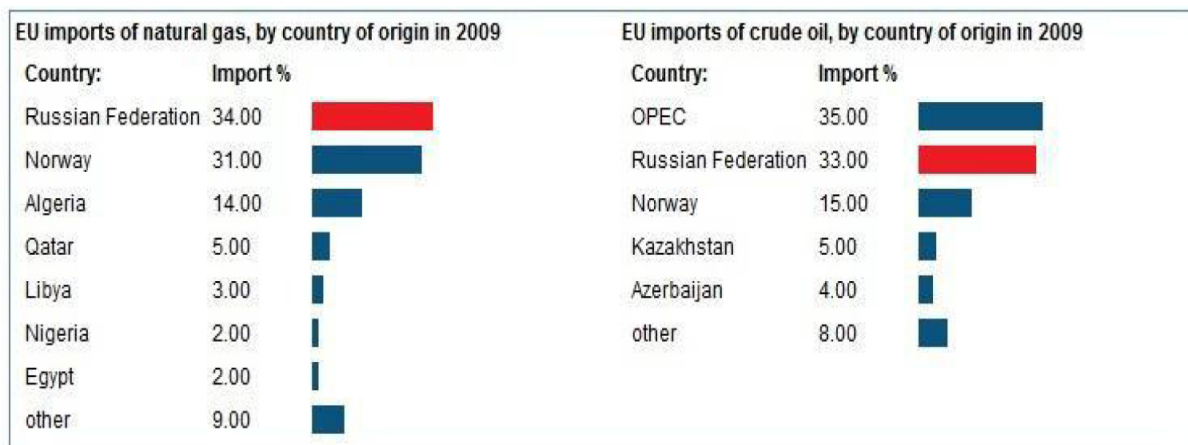
55 Ibidem.

56 Proedrou, F. (2007) The EU-Russia Energy Approach under the Prism of Interdependence. *European Security*, Vol.16, No. 3-4, p.334.

2.3 Geopolitical context and political economy of energy trade

It is already clear that any discussion of energy trade within the EU necessarily begins with assessing the clear mutual interdependence that exists between the EU and Russia. The latter holds vast reserves of energy and extracts them for export, while the energy-dependent economies of the EU readily consume them at competitive prices. Russia is, in fact, the largest oil, gas, uranium and coal exporter to the EU. Oil and gas, however, have the largest bearing on geopolitics, as they figure most heavily into energy trade between Europe and Russia with over 34% of total gas imports and 33% of total crude oil imports to the EU originating from Russia (See Figure 2-1). The EU, on the other hand, is Russia's single largest trading partner, with 80% of all Russian oil exports and 70% of all Russian gas exports going to the EU.⁵⁷ Over 70% of Russian crude oil production is exported, 60% of which goes to the EU, while 90% of Russian gas goes to the European Union.⁵⁸

Figure 2-1 EU Energy Dependency on Russian imports



Source: www.energy.eu

This intrinsic interdependence between the EU and Russia has made them natural partners in the energy sector and has inspired partnerships in this area (i.e. EU-Russia Energy Dialogue in 2000). However, the Russian gas network is overwhelmingly dependent on European markets and without the investment of significant labor, money and time to build new networks, this dependence is bound to continue.

⁵⁷ European Commission. Available: http://ec.europa.eu/energy/international/russia/russia_en.htm.

⁵⁸ Petroleum economist, CERA, quoted in Paillard, C. (2010) "Russia and Europe's Mutual Energy Dependence." *Journal of International Affairs*, Vol. 63, No. 2.

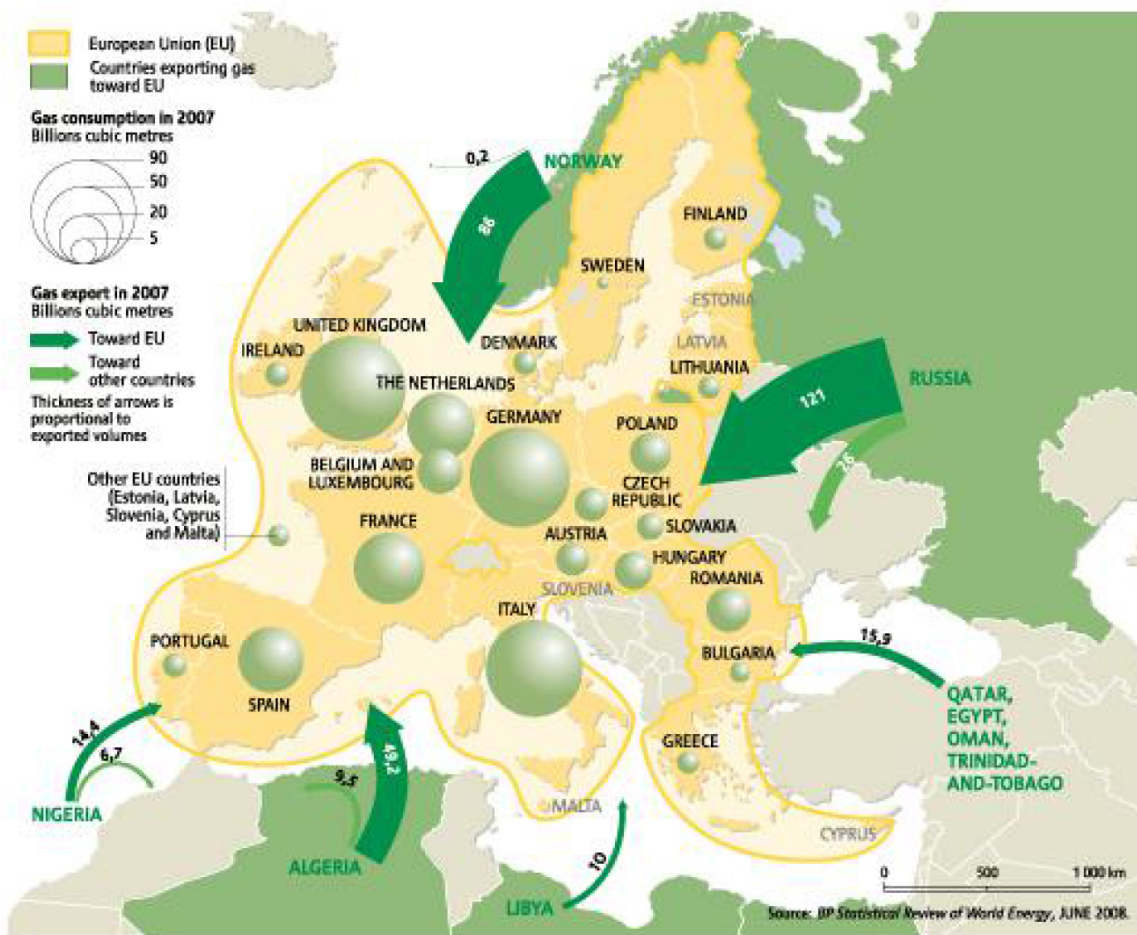
Approximately 40% of Russian public money comes from European oil and gas markets⁵⁹, while between 75-80% of Russian export revenues are directly linked to the EU energy market. This can help explain the tough attitude of the Russian state-owned monopoly Gazprom in its gas contract negotiations. The now-infamous links between foreign policy and the ‘selective’ supply and pricing strategies of Gazprom have naturally caused tensions between the EU and Russia, turning energy into a factor which significantly influences geopolitics on the continent. Furthermore, the trend of Russia using its energy supplies as political leverage, or even as a ‘weapon’ in some cases – especially when dealing with countries that belong to its former sphere of influence – has triggered a reactive response from the EU.

Russia’s so-called ‘energy diplomacy’ has directly impacted the EU as a whole. The gas dispute between Russia and Ukraine in 2009 can be pinpointed as an example of the far-reaching effects of Russian energy policy: the thirteen-day gas shut-off to Ukraine over unresolved debts and pricing directly affected supply to many other EU Member States during a particularly cold winter. Since the supply disruption to Ukraine was not an unprecedented event (a similar scenario played out in 2006), the EU effectively took little precaution to avoid shortages in case of a similar repeated incident. Since 80% of Russian gas is transited to the EU through Ukraine, an alternative for supply should have been in place. Rather than integrating markets and drawing on alternative resources, EU countries made individual contracts with Gazprom. This not only increased their dependence levels, but compromised the creation of a unified EU policy towards Russia.

The result of the 2009 gas crisis was a clear skepticism on the part of the EU about Russia’s credibility as a stable supplier of energy. Consequently, there came an increase in the securitization of energy dependence within the EU as a whole and a stronger desire to diversify away from Russia as the dominant supplier of gas and energy supplies in general. There is a clear distinction in the levels of securitization of energy dependence on Russia, with the countries of the BSR especially perceiving their dependence as *negative*. The glaring divergence between Eastern and Western Europe in terms of energy dependence on Russia (See Figure 2-2 and Table 2-1) has proven to be a hindrance in crafting a common EU energy policy towards Russia, as each state pursues different strategies based on the availability of domestic natural resources, the prioritization of EU policies, relations with Russia, geographical location and presence of infrastructural interconnections.

59 Paillard, C. (2010).

Figure 2-2 European Gas Constraints in Perspective



Source: BP Statistical Review of World Energy, 2008

Table 2-1 Russia’s share of total natural gas imports in select European/CIS countries⁶⁰

Weak dependence (West) 20-40%		Medium dependence (Central) 40-60%		Medium dependence (Central) 60-80%		Strong dependence (East) 80-100%	
Italy	35%	Belarus*	52%	Austria	77%	Estonia	100%
France	30%	Ukraine*	50%	Romania	70%	Finland	100%
		Germany	41%	Czech Rep.	69%	Moldova	100%
				Poland	69%	Serbia	100%
				Turkey	60%	Bulgaria	100%
						Latvia	94%
						Lithuania	94%
						Hungary	85%
						Slovakia	80%
						Greece	80%

Source: Cited in Palankorpi, figures from Heinrich 2006, p. 5.

60 Although the table features figures from 2006, the overall trend in dependence remains in the same range.

2.3.1 Securitization of Energy Dependence

The rather new phenomenon of *securitization of energy dependence* has been especially visible in the BSR, which is overwhelmingly dependent on Russia for oil, gas and electricity. This dependence, coupled with a lack of physical and market interconnection with the rest of the EU, has contributed to the ‘energy island’ status of the Baltic States. This dependence is viewed as a threat to the national security of Latvia, Lithuania and Estonia, since the three countries have fallen victim to Russian energy politics and remain mistrustful of Russia for historical reasons. Although the three Baltic States differ in their dependencies (this is attributed to the availability of domestic natural resources in each country and different energy mixes), they are predominantly dependent on Russia as a single supplier for oil, gas and electricity and remain intricately linked to post-Soviet energy infrastructure via electricity grids and pipelines.

As mentioned before, this dependence is seen as a national security threat and can be substantiated by instances of supply disruptions and blackmail via energy pricing strategies of Gazprom. The cut-offs of oil supplies to Lithuania have already been mentioned. As for selective pricing, Belarus pays \$165 per tcm⁶¹, while the EU pays an average of about \$415 per tcm⁶². In addition, clear attempts to undercut Baltic efforts of diversification away from Russia as the single supplier of gas (and regulator in the case of electricity) warrant further mistrust, trigger skepticism about the likelihood of adherence to market principles in Russian business practices and pose challenges to ending the politicization of energy affairs in the region. Energy molds each respective Baltic country’s foreign policy, security strategy, economic policies and diplomatic relations with neighboring countries, since energy supply is so closely linked to national security.

In terms of the EU’s emerging efforts at diversifying away from Russia as the predominant supplier (especially of gas), Russia has attempted to secure the lucrative and stable markets of the EU by playing Member States off of each other, undermining the EU’s principles of solidarity and reciprocity. This has been achieved by creating favorable conditions for countries that are willing to forego a common EU approach in favor of bilateral agreements with Russia, while subjecting other countries to supply cutoffs, unfavorable terms of contract and higher prices for energy supplies. In other words, the direct link between Russian foreign policy and the ‘selective’ supply and pricing strategies of its state-owned companies have favored ‘energy diplomacy’ over the principles of a free market economy. They have also made energy a key factor in wider geopolitical processes as varying levels of securitization of energy dependence cause tension both within the EU and between the EU and Russia. Until European energy companies make agreements based on unified, regional strategies, the “free-for-all” negotiations with Russia will continue and the EU’s negotiating power will decrease.⁶³

61 Bloomberg (2011).

62 Russia Today (2012).

63 Paillard, C. (2010).

2.3.2 Different post-Soviet trajectories of development

As mentioned before, the glaring imbalance in energy dependence between Eastern and Western European countries has posed a serious challenge to creating a unified EU energy strategy vis-à-vis Russia. The enlargements of 2004 and 2007 significantly impacted the energy situation in the EU, since the newly admitted countries of Eastern and Central Europe were (and continue to be) more dependent on Russia for energy supplies and lack the infrastructural, institutional and market interconnection with Western Europe that could help alleviate, or at best, neutralize, this situation (by providing alternative supply routes, for example). In addition, the nationalization of preexisting Soviet-era infrastructure that remained in this part of Europe following the end of the Cold War ignited a sort of revanchism on the part of Russia and inspired the aggressive stance of Russian state-controlled companies in European markets (this is especially true of the Baltic internal markets).

It is clear that the high dependence of Central and Eastern European EU Member States directly impacts EU-Russia relations and makes a unified EU approach difficult to craft. Different post-Soviet trajectories of development even within the BSR itself (as is the case with each of the three Baltic States and Poland) help to serve as background to account for the inconsistencies in energy policy formulation within the region and the different attitudes toward Russia which shape this dialogue.

While the three Baltic States of Estonia, Latvia and Lithuania were completely integrated politically, culturally and economically into the Soviet Union, Poland, on the other hand, was an independent Socialist satellite in the Eastern European Communist bloc. The need to preserve identity in the face of fifty years of Soviet policies directly led to the centrality of identity discourses in social, political and economic change in each of the three Baltic States. Furthermore, the impact of Russian and Soviet control of Estonia, Latvia and Lithuania left many unresolved social and political issues after independence in 1990. The ensuing citizenship debates; the issue of Soviet troop withdrawal; the drawing of shared boundaries of the newly independent countries; and the rights of Russian-speaking minorities all posed particular challenges to rebuilding the nation-state, modernizing the economy, coping with societal changes and facilitating accession to the EU and NATO.

In terms of the energy sector, which is central to the discussion at hand, the location of port facilities in Latvia, Estonia and Lithuania along the Baltic coast made them key transit routes for Soviet energy export to the West via Baltic Sea lanes. This intricately tied them – both economically and infrastructurally – to the Soviet Union via energy supply lines. Though economically and politically independent today, the Baltic States remain linked to Russia via these Soviet-era infrastructural interconnections. The fact that these pipelines, electricity grids and other energy facilities were once constructed and controlled by the Soviet Union poses unique challenges to the energy dependence issue in each of the three Baltic States. Russian state-owned companies, though active in European energy markets in general, particularly vie for control within the Baltic in-

ternal market, which remains isolated from the rest of the EU and is susceptible to Russian influence via corruption and blackmail.

Poland is a slightly different case, as it was never fully subjected to Soviet social, political and economic policies. Furthermore, being the most populous independent Socialist satellite in the Communist bloc, identity was essentially a non-issue. Though also an important factor in post-Communist transition, it was not as central to issues of social, economic and political change when compared with the Baltic States. Poland followed a post-Communist trajectory of development after the collapse of the Soviet Union, which was mainly focused on economic and political transition, while the Baltic States had to resolve their lingering post-Soviet social, political and economic issues. In comparison to the three Baltic States, Poland did not and does not have issues relating to Russian minorities, which leaves the door open for Russian influence on the internal dynamics of the Baltic States. Under Communist rule, Poles enjoyed greater freedom (embodied in the right to form labor unions) and was much more exposed to the West when compared with Lithuania, Estonia and Latvia. The special relationship with the United States further provided an international platform for publicizing and gathering support for the Polish effort at gaining independence. In terms of the energy sector, the strategic position of Poland as a transit country for Russian energy supplies to neighboring Warsaw Pact allies, as well as to the Western European markets, afforded (and continues to afford) some room for maneuvering vis-à-vis Russia.

As can be seen, though the Baltic States and Poland differ slightly in their post-Soviet trajectories of development, the projection of *enmity* onto the political economy of energy trade vis-à-vis Russia in the case of Poland and the three Baltic States is similarly high for historical reasons. This has led to the perception of energy dependence on Russia as *negative* in comparison to other countries in the EU. Resolving the substantial divide that exists between Eastern and Western Europe in terms of securitization of energy dependence has become a priority for the Baltic States and is seen as a prerequisite to resolving the larger EU energy dependence on Russia. Since energy has also been used by Russia for political reasons, the current fears of the Baltic States – that this trend will continue in the future – is understandable, especially when viewed in tandem with the historically antagonistic relationship they have with Russia. This historical *enmity*, as Barry Buzan argues, accounts for the high securitization of energy dependence in the region.

In a March 2006 report, the Swedish Defense Research Agency (FOI) actually identified 40 politically motivated *cut offs* by Russia between 1991 and 2004. The total number of incidents (cut-offs, takeovers, coercive price policy, blackmail or threats) is over fifty. Two specific instances that have shaped the defensive attitudes of the Baltic States involve the shutdown of oil pipelines as a form of blackmail. The first incident occurred after Russian state pipeline monopoly Transneft failed to gain control of Ventspils, the Latvian oil terminal on the Baltic Coast in 2002. Oil supplies to the facility were cut-off; the port having once served as a main outlet for some 340,000 barrels of Russian crude oil per day.⁶⁴ The apparent purpose of the blockade was to essentially bankrupt the port and have Transneft takeover its assets. The second incident involved the sale of the Mazeikiu oil refinery to Polish

64 Lelyveld, M. (2003) "Russia: Moscow seeks Takeover of Latvian Oil Port." Radio Free Europe, Radio Liberty. 23 February. Available: <http://www.rferl.org/content/article/1102205.html>.

PKN Orlen over a Russian bidder in 2006. The Druzhba pipeline – which supplied Russian oil to Mazeikiu (and one-tenth of oil supplies to Europe) – was coincidentally closed for repairs and remains closed to this day.

With similar cutoffs and instances of blackmail in other countries within Russia's former sphere of influence (namely, Belarus, Ukraine and Georgia), the fear is that the weaponization of energy could continue in the future and “coerce political concession in ongoing negotiations, commandeer infrastructure takeover, and execute economically favorable deals or to make political statements.”⁶⁵ However, it is important to note the impact of the Ukrainian gas crisis of 2009, which, when viewed together with the Russian invasion of Georgia the previous year, greatly impacted European perceptions of Russia as a stable and reliable partner in energy and security and raised growing concerns about EU dependence on Russia as the predominant supplier of energy resources.

2.3.3 Regional energy interests and key issues: differing priorities and inconsistencies

It is evident that energy has been used by Russia to increase its engagement in the BSR. This is especially apparent ever since the initial planning of the Nord Stream project in 2005. The securitization of energy dependence within the region (which is a *perceived* phenomenon) increased even more in light of the Russian-Ukrainian gas crises of 2006 and 2009 as mentioned earlier in this chapter. These incidents also served to reinforce the political dimension of energy security for the EU as a whole, bringing supply diversification to the fore of national and supranational priorities in terms of energy policy. When viewed together with Russia's 2008 war with Georgia and the dramatic increase in military expenditure that followed; Moscow's confirmation in its 2010 military doctrine that NATO's expansion continues to pose a threat to Russia; and the defensive response to the proposed missile defense system in Eastern Europe⁶⁶, it is no surprise that Baltic regional concerns about their security vis-à-vis Russia increased dramatically. It is within this context that the Baltic countries must balance national, regional and European interests in their energy policy choices, while seeking measures which would decrease dependence on Russia and increase their national security.

As mentioned earlier in this chapter, the countries of the BSR differ in their energy consumption, energy production means, available domestic natural resources, infrastructural connections and supply routes, as well as economic, political and even social considerations. While oil and gas are the most critical energy sources, coal, electricity and nuclear power also affect larger geopolitical processes because they offer the potential to diversi-

65 Reuters (2008) “FACTBOX: Russian oil and gas export interruptions.” 29 August. Available: <http://uk.reuters.com/article/2008/08/29/us-energy-russia-cutoffs-idUKLS57897220080829>.

66 Most recently, Putin promised during his reelection campaign to deliver an “effective and asymmetrical response” to NATO plans for a missile-defense shield by tacking on more than \$120 billion to the already dramatic defense-spending increases approved in 2011 and lifting defense spending from 3 to between 5-6% over the course of the decade (*The Voice of Russia*. (2012) “Response to global missile defense – Putin.” 20 Feb.).

fy away from the single largest producer and exporter of energy to the EU: Russia. In terms of the three Baltic States, each one varies greatly from the other in terms of energy mixes.

Estonia, for example, is the only country in the world in which oil shale serves as the main fuel for power generation, accounting for 94% of electricity production in 2008⁶⁷ and making Estonia less dependent on the import of crude oil from Russia and Norway.

Latvia, on the other hand, is focused on natural gas, which accounts for approximately 30% of its energy resources. Furthermore, Latvia has the third largest natural gas storage facilities in Europe, currently covering the gas storage needs of all three Baltic States and the Pskov region in Russia. All of Latvia's gas, however, is supplied by Russia and Gazprom owns large shares of the Latvian gas-distribution company *Latvijas Gāze*, increasing Russian influence on the internal affairs of Latvia.

Lithuania's primary energy source until December 2009 was nuclear energy, with the Ignalina NPP supplying 78.4% of Lithuania's total electricity production in 2008. Lithuania also exported electricity to both Latvia and Estonia, as well. With the closing of the Ignalina NPP in 2009, Lithuania became 100% dependent on electricity imports and, consequently, overwhelmingly dependent on Russia for yet another energy source. This is the reason why the new NPP project in Visaginas is seen as vital to the energy security of Lithuania, and the region more broadly.

Poland has vast coal reserves, ranking third after Russia and Germany in electricity generation from coal and enjoys a greater potential to diversify its supplies of oil because of its geographic location as compared with the three Baltic States. Poland also has natural gas reserves, which slightly decreases its dependence on Russia for gas imports. Furthermore, Russian gas flows through the territory of Poland, allowing Poland as a transit country to hold greater weight in negotiations vis-à-vis Russia and the EU. The recent Russian strategy to avoid transit countries like Poland – specifically the Nord Stream pipeline which bypasses Belarus and Ukraine as well, and the Baltic States – has upset the ability of these countries to counterbalance their dependence on Russian supplies by controlling transit through their territory. Russia will theoretically have the ability to shut off gas supplies to these countries without affecting its 'priority partners' in Western Europe. This helps to explain the defensive stance of these countries during the planning stages of the Russian-German joint venture.

While each country's particular energy situation is different, the overarching commonality between them all, however, is a dependence on a single supplier: namely, Russia. Further aspects associated with their historical ties to the Soviet Union, such as the presence of Russian-speaking minorities (particularly in the case of Latvia, which has a 29.2% Russian community, but also in Estonia) in the Baltic States and disjointed systems of political and regulatory governance, further add to Baltic fears of remaining an 'energy island' and are factored into decisions regarding energy policy. The increased influence of Russia within the internal markets of the Baltic States is also a worrying trend, since Russia seeks to influence local energy politics by using its 'soft power' and establishing lobby groups, encouraging a non-transparent political culture and sustaining a "post-Soviet way of interaction between local business circles and the political elite."⁶⁸

67 Raukas, A. (2004), "Opening a new decade." *Oil Shale. A Scientific-Technical Journal*, Estonian Academy Publishers, No.21 (1), pp.1-2).

68 Maigre, M. (2010) "Energy Security Concerns Of The Baltic States," RKK/ICDS International Center for Defense Studies.

The outright Russian military presence under the pretext of infrastructure protection within the region also warrants national security fears among the Baltic States and has made decreasing dependence on Russia as an energy supplier a national security priority.

Energy policy in the BSR is relevant for Europe as a whole, since the relations between the countries of the region and Russia have a major impact on EU energy security. This can be seen with the 2006 and 2009 Ukrainian gas crises. Individual Member States' respective energy mixes, import dependence structures and resource technologies all impact regional interests in energy cooperation and directly influence interconnection projects.

A regional approach in energy strategies among the Baltic States and Poland in line with EU policy priorities is seen as a way to help decrease dependency, diversify energy sources, increase security through interconnections, and build sustainability by the developing of new technologies. The main setbacks are the current isolation of the Baltic energy market (its 'energy island' status), the heavy influence of Russian state-owned companies in the energy sector and the unilateral decisions being made within the EU based on individual national interests.

2.3.4 EU Energy Policy: A framework for internal and external relations

The main argument in the BSR is that the EU has a significant role to play in the energy security of the Baltic countries. Currently, there is a two-layer structure to energy policy within the region: the European Commission's energy policy goals for the EU as a whole and the national governments' in-country priorities.

These two sets of goals, however, do not necessarily converge. The EU's financial resources, ability to facilitate agreements and energy projects between the countries of the BSR and overall political weight in relations with Russia are all factors that could positively influence Baltic regional energy cooperation and prevent unilateral measures in energy relations with Russia.

The Baltic States believe that Europe must offer solutions to Member States that are overwhelmingly dependent on Russia for oil and gas. This was especially the sentiment after the closing of Lithuania's Ignalina NPP, which was in effect a result of EU safety and environmental mandates. The cost of replacing the plant proved to be too high to be covered by Lithuania alone and it left the country completely dependent on imports (primarily from Russia) for its electricity needs. Furthermore, Germany's key role in facilitating diverging approaches within Europe in regards to relations with Russia stymied backlash from the Baltic countries and a need to discourage this type of unilateralism vis-à-vis Russia surfaced. In other words, internal European division – both politically and economically through a lack of market interconnection – is seen as a hindrance to creating a unified policy, which makes the entire EU vulnerable in EU-Russian energy relations. However, creating a unified policy amid such a wide range of energy mixes and import dependencies, and in light of such diverse foreign policies and security approaches, has proven to be a challenge.

The most significant achievement towards addressing this internal problem within the EU as regards the BSR has been the Baltic Energy Market Interconnection Plan (BEMIP). It is one of six EU priority infrastructure projects under the EU Security and Solidarity Action Plan. By inter-

connecting the internal energy market of the EU and working out a system of energy solidarity, the hope is that the security of energy supply will increase for all EU Member States. Furthermore, by developing an effective energy policy through the integration of its own gas and power markets and defining its energy objectives abroad more clearly, the EU can approach Russia with a unified voice. The goal of the BEMIP is to connect the Baltic ‘energy island’ with the internal market of the EU and provide the necessary financial assistance framework, focusing on electricity first and then gas. Currently, the Baltic States are linked to the post-Soviet eastern system of Russia and Belarus in terms of electricity, lacking interconnection with the Western and Scandinavian grid systems. In terms of gas, the liberalization and diversification of the market is necessary; however, the domination of one supplier in the region (Russia) does not necessarily support these objectives.

The EU has, however, issued the Third Energy Package, which directly concerns natural gas and electricity. It aims at establishing a unified, secure European gas and electricity market through five proposed policies (two directives concerning common rules for the internal market in natural gas and in electricity and three regulations on conditions for access to the natural gas transmission networks, the network of cross-border exchange in electricity and for establishing an agency for the cooperation of energy regulators)⁶⁹:

- to force incumbent companies having a de facto monopoly position to unbundle their merchant functions from their transportation operations
- to encourage investments in interconnectors across external borders
- to diversify gas supply both through pipelines and liquefied natural gas (LNG) terminals
- to streamline rules and procedures for projects of European interest, and
- to foster competition so that consumers have access to gas energy at affordable prices.

The unbundling regulations within the Third Energy Package are central to the entire legislation. There are three options for unbundling – which refers to the separation of production from processing and distribution networks. The strictest option for unbundling aims at breaking up vertically-integrated energy companies and poses a particular threat to Gazprom, which has aimed to consolidate its presence within the internal market of the Baltic States. Since Gazprom owns stakes in Estonia’s Eesti Gaas, Latvia’s Latvijas Gaze and Lithuania’s Lietuvos Dujos, its presence on the internal gas markets within the Baltic States could (and has been) threatened.⁷⁰ Gazprom argues that the regulatory rules of the Third Energy Package are discriminatory since⁷¹:

- they are unfavorable to companies which have invested in the construction of the pipelines leaving their property without protection and devaluing investments;
- are based on administrative-political decisions and not on the principles of a free market;

69 Paillard, C. (2010).

70 In pursuing the strictest option for unbundling and separating pipelines from Gazprom’s control, Lithuania became the first EU member country to start implementing this EU legislation on its own territory. Lithuania has been taken to international arbitration by Gazprom for this move. See *Bloomberg* (2012) Bierman, S. and Seputyte, M. “Gazprom Takes Lithuania to arbitration over Gas Unbundling” *Bloomberg News*, 01 March. Available: <http://www.bloomberg.com/news/2012-03-01/gazprom-seeks-international-arbitrage-against-lithuanian-state.html>.

71 Molis, A. (2011) “Response of Russia to the Third EU Energy Package.” *Energy Security Highlights*, Energy Security Center Publication.

- the implementation of gas supply contracts may be hampered since companies which import gas may not necessarily agree to the terms of contract of companies responsible for transit; and
- the transformation of long-term gas contracts into ‘spot’ trade will make prices more sensitive and less predictable.

However, the different levels of unbundling adopted by each of the Baltic States have hampered cooperation and ignited mistrust and suspicion between the three countries.

The other pillar of the EU’s energy policy addresses the external dimension, focusing on relations with third countries – transit and supplier partners. The Polish Center of Eastern Studies (OSW) has outlined the major objectives of the EU’s external energy policy⁷²:

1. diversify resources, routes and suppliers
2. expand the production of resources in third countries
3. update and/or create new production and transportation infrastructure
4. improve investment conditions in third countries
5. integrate the infrastructure (market) of third countries into the EU system
6. transpose the EU environmental, safety and efficiency standards to third countries

In pursuing the strictest option for unbundling and separating pipelines from Gazprom’s control, Lithuania became the first EU member country to start implementing this EU legislation on its own territory. Lithuania has been taken to international arbitration by Gazprom for this move.

Since Russia is the EU’s key external partner in the area of energy, special relations are maintained with Russia in order to meet the above-mentioned objectives. Cooperation with Russia in the energy sector has been active ever since its formal institutionalization in 2000 within the framework of the EU-Russia Energy Dialogue. However, the EU needs to construct a reliable, mutually-agreed legal framework for EU-Russia relations in the energy sector since the dialogue is non-binding but has produced various bilateral agreements.⁷³ Multilateral tools are also used in relations with external partners, including the Energy Charter Treaty (ECT), which has more than 50 members and which regulates investment, transit and other important energy issues (See Table 2-2 for the other tools in EU external energy relations). The ECT was signed, but not ratified by Russia – the country most central to its provisions. The main challenge has been to combine the EU’s goals concerning security of supply with Russia’s need to secure demand.⁷⁴ By resolving disagreements with Russia over the ECT and its Transit Protocol, which creates a legal framework to facilitate energy trade across borders and cooperation among energy producing, consuming and transit coun-

72 Brunarska, Jarosiewicz, Loskot-Strachota and Wieniewska. (2011) “Between Energy Security and Energy Market Integration: Guidelines for the Future Development of the EU’s External Energy Policy in Europe’s Neighbourhood” Polish Center for Eastern Studies, OSW, Warsaw, June.

73 A new bilateral treaty to replace the 1994 Partnership and Cooperation Agreement is needed to provide a “comprehensive framework for EU-Russia relations, and include substantive, legally binding commitments in all areas of the partnership, including political dialogue; Justice, Freedom and Security (JLS) issues; economic cooperation; research; education and culture; as well as solid provisions on trade, investment and energy.”

74 Loskot-Strachota, A. (2011) “Rethinking the external dimension of the European Energy Policy.” Warsaw, Polish Center for Eastern Studies, OSW, June.

tries, a set of rules would govern energy relations between Russia and the EU and could be applied to the entire emerging Eurasian energy market.

The Transit Protocol, however, is at the heart of the dispute between Russia and the EU since it obliges contracting parties to facilitate transit on a non-discriminatory basis, consistent with the principle of freedom of transit enshrined in the WTO/GATT75 and explicitly mentions obligations relative to energy transit, including the mandatory third-party access to fixed infrastructure like pipelines and electricity grids. However, in light of the fact that Russia has attempted to obtain property rights or leverage on transit infrastructure in Ukraine, Central Asia, Belarus and even within the EU itself, the provisions relating to “transparent and non-discriminatory” access to transit infrastructure by third-parties was clearly not in its interest. After leaving the ECT, Russia signed an energy agreement with Germany in 2009, further driving a wedge in between EU Member States. This last point – the disorganized and divergent strategies towards Russia – has in effect allowed Russia to divide Europe. Until a common approach is found and regional market interconnection is achieved, this situation is likely to continue.

Table 2-2 The most important instruments of the EU’s External Energy Policy

<i>Instruments</i>	<i>Partners</i>
A. Bilateral	
Energy Dialogue	Brazil (since 2007), China (since 2005), India (since 2004), Iraq (since 2010), Norway (since 2005), Russia (since 2000), Republic of South Africa (since 2008), Ukraine (since 2005), US (since 2006)
Bilateral agreements of various types, regarding overall economic cooperation, including on energy, among them: Partnership and Cooperation Agreements (PCA), Free Trade Agreements, Stabilisation and Association Agreements (SAA)	– EU’s economic partners worldwide – PCA were signed with the majority of the member states of the Commonwealth of Independent States in the EU Neighborhood Policy – Deep and Comprehensive Free Trade Area Agreements – an instrument of the EPS (Eastern Partners)
Memoranda of Understanding relating to cooperation in the area of energy (MoU)	EU’s energy partners, including Ukraine, the states from the Caspian region, MoU was also the first stage of deepened energy relations
B. Multilateral	
Energy Community	The closest neighbors: currently its members are the Balkan states, Ukraine, Moldova; the observers include: Turkey, Norway and Georgia
European Neighborhood and Partnership Instrument	17 states of the neighborhood
Energy Dialogue	Oil producers grouped together in OPEC
Baku Initiative (INOGATE, TRACECA)	EU’s assistance program aimed at Turkey and the member states of the CIS (Russia as an observer)
Black Sea Regional Energy Centre (BSREC)	11 states of the Black Sea basin
Caspian Development Corporation (CDC)	Companies from the Caspian region
Union for the Mediterranean, the Barcelona Process	16 states located on the Mediterranean Sea in North Africa, the Middle East and the Balkans

Source: OSW, 2011

75 On 1 January 1995, the WTO replaced GATT, which had been in existence since 1947, as the organization overseeing the multilateral trading system.

Chapter 3. A Comparison of Polish and Baltic Energy Policies

The aim of this chapter is to compare the various energy security strategies within the BSR on the national, EU and regional dimension. The objectives are to: 1) lay out the national policies of Poland and Lithuania, as well as Latvia and Estonia; 2) explore regional cooperation initiatives; 3) explain why these efforts face challenges; and 3) show how this regional approach can lead the way for a wider unified EU energy policy. The chapter will begin by outlining the national energy policies of each country and place them within the context of EU Energy Policy, addressing the respective levels of existing domestic energy sources, consumption trends, import/export structures, dependence structures, infrastructure, and transit corridors. Since the securitization of energy dependence is prevalent within the countries of the BSR, the impact of energy security on other sectors of foreign and security policy will serve as the analytical framework. Prospects at regional cooperation will be outlined based on interconnecting the BSR with the wider EU as part of the Common EU Energy Policy and EU regional projects, most importantly the Baltic Energy Market Interconnection Plan (BEMIP). Lastly, emerging regional energy resources – namely shale gas and LNG – will be discussed as possible game changers in terms of energy relations between not only the countries in the region and Russia, but the wider EU and Russia.

3.1 Energy security strategies in the BSR

As already discussed, a high level of *securitization of energy dependence* is a common feature among the countries of the BSR. Lithuania, Latvia, Estonia and Poland are heavily dependent on Russia as their main supplier of oil, gas and electricity. Since historical *enmity* pervades relations between these countries and Russia, energy trade has become highly politicized and the availability of energy supplies has become closely linked to foreign and security policies. The political dimension of energy security also emerged for the rest of the EU following the 2009 gas dispute between Russia and Ukraine. Coupled with the war between Russia and Georgia, the centrality of energy to security in the region has become clear and is linked to the fragile balance in wider EU-Russia relations.

Since Russian engagement in the BSR is mainly centered on energy – particularly following the formal beginning of the Nord Stream gas pipeline project in 2005 – the main regional energy security concerns of the Baltic littoral states are to lessen dependence on Russian energy imports and to diversify suppliers.⁷⁶ However, these efforts present multi-dimensional challenges since national, regional and European interests must all be balanced when formulating policy.⁷⁷ Furthermore, Lithuania, Latvia, Estonia and Poland all have very different energy consumption, which is dictated by their available domestic energy sources, their infrastructure and supply routes, and on economic, political and even social⁷⁸ considerations specific to each country.

Estonia is the only country in the world that uses oil shale reserves as its main fuel for power generation. Latvia is heavily reliant on natural gas, which is exclusively supplied by Russia. Lithuania was once almost self-reliant on nuclear power, but increased its dependence on Russia for energy supplies⁷⁹ after it had to find other sources for power generation following the closing of the Ignalina NPP in 2009. Poland is the EU's largest hard coal producer and is heavily dependent on it for power generation.⁸⁰ This has, however, led to contention with EU energy efficiency standards in regards to reducing carbon emissions and has profoundly shaped the national energy security strategy of Poland (sometimes to the detriment of regional projects).

Country-specific consumption and production levels account for varying interests within the BSR. In the following sections, these factors will be elaborated on and other aspects will be addressed which influence the energy security strategies of Poland, Lithuania, Latvia and Estonia, respectively. One of the major differences addressed in will be the large Russian influence in the internal gas markets of the Baltic States through the participation of Gazprom in the management of Baltic gas companies (Gazprom holds equity stakes in Estonian *Eesti Gaas*, Latvian *Latvijas Gaze* and Lithuanian *Lietuvos Dujos*) versus the firm resistance of Poland to Gazprom's expansion within its internal gas market.

3.2 Energy Policies of Poland, Lithuania, Estonia and Latvia

The following sections will present the respective energy security strategies of Poland, Lithuania, Estonia and Latvia. The main focus will be on Poland and Lithuania, as this work

76 Maigre, M. (2010) "Energy Security Concerns of the Baltic States." International Center for Defense Studies. http://www.icds.ee/fileadmin/failid/Merle_Maigre-Energy_Security_Concerns_of_the_Baltic_States.pdf.

77 Ibidem.

78 The social issues facing the Baltic States revolve around the large Russian-speaking minorities in Latvia and Estonia, which has increased Russia's influence in the region. Lithuania has its own ethnic tensions revolving around the Polish minority in Vilnius, which has significantly affected Polish-Lithuanian diplomatic relations.

79 The closing of the Ignalina nuclear power plant had a wider regional impact as well, since Ignalina also supplied power to Latvia and Estonia.

80 Poland is the second largest consumer of coal after Germany and the tenth largest producer of coal in the world.

maintains that the interconnection of the three Baltic States to the energy networks of Poland, and thereby to the wider EU, is a priority for achieving greater energy security for the entire region. In order to put the different strategies in perspective, the following key factors that influence individual national policy will be examined⁸¹:

- Energy producers vs. energy consumers
- Relations with Russia
- Levels of dependency on Russian imports
- Priorities regarding EU Energy Policy
- Unilateralism vs common approach

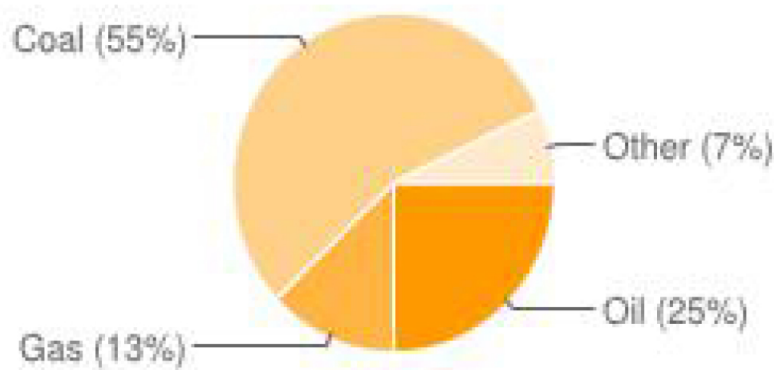
3.2.1 Poland

Poland is different from the three Baltic States – and most of the EU in this case – because it has vast coal reserves, which help constitute about 55% of total domestic energy consumption and which are responsible for generating roughly about 85% of domestic electricity.⁸² Coal is seen as the guarantor of energy security for Poland, as it makes the country less dependent on gas imports from Russia. The reliance on domestic production of coal, however, poses challenges to complying with the EU's Climate and Energy Package, which mandates a significant decrease in carbon emissions. Consequently, this has inspired the national energy policy of Poland to focus on meeting long-term EU objectives of zero emission-based economic growth by increasing the use of more environmentally sustainable resources such as renewables, natural gas and nuclear energy. Poland's energy strategy is shaped by both its vast domestic coal reserves, as well as a heavy reliance on imported fuels, of which gas is of particular political and economic importance as it increases dependence on Russia and is therefore highly securitized. Since Poland also has some domestic natural gas production, it is in a better position than most Central and Eastern European countries, which remain completely dependent on Russian natural gas imports. However, Russian oil and natural gas imports account for nearly half of Poland's primary energy supply.⁸³ Poland's ambitious energy projects, such as the LNG terminal in Świnoujście which is the first of its kind in the region, as well as its position as a potential shale gas exporter, might well change the balance of regional energy dynamics and propel Poland into a regional leader in the energy sector.

81 Sprūds, A. and Rostoks, T. (2009), *Energy: Pulling the Baltic Sea region countries together or apart?* Latvian Institute of International Affairs.

82 *Lithuania Tribune*. (2012) "Poland's energy sector and Russia's position: Part 1", 17 February.

83 *Ibidem*.

Figure 3-1 Total primary energy consumption in Poland, 2010

Source: Journal of Energy Security⁸⁴, 2011

*other: nuclear, hydro, geothermal, solar, biofuels & waste, electricity and heat

As can be seen from Figure 3-1 above, Poland is heavily dependent on hard coal in its energy mix. It is the biggest hard coal producer in the EU, the second largest consumer after Germany and the tenth largest producer of coal in the world. Coal constituted 55% of Poland's total primary energy consumption in 2010 and approximately 92% of its electricity is generated by brown and hard bituminous coal-burning plants.

This has inevitably resulted in high emissions and CO₂ intensity. Although Poland is subject to the EU's Climate and Energy Package, which sets out environmental standards on carbon emission levels, it blocked the European Commission's resolution to put in place a new policy framework for low-carbon energy up to 2030. Andrzej Kraszewski, Polish Minister for the Environment, has pointed out that such EU regulations are disadvantageous for Poland, since meeting the requirements for carbon emissions will cost 5 to 13 billion zlotys (1.2 billion Euros to 3 billion Euros) a year.⁸⁵ According to Mieczysław Kasprzak, Secretary of State at the Polish Ministry of Economy, 7.7% of electric power comes from renewable sources. The number should increase to 15% by 2020 under the Renewables Bill passed in December 2011. The aimed share of renewable energy in transport for 2020 has been set at 10%.⁸⁶ To put this into perspective, the share of bio-components and other renewable fuels in transport fuels in 2011 amounted to 6.25%.

Due to the significant role of coal in the Polish energy mix, Poland ranks below both Latvia (41.62%) and Lithuania (81.92%) at 31.51% in terms of its level of energy import dependency according to Eurostat, the European Commission's statistical agency.⁸⁷ Of the three Baltic States, Estonia has the lowest import dependency at 12.93% due to its shale oil reserves. Poland's energy import dependency level in 2010 was 31.52%, while the EU-27 average was 52.68%. (See Figure 3-2 for energy import dependence in the EU.) Although this is below the EU-27 average, it marks an increase in dependency from the years preced-

⁸⁴ Nyga-Łukaszewska, H. (2011) "Poland's Energy Security Strategy." *Journal of Energy Security*. 15 March.

⁸⁵ Euractiv (2012) "EU's climate and energy deals 'disadvantageous for Poland'". 19 June.

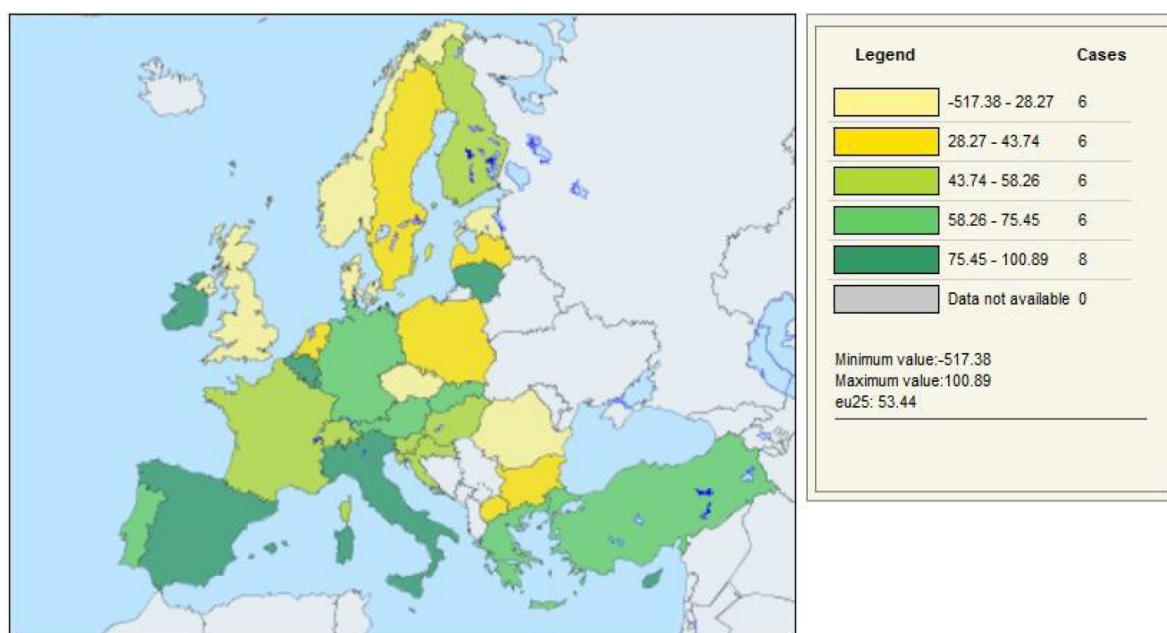
⁸⁶ Government of Poland. Energy Policy of Poland until 2025.

⁸⁷ Eurostat defines energy import dependency as the extent to which an economy relies upon imports in order to meet its energy needs. The indicator is calculated as net imports divided by the sum of gross inland energy consumption plus bunkers. Available: http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/dataset?p_product_code=TGIGS360.

ing 2008, which saw levels from 14.59% in 2004 to 25.64% in 2007. This can be explained by a decrease in domestic production as a result of aging mines.⁸⁸ In 2008, Poland for the first time actually became a net *importer* of coal, since production was insufficient to meet demand. Increased imports from Russia in 2009 accounted for 70% of total coal imports.

Although Poland enjoys more leverage in its energy relations because of domestic coal production, the situation for import dependency for oil and gas is decidedly different. Poland imports nearly 95% of its oil and 66% of its natural gas, with Russia as its main supplier. Russia's prevailing dominance over the Polish gas import market continues as a result of the Soviet legacy gas transport infrastructure – the Yamal –

Figure 3-2 Energy import dependence in the EU



Source: Eurostat

Europe pipeline (See Figure3-3) – which was designed to transmit fuels from the East to Poland. This heavy reliance on external supplies of gas remains a threat to the security of energy supply. More than 94% of oil and 80% of gas is imported from a single supplier: Russia. This has shaped the Polish government's priority of diversifying sources of imports and transport routes so as to strengthen energy security and enable Poland to negotiate better prices.

⁸⁸ Public opposition makes it extremely difficult to get permits for the construction of new mines.

Figure 3-3 Yamal Europe gas pipeline

Source: Gazprom

In terms of oil, the Polish government supports the extension of the Odessa-Brody pipeline from Ukraine to the Polish refinery at Plock and Gdansk, as part of a wider regional initiative aimed to supply Caspian oil to Europe. Poland remains dependent on Russia for crude oil through the Druzhba pipeline, but is less dependent on refined products, as it has six of its own refineries. In the gas sector, the key elements of Polish Energy Policy to 2030 – which is the main document guiding development in the energy sector – include the construction of an LNG terminal to diversify supply sources and the exploration of shale gas. Other goals are to increase in the capacity of underground gas storage facilities, to extend the transmission and distribution system and to increase domestic production of natural gas. The planned “Amber” pipeline between Poland and Lithuania, which is part of a wider regional effort at energy cooperation, is also a priority project. Feasibility studies have already been carried out. Poland has also put forward an ambitious national nuclear program, which aims at building three plants by 2030 as a source of viable, long-term renewable energy. The wider impact of the Polish nuclear program will be discussed in Section 3.4.

Despite the fact that gas accounts for the smallest percentage of energy consumption in Poland (13%), it is a particularly strategic energy source in the region and is highly securitized based on historical relations with Russia and recent precedents of supply disruptions to the region. Poland is essentially completely dependent on Russia for the gas that it imports through the Yamal pipeline, as well as through Germany. It also pays some of the highest prices for imported gas from Russia, despite being one of Gazprom’s biggest customers with imports reaching 9.3 billion cubic meters a year – or two-thirds of Poland’s annual gas

consumption.⁸⁹ Dependence on Russia will only grow, given the 10-year contract that was signed in 2010 to increase Russian imports of gas to 11 bcm beginning in 2012.⁹⁰

As Poland seeks to lessen its dependence on Russia, LNG and shale gas have become the key diversification projects. The LNG terminal in Świnoujście – the first of its kind in Central and Eastern Europe – will be completed in 2014 and will have a capacity of 5 bcm, with the possibility of expansion to 7.5 bcm at a later date. The terminal will allow Poland to access the fluid market of LNG, with numerous LNG providers as well as spot purchases, buying natural gas that is roughly \$100-150 per thousand cubic meters (tcm) cheaper than Russian natural gas (industry estimates for LNG are currently in the \$290-\$350 per tcm range, while Poland pays about \$420 per bcm for Russian natural gas).⁹¹ Although the LNG terminal might not eliminate dependence on Russia, it could certainly lessen the political pressure that Russia holds over Warsaw.

While LNG is seen as a near-term way in which to alleviate dependence on Russian gas imports, the recent news of Poland having potentially large shale gas reserves off of its Baltic coastline is seen as an opportunity for Poland to diversify away from Russia as well as to possibly change its balance of fuels in the long term. Although initial estimates done by the United States were dramatically reduced after the Polish Geological Institute carried out its own studies in 2012, the Polish government continues to support the exploration of shale gas as a source of energy supply, with reports of considerable state investments into the initiative.⁹² Preliminary estimates suggested that Poland could have 1.4-5 tcm of shale gas, however, more recent studies have shown the estimates to be closer to 768 billion cubic meters.⁹³ Despite early commercial interest in the Polish “shale boom,” some industry giants like ExxonMobil abandoned their drilling, citing a lack of commercially-viable (insufficient) amounts of gas in their test wells. Furthermore, obstacles remain to the exploitation of shale gas; namely, acquiring licenses and private mineral rights as well as environmental concerns associated with “fracking” – the process for extracting the shale gas involving chemicals and highly pressurized water. However, as suggested in a recent *New York Times* article⁹⁴:

for a company of Exxon’s size, it may not be profitable to spend time drilling a lot of dry wells in Poland when it can focus on more established and “de-risked” prospects elsewhere. But smaller developers might be willing to take risks and explore the geology a bit more thoroughly – if only they could gain private titles to the resources.

Prospects for exploration are, therefore promising; in fact, according to Rafal Miland, deputy director at the Environment Ministry’s geological concessions department, Poland

89 According to a study done by Interfax and Vedomosti, Poland pays about \$420 per 1,000 cubic meters of gas, as compared to \$410 for Italy, \$379 for Germany and \$333 for Slovakia. (from Cienski, J. (2012) “Poland: getting cheaper Russian gas?” *Financial Times – beyondbrics blog*. 21 June).

90 *Lithuania Tribune*. (2012) “Poland’s energy sector and Russia’s position: Part 1”, 17 February.

91 *Ibidem*.

92 *Bloomberg* (2012) “Polish Shale Gas Search to Get \$515 Million From State Firms.” 04 July.

93 *Ibidem*.

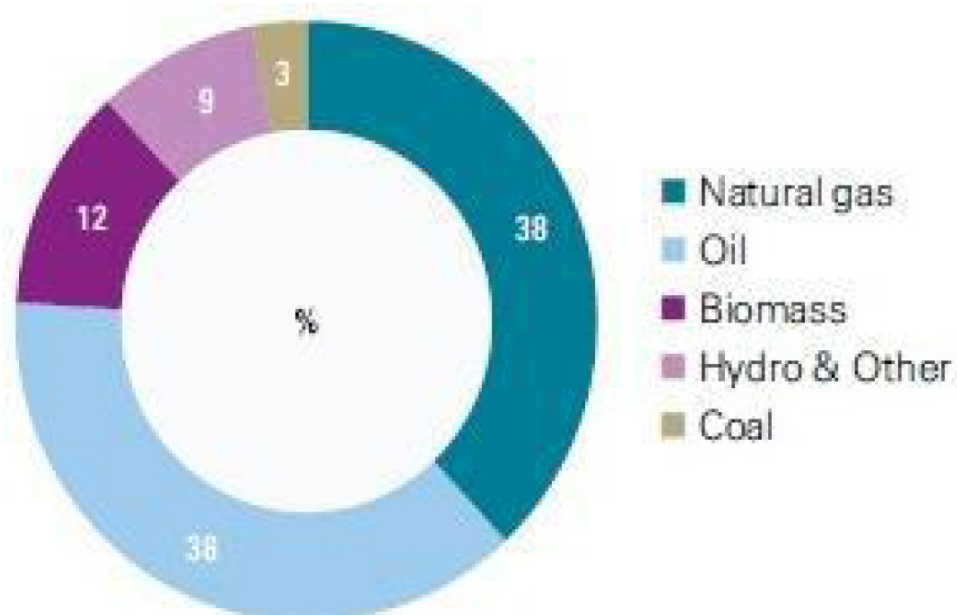
94 *The New York Times* (2012) “The Shale Gas Secret.” 14 July.

expects to have 248 shale gas wells by 2017, with 49 started by the end of this year.⁹⁵ This could change the energy situation of not only Poland, but the BSR more widely.

3.2.2 Lithuania

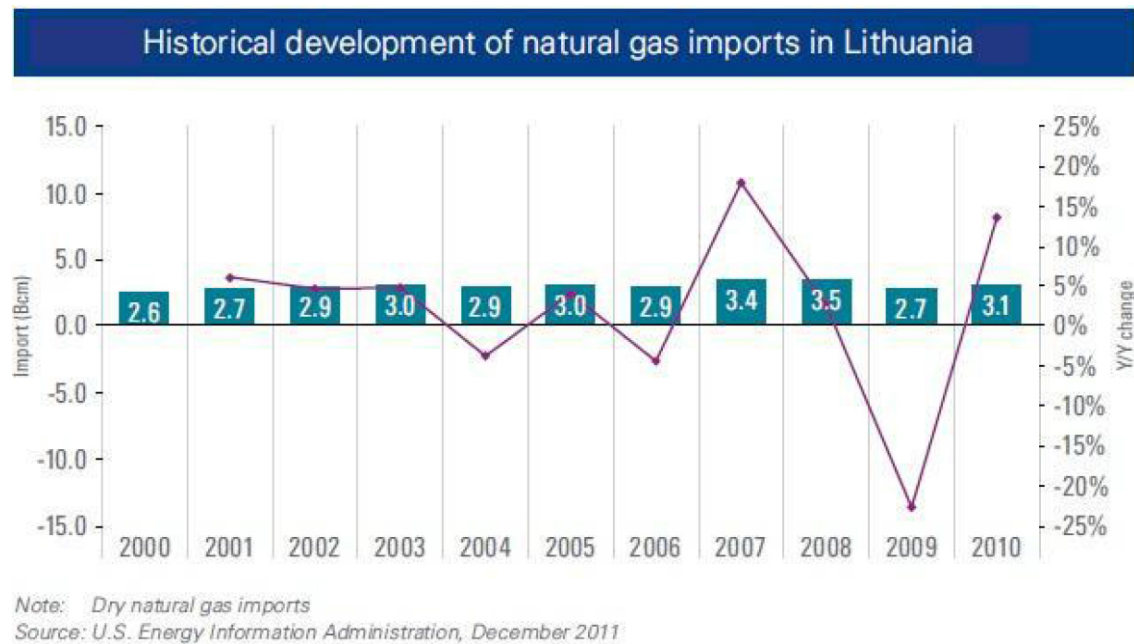
Lithuania's national energy strategy is highly ambitious and aims – first and foremost – at achieving energy independence. As previously mentioned, Lithuania was once heavily reliant on nuclear power to generate most of its electricity needs. After the closing of the second reactor of the Ignalina NPP in 2009 (as per requirements for EU accession), Lithuania found itself even more dependent on Russia for energy supplies. In addition to an already overwhelming dependence on oil and gas (See Figure 3-4), electricity was added to the mix. Given the lack of interconnection with the Nordic and Continental European electrical grids, Lithuania was forced to import electricity from neighboring countries via the Eastern (post-Soviet) UPS/IPS grid system and to increase its import of fossil fuel from Russia in order to generate the rest of its electricity needs (Figure 3-5 illustrates the dramatic rise in gas imports after 2009, following the closing the second reactor at Ignalina). This has created an unstable situation for domestic consumers, who are more vulnerable to supply disruptions and large price fluctuations. It is no surprise then that the current energy strategy – which was passed by the Lithuanian Seimas at the end of June 2012 – highlights the Visaginas nuclear plant as the main strategic project in electricity generation in the National Energy Independence Strategy, despite the prevailing tendency in Europe to move away from nuclear power following the Fukushima disaster in Japan.

Figure 3-4 Total primary energy consumption of Lithuania, 2010



Source: Lithuania Energy Report, 2011

⁹⁵ Bloomberg (2012) "Polish Shale Gas Search to Get \$515 Million From State Firms." 04 July.

Figure 3-5 Development of natural gas imports in Lithuania, 2000-2010

Source: EIA, 2011

The interconnection of electrical grids with Poland and Sweden are a precondition to the construction of the NPP and also occupy a prominent place in the energy independence strategy. A new LNG terminal on the Baltic Coast in Klaipeda is also seen as a priority project towards achieving energy independence.

Through these initiatives, energy reliance on the single supplier, Russia is expected to drop from 80% in 2012 to 55% by 2016 and further to 35% in 2020, while gas imports from Russia are expected to halve when the new floating LNG terminal is commissioned in 2014.⁹⁶ The planned LNG terminal – estimated to cost about 200 million Euros – will have an annual capacity of 2-3 bcm, with about 1 bcm of gas expected to be pumped via the terminal within the first year.⁹⁷

The Lithuanian Energy Strategy has three main objectives, which are directly in line with EU policy:

1. energy independence
2. competitiveness
3. sustainable development

In terms of the first objective – *energy independence*, the aim is to interconnect the energy networks and systems of the three Baltic States with those of the EU; to secure the supply of alternative and competitive energy resources; and to develop local competitive and environmentally-friendly electricity and heat production capacities. Full integration into the European energy system is foreseen through the implementation of two electricity links: Lit-

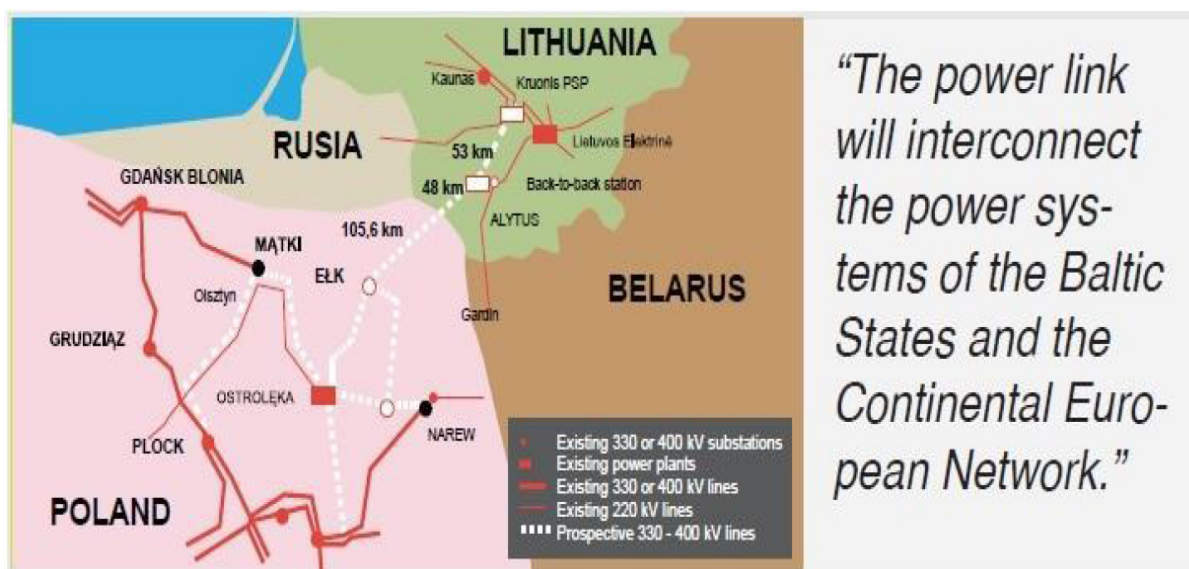
⁹⁶ World Nuclear Association (2012) "Nuclear Power in Lithuania".

⁹⁷ *15min.lt* (2012) "Lithuania in talks with Statoil on supplies for LNG terminal." 13 April.

PolLink and Norbalt— which will link the grids of Lithuania with those of Poland and Sweden, respectively (See Figures 3-6 and 3-7). These interconnections are set to provide alternatives to the Russian-dominated Eastern electricity grid by 2016.⁹⁸ Full integration into the European market for electricity is a precondition to these infrastructural projects and the EU's Third Energy Package, which mandates the ownership unbundling of production from distribution in the electricity and gas sectors, is a means to this end.

In the electricity sector, the ownership of electricity generation is being unbundled from transmission, while the ownership of gas transmission and supply is being separated in the gas sector. While the LNG terminal in Klaipeda is the key strategic project for securing alternative gas supplies in a relatively short amount of time, the planned “Amber” gas pipeline from Poland to Lithuania and underground gas storage facility are also of key importance in the gas sector (See Figure 3-8). The pipeline will integrate the Baltic States into the European gas market and would provide access to the global LNG market via the Swinoujscie LNG terminal. This would allow for diversification away from Russian gas imports as Gazprom currently holds 100% market share in Lithuania (as well as in Latvia) for pipeline-delivered natural gas with *Lietuvos Dujos* as the main importer of Russian gas to the country and its pipeline grid owner-operator. The pipeline would have the capacity to transport 2.3 billion cubic meters of natural gas to the Baltic States, with the possibility of increasing capacity to 4.5 billion cubic meters.⁹⁹ On the other hand, the pipeline will not be under full Lithuanian control, which is seen as a drawback in light of disruptions or crises.

Figure 3-6 Lithuania-Poland Power Interconnection (LitPolLink)



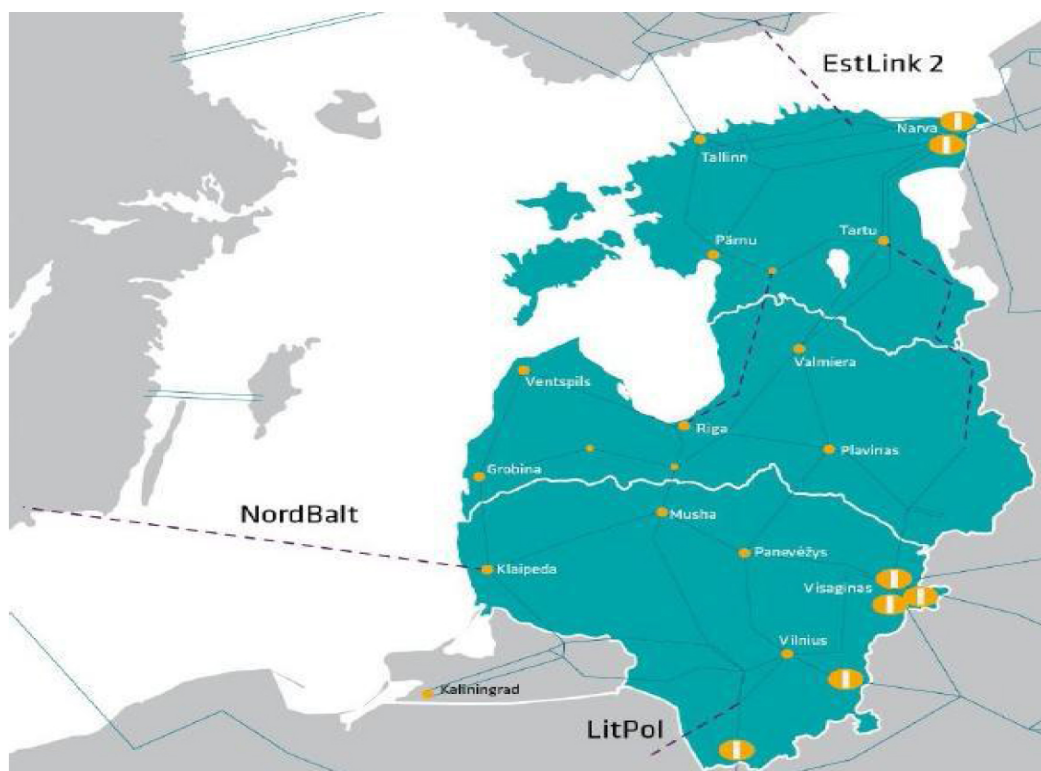
Source: *Lithuanian Energy Quarterly*, Newsletter 2010 Q1

⁹⁸ LitPolLink will provide a 1000 MW line and will be built in 2 stages: the first line with a capacity of 500 MW by 2016 and the second line with a capacity of an additional 500 MW by 2020. After the construction of the first line in 2016, Lithuania will connect to the European Continental Network. The *NordBalt* electricity line will have a capacity of 700 MW and is planned to be built by the end of 2015. It will allow connect to Scandinavian electricity network, to trade electricity with the Nordic countries, and to access cheaper balancing reserves.

⁹⁹ *Pipelines International* (2012) "Case made for a Poland to Lithuania gas pipeline." 15 February.

In order to achieve *competitiveness* – the second objective of the Energy Strategy – the funds that would otherwise be spent on the import of natural gas and electricity would be put towards the national economy and energy sector, while taking steps to increase the overall level of energy efficiency within the country.¹⁰⁰ The target is to achieve an annual savings of 1.5% of the total final energy consumption by 2020.¹⁰¹ Although the investments into infrastructure and strategic projects severely outweigh the immediate returns, the long-term goals of total energy independence, as well as a stable and secure energy supply, is considered to be a top priority. Furthermore, the investments are expected to pay off in the long-run. To address the competitiveness of the internal energy market, steps have been taken to liberalize the energy market including the implementation of the EU’s Third Energy Package, as mentioned earlier. This is meant to ensure fairer prices to gas consumers and more investment into development of gas infrastructure.

Figure 3-7 Planned Interconnection of Electricity Grids in the Baltic Sea Region



Source: Elering

100 Lithuania’s energy efficiency is 2.5 times lower than the EU average.

101 Government of the Republic of Lithuania. (2009) *Lithuanian National Energy Strategy*.

Figure 3-8 The Lithuanian gas sector



Source: Lithuanian National Energy Strategy up to the year 2020

As for *sustainable development*, the energy strategy aims to transition from fossil fuel consumption to climate-friendly and renewable energy resources, as well as to adapt advanced and efficient technologies. This is particularly meaningful for the heating sector, which is envisioned to shift from (mainly) gas-based production to biomass. The target for decreasing the heating consumption in households and public buildings by 2020 is 30–40% of 2009 levels, meaning an annual savings of as much as 2–3TWh of heat.¹⁰² The state will aim to reach the target of 23% of renewable energy in final energy consumption, including no less than 20% of renewable energy in the electricity sector, 60% in the district heating sector and 10% in the transport sector. The target for reducing overall CO₂ emissions by 2020 is 23%, as compared to 2008 levels.¹⁰³

Plans for the oil sector are not as ambitious in comparison to the gas or electricity sectors, which receive backing under the BEMIP. Since 2006, oil for the Mazeikiai refinery has been supplied via the Butinge oil terminal and shipped via rail to Mazeikiai. In the past, the Druzhba pipeline directly supplied the refinery, but as a result of the continued reparations to its northern branch, has ceased supplies completely.

The overground “Friendship” pipeline stopped transporting crude oil from Russia to the refinery after Polish *PKN Orlen* acquired the refinery in 2006 over a Russian state-owned company. The refinery itself and control over it is also linked to the wider issue of dependence on Russian gas imports since,

Mazeikiai plays a major role in the regional contingency plans for a major interruption in natural gas supply — it would supply distillates to the combined cycle and electric gen-

¹⁰² Ibidem.

¹⁰³ Ibidem.

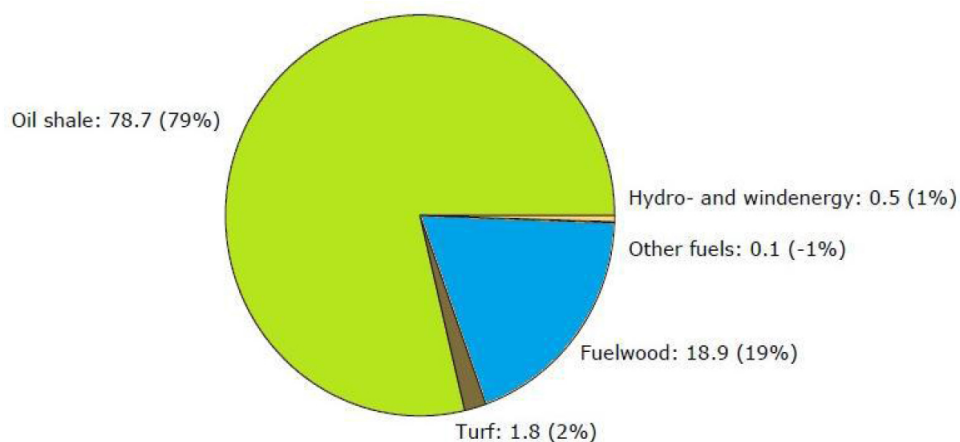
erating 284 stations with dual-fuel firing capability, supplementing crude oil imports supplied through the oil port at Butinge. This double role of Mazeikiai makes its ownership and the potential for a power monopoly a serious concern for the Baltic countries in the context of energy security.¹⁰⁴

It is suspected that the coincidental shutdown of the Druzhba pipeline to Mazeikiai after it was sold to *PKN Orlen* over the Russian *Yukos* was another incident where Russia used energy as a political tool.

3.2.3 Estonia

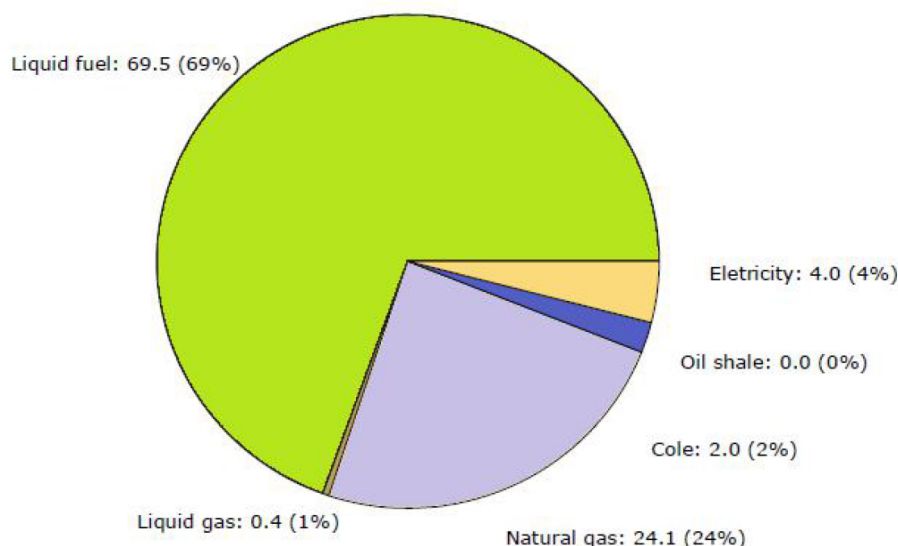
Estonia is unique when compared to the other two Baltic States in regards to its domestic production of energy. Estonia produces large amounts of oil shale, which accounts for about two-thirds of its domestic production (approximately 79% - See Figure 3-9) and is actually enough to export as well. This slightly decreases its dependence on Russia for crude oil imports and is therefore seen as integral to the energy and national security of the country. However, since almost all of Estonia's own oil shale production is mainly used to produce electricity and heat domestically, there still exists the need to import oil from the single supplier in the region: Russia. Given the high securitization of energy dependence in the region as a result of historical grievances and the *enmity* that pervades relations with Russia, the need to lessen dependence on oil imports from Russia has become a priority for the national energy strategy. Together with natural gas, liquid fuel accounted for 93% of energy imports in 2010, the majority of which was – and continues to be – imported from Russia (See Figure 3-10).

Figure 3-9 Energy production in Estonia, 2010



Source: Estonian Statistical Office

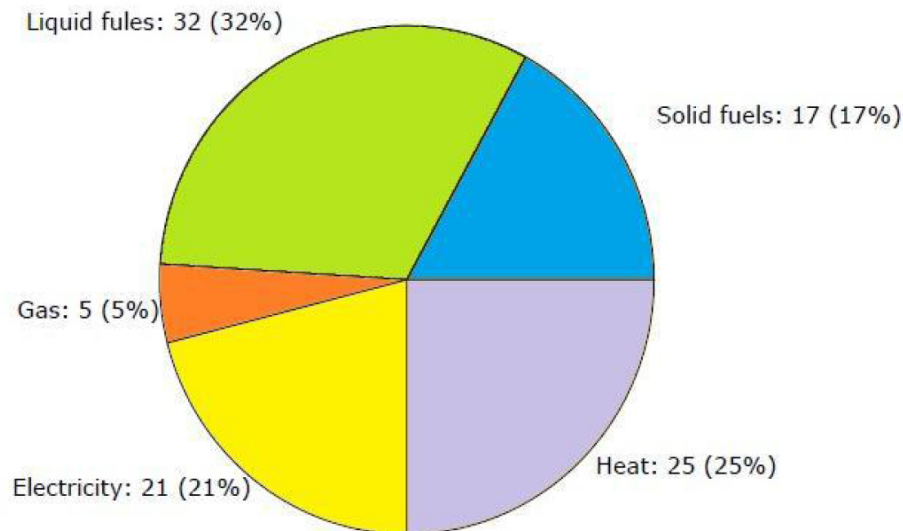
104 IAEA (2007) "Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States".

Figure 3-10 Estonian energy imports, 2010

Source: Estonian Statistical Office

The situation in the Estonian gas sector is much starker, with dependence on natural gas from Russia at 100%. However, considering the small proportion of natural gas in the overall energy balance of Estonia (See Figure 3-11), this dependency is comparatively smaller when looking at the Baltic States and Poland. As mentioned earlier, Estonia has the lowest import dependency (12.93%), with Poland at 31.51% - ranking below both Latvia (41.62%) and Lithuania (81.92%) according to Eurostat, the European Commission's statistical agency. At any rate, the priority for Estonia remains the diversification and expansion of supply networks away from the single supplier. This goes for the electricity sector as well; Estonia has already linked to Finland through EstLink-1 and a second electric cable (EstLink-2) is planned to further stabilize the supply of energy and establish a common market situation in the Scandinavian direction. The EU's Third Energy Package is a means to liberalizing the electricity and gas sectors, although the former is still dominated by the state-owned Eesti Energia, which will continue to dominate the internal market under "very conservative regulation and strict requirements for market operators" as Estonia was granted a transition period for the liberalization of its electricity sector.¹⁰⁵

105 Kisel, E. (2009) "Developing Estonian energy policy hand in hand with EU energy packages" Estonian Ministry Of Foreign Affairs Yearbook.

Figure 3-11 Energy consumption in Estonia, 2010

Source: Estonian Statistical Office

As already mentioned, 100% of natural gas consumed in Estonia is produced by Gazprom, which also owns 37% of Eesti Gaas – the local natural gas supplier and main network company.¹⁰⁶ Estonia’s National Development Plan of the Energy Sector until 2020¹⁰⁷ – the document which guides Estonia’s energy policy and contains strategies for the electricity sector, the use of oil shale, biomass and bioenergy – aims to create competition on the natural gas market by securing alternative suppliers in the region and developing LNG terminals as the necessary infrastructure to import gas supplies; however, Gazprom’s monopoly over the supply of gas extends into Eesti Gaas, making alternative supply infrastructure rather unlikely since the restructuring of ownership “is legally impossible in the natural gas market since Eesti Gaas is a private undertaking”.¹⁰⁸ The debate about where to build the regional LNG terminal has seen Riga as the most sensible location, but Estonia does not rule out the possibility of a LNG terminal being located on its coast.

Although oil shale in the short-term is proving to satisfy the domestic needs of Estonia, it is a non-reproducible resource which necessitates the diversification of energy sources in the future. It also demonstrates the challenges of balancing national and regional priorities, since nationally, it is regarded as an export commodity while being a source of electricity generation for the wider region.¹⁰⁹ Furthermore, it poses challenges to meeting EU energy efficiency standards in regards to reducing carbon emissions. Estonia aims to increase the efficiency of its system by fully refurbishing its oil shale-fired plants; installing circulating fluidized bed combustion (CFBC) technologies to reduce CO₂ emissions; and investing in new renewable electricity plants and cogeneration stations. Furthermore, Estonia is cooperating with Lithuania and Latvia in the Visaginas NPP project to secure another source of electricity supply.

¹⁰⁶ Ibidem.

¹⁰⁷ Government of the Republic of Estonia. *The National Development Plan of the Energy Sector until 2020*.

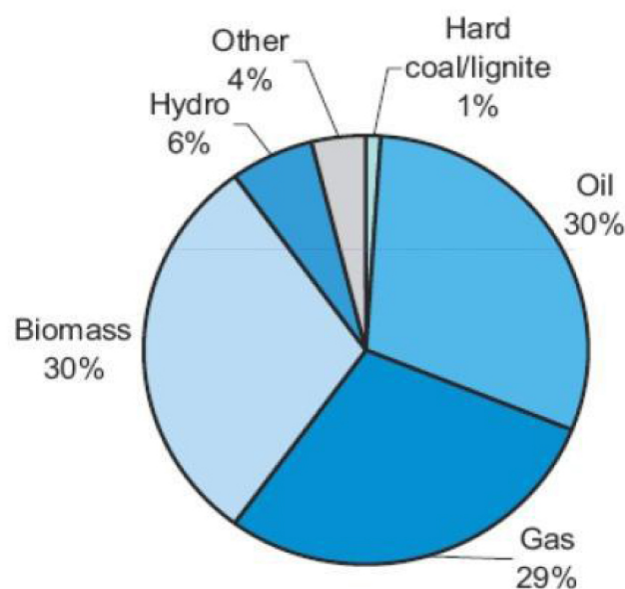
¹⁰⁸ Ibidem.

¹⁰⁹ IAEA (2007) “Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States.”

3.2.4 Latvia

Similar to Lithuania and Estonia, Latvia is highly dependent on Russia for gas imports. However, what sets Latvia apart is the fact that gas plays a special role in the country, constituting about one third of the national energy mix – the highest among the three Baltic countries (See Figure 3-12).¹¹⁰ After the decommissioning of the Ignalina NPP, which also supplied Latvia with electricity, gas-powered plants replaced this source of electricity generation. The need to import natural gas necessarily increased the dependence on Russian supplies. As a result, the extensive control that Gazprom already had within the internal market of Latvia was increased.

Figure 3-12 Latvian energy mix, 2010



Source: Latvian Sustainable Development Strategy of Latvia until 2030

Another factor that makes Latvia unique in the context of the BSR countries, and the entire EU for that matter, is its extensive underground gas storage capacity. The facility at Incu-kalns which currently stands at 2.3 bcm is among the largest in Europe and *Latvijas Gaze*, a joint-stock company and the main natural gas company in Latvia, plans to further expand it to reach 5 billion cubic meters. This is one of the main factors both favoring and discounting Riga in terms of hosting the regional Baltic LNG terminal. On the one hand, the underground storage facility would provide storage for lower demand during the warmer seasons and could be used for strategic reserves in case of emergencies, but, on the other, would further consolidate Gazprom's control of regional gas supplies as it holds a blocking share in *Latvijas Gaze*.

The energy policy for Latvia is laid out in the National Energy Program until 2020. It gives priority to the rational use of energy resources, the development of renewables, ener-

110 Maigre, M. (2010) "Energy Security Concerns of the Baltic States." International Center for Defense Studies.

gy diversification and the restructuring of the energy sector in line with EU standards. Latvia supports the regional NPP project in Lithuania, despite its unpopularity among Latvians, with only 45% supporting it according to a poll by TNS Latvia and the LNT TV channel. The liberalization of the internal gas and electricity market in line with the EU's Third Energy Package is also a priority, as it is seen as a precondition to the wider integration of the Baltic States into the EU common market.

In terms of securitization of energy dependence, past experiences of pricing disputes and subsequent delivery interruptions from Russia continue to shape the Latvian energy security strategy. Oil transit via pipeline to Ventspils was essentially cut off because of import pricing disputes and for political reasons – namely vying for control of the Ventspils port during its privatization. Ventspils is the largest oil port in the Baltic region and the second-largest (after Novorossiisk on the Black Sea) maritime outlet for Russian oil, with an annual handling capacity of at least 16 million tons of oil and oil products. Starting in 2003,

the Russian government reduced the oil transit through Ventspils from a once-healthy volume to a trickle. It seek[ed] to force the oil port into bankruptcy and asset depreciation, and thus to blackmail the Latvian owners – both state and private – into selling a controlling stake to Transneft at a fraction of the real value. Moscow also undoubtedly calculate[d] that Russian state control of Latvia's single largest economic asset would translate into economic and perhaps political leverage on this small country.¹¹¹

Although Moscow claimed it was attempting to reroute the flow of oil from Ventspils to the newly built oil port of Primorsk, which is owned by Transneft, the effect of the cutoff was dramatic and illustrated Russia's use of energy as a political tool. The following section will delve more deeply into the impact of energy security on other sectors of security, and in doing so, will show the shared security concerns of the three Baltic States and Poland.

3.3 Impact of energy security on other sectors of security

Given the history of supply disruptions and the use of energy as a tool of political influence, energy security has become intricately linked to the foreign and security policies of the three Baltic States and Poland. As already discussed, this phenomenon of *securitization of energy dependence* is also connected to the historical inheritance of the region and its political domination by the Soviet Union for decades. The dependence of the Baltic States and Poland on Russia for gas and oil, as well as for electricity imports (in the case of the Baltic States) is largely perceived as *negative* and has come to be intricately linked to other sectors of security. This has been precipitated by Russia's moves to gain control over key energy in-

111 Socor, V. (2003) "Have Oil, Won't Let It Travel Via Latvia." Institute for Advanced Strategic and Political Studies (IASPS). 02 February.

infrastructure in EU Member States, particularly in former Soviet bloc countries; increase the influence of Russian state-owned companies on the European energy market avoid transit countries; use energy as an informal tool of foreign policy through a deliberate lack of transparency in commercial dealings and persistent short term concerns¹¹²; threaten to diversify the gas market from Europe to Asia; and increase energy exploration in post-Soviet countries, the Middle East, Africa, Asia, South America, and the Arctic.¹¹³

The most geopolitically strategic energy resource in the BSR is gas. There is a particularly strong presence of Russia's state-owned Gazprom within the gas sectors of the three Baltic States, which when taken together with the above-stated moves by Russia, affects the energy security of these countries for the following reasons¹¹⁴:

- **There is a lack of diversification routes and alternative suppliers.** Since the gas pipeline system in the Baltic States is not connected to EU Member State transmission gas lines and is currently solely connected to the Russian system, the effects of cut-offs and supply disruptions cannot be mitigated.
- **There are economic effects as a result of price discrimination.** Until 2007, the three former Soviet republics paid lower prices for gas compared with the average EU price; however, prices have been steadily increasing to meet market prices. The comparatively higher price that the Baltic States now pay for gas as compared with the rest of the EU (Lithuania pays USD 490 per 1,000 cubic meters of natural gas as compared to \$410 for Italy, \$379 for Germany) indicates a discriminatory pricing strategy of Gazprom toward the Baltic States.
- **There is an uneven level of market liberalization within the Baltic States.** Gazprom continues to control all supplies to Estonia, Latvia and Lithuania, despite the fact that gas is being imported by various companies.¹¹⁵ The EU's Third Energy Package aims to open up the market and challenges Gazprom's engagement in the gas sectors of the Baltic States since it calls for the unbundling of gas production from distribution;¹¹⁶ however, setbacks to unifying the Baltic internal market remain because Lithuania, Latvia and Estonia have chosen different options for unbundling – with Lithuania choosing the strictest one and expressing frustration with the unwillingness of both Latvia and Estonia to follow suit.¹¹⁷

In terms of the first point, the Soviet-era infrastructure that exists on the territory of these countries to this day continues to remain a vital transit route for energy supplies from Russia. The geographical location and physical interconnection with Russia through gas

112 IAEA (2007) "Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States."

113 Molis (2011) "Response of Russia to the Third EU Energy Package." *Energy Security Highlights*.

114 Based on findings from Loskot-Strachota and Nalecz (2009) and the IAEA (2007).

115 As mentioned before, Gazprom holds large equity stakes in each of the three Baltic States' gas companies and a number of private companies in the Baltic States have been found to have informal ties to Gazprom.

116 Gazprom currently holds 100% market share in Lithuania (as it also does in Latvia) for pipeline-delivered natural gas. The joint company Lietuvos Dujos is the main importer of Russian gas in the country, as well as the pipeline grid owner-operator.

117 A more detailed description of the unbundling options will be presented in Section 3.4.

pipelines makes **diversification away from the single supplier** to the region logistically challenging given the current rigid nature of gas transit and the lack of infrastructure interconnection with the rest of the EU. Furthermore, the lack of investments for maintaining ageing Russian gas supply infrastructure makes long-term reliability a risk. Currently, only two out of three supply lines to the Baltic countries are operational, which ensures supply security, granted no simultaneous malfunctions occur.¹¹⁸ In order to mitigate dependence and safeguard against supply disruptions, there are plans to link the Lithuanian and Polish gas systems and to construct a floating LNG terminal in Klaipeda.

The second point relating to the **politicization of energy prices** is conditioned by the antagonistic relations between the countries of the former Socialist bloc and Russia – undeniably a result of the historical *enmity* so central to Buzan’s Regional Security Complex Theory. The discriminatory pricing strategies of Gazprom pose a threat to the internal political stability of the Baltic countries since concessions are oftentimes expected in return for favorable pricing. Furthermore, many of these countries accumulated large, unregulated debts as a result of the low prices in the past, which Gazprom then exploited for acquiring pipeline systems. Gazprom has explained its pricing policies with payment arrears and resistance by the post-Soviet countries; however, these justifications are oftentimes accompanied by “loud public polemics” by Russian officials.¹¹⁹ Furthermore, Russian policies vary by country, making political motives clear when viewed in context. For example, the price of gas for Germany, which is around USD 379 per 1,000 cubic meters, is comparatively lower than it is to Lithuania, USD 490 per 1,000 cubic meters. Even the price of gas differs between each of the three Baltic States, with Latvia – which coincidentally has the largest Russian influence in its internal market and politics and has chosen the most lenient option for liberalizing its internal gas market as per the EU’s Third Energy Package – paying the lowest price.

The small size of the Baltic internal energy markets also seems to play a role in Gazprom’s pricing strategy. Of the total gas sales in 2010, Gazprom sold 70.2 billion cubic meters of gas to the CIS and Baltic States at RUB 450.1 billion (approximately USD 13.6 billion) while selling a comparatively larger share to Europe - 148.1 billion cubic meters of gas at RUB 1099.2 billion (approximately USD 33.2 billion). This makes competing with larger countries for Russian energy supplies more difficult and hinders other gas vendors from investing in alternative gas transmission infrastructures that would allow source diversification.¹²⁰

In addition to discrimination based on energy pricing, there are other examples of the impact that energy security has on other sectors of security in the countries of the BSR. Since coming online in November 2011, Nord Stream has not only had effects on the dynamics of energy trade in the EU (by bypassing Central and Eastern European countries and decreasing their control over supplies, as well as creating greater dependence on Russian gas in the EU), but has likewise had security implications for the BSR countries in the immediate vicinity of the pipeline, which traverses the entire Baltic Sea. Firstly, by bypassing

118 IAEA (2007) “Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States.”

119 Aslund, A. (2010) “Gazprom: Challenged Giant in Need of Reform” in Aslund, Guriev and Kuchins, *Russia after the Global Economic Crisis*, Washington: Peterson Institute for International Economics, Center for Strategic and International Studies.

120 IAEA(2007) “Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States”.

transit countries in the BSR, Russia has reduced the capacity of small countries to act as security providers. This could potentially reflect “a desire to avoid any mutual dependencies in the energy area with the Baltic countries and Poland, or a desire to separate pipeline fees from export revenues, or as a bargaining chip to use in price and policy negotiation with the Baltic countries”.¹²¹ The Nord Stream pipeline has also increased Russian military presence in the Baltic region.¹²² Arguably, this allows Russia to increase its surveillance in the region and gain critical intelligence regarding the activities of NATO members, since the risers and pipelines are “excellent platforms for sensors, radars, hydro-acoustic systems and sonars.”¹²³ Such scenarios are not implausible, given the concealed installation of a fiber optic cable along the Yamal pipeline in Poland.

Furthermore, during the construction of Nord Stream, it was announced that Russia’s Baltic Fleet would protect the pipeline. Likewise, two large-scale military exercises were also carried out in order to demonstrate the capacity of Russia to safeguard the pipeline. The *Ladoga-2009* military exercise, which involved approximately 60,000 Russian troops and lasted a month and a half, was viewed with suspicion by the Baltic States as well as Sweden, which significantly reduced its military capabilities following the end of the Cold War. The other military exercise, *Zapad-2009*, was carried out in Kaliningrad and Belarus with similar apprehension on the part of Baltic countries. It is therefore apparent that Russian influence in the region has not only affected the stuff of trade in energy relations, but has intertwined energy issues with wider security issues.

Baltic concerns about their security vis-à-vis Russia increased dramatically after Russia’s 2008 war with Georgia; the dramatic increase in military expenditure that followed and which is planned to further increase¹²⁴; Moscow’s confirmation in its 2010 military doctrine that NATO’s expansion continues to pose a threat to Russia; and the defensive response to the proposed missile defense system in Eastern Europe.¹²⁵ As a result, contingency plans were drawn up by NATO (Operation Eagle Guardian) and plans for the reinforcement and defense of Poland were expanded to include Estonia, Latvia and Lithuania. Furthermore, the *Baltic Region Training Event* training mission also took place near the Russian border in 2010 to demonstrate the solidarity and commitment of NATO to the security of the Baltic.¹²⁶ The need for the NATO Air Policing Mission in the Baltic States was reinforced in November 2011 after four Russian air force planes flew near the territory of the Baltic States, scrambling NATO jets to escort them along Lithuanian territory on their way from Kalinin-

121 Ibidem.

122 Lin, C. (2009) ‘The Prince of Rosh: Russian Energy Imperialism and the Emerging Eurasian Military Alliance of the Shanghai Cooperation Organisation’, Berlin: Institut für Strategie- Politik- Sicherheits- und-Wirtschaftsberatung (ISPSW), February, p. 4.

123 Ibidem.

124 Russia’s last federal budget (May 2012) sets aside a staggering 4.1% of GDP for defence in 2015.

125 Most recently, Putin has made a reelection promise to deliver an “effective and asymmetrical response” to NATO plans for a missile-defense shield by tacking on more than \$120 billion to the already dramatic defense-spending increases approved in 2011 and lifting defense spending from 3 to between 5-6% over the course of the decade (*The Voice of Russia*. (2012) “Response to global missile defense – Putin.” 20 Feb).

126 *RIA Novosti* (2012) “Nonprofits Law May Come into Force in Fall - Kremlin Source”, 2 July.

grad to Russia.¹²⁷ Although the Russian planes did not cross into Lithuanian territory, they were contemporaneous with a Russian military build-up in the region and warranted concern on the part of all three Baltic States, which are reliant on NATO for their security and continue to view Russian military moves in the Baltic with suspicion and fear.

Along these lines, Russian moves to modernize its military while consolidating control over energy sources are also viewed by the Baltic States in an offensive light. Given the fact that the major goals of Russia's Energy Policy are to ensure the sustained growth of the national economy through the security of supply, security of demand and the modernization of the energy sector, exploring untapped resources in the eastern regions of Russia and exploiting oil and gas fields in the northern regions and the Arctic offshore are seen as one of the means to this end. This course of action can also be seen as a way to increase the international standing of the Russian Federation by consolidating its status as both a regional power and major actor in an area of growing geopolitical importance.

In terms of the former, the buildup of the Russian military and extensive efforts at using energy exports as a political weapon are cited as examples of how Russia is attempting to assert its power across Eurasia – from the EU, to the Middle East, to the Caspian Region and Central Asia, and onto South Asia and the Far East.¹²⁸ In terms of the latter, an increased military presence – namely the use of the Northern Fleet to protect energy exploration in the Arctic – has accompanied energy exploration.¹²⁹ Given the fact that the other Arctic nations are all NATO members and Russia's 2010 Military Doctrine cites NATO expansion as a continual threat to Russian security, it is clear that competition in this strategic region is not based on economic interests alone. When viewed together, a new trend within Russian energy politics seems to have surfaced: securing energy resources by strengthening ties between the energy sector and the military.

According to Russia, these actions are all meant to preserve the territorial integrity of the Russian Federation, to maintain sovereignty in the face of foreign subversion, and to insure itself against military intimidation.¹³⁰ However, the wars in Chechnya and Georgia; the fear of NGOs planning an 'orange revolution' in Russia¹³¹; offensive reaction to NATO's eastward expansion¹³²; the desire to hold onto the naval base in Sevastopol¹³³; growing links

127 *Defense News* (2012) "Russian Planes Spark NATO Scramble in Baltics." 07 November.

128 Lin, C. (2009) "The Prince of Rosh: Russian Energy Imperialism and the Emerging Eurasian Military Alliance of the Shanghai Cooperation Organisation", Berlin: Institut für Strategie- Politik- Sicherheits- und-Wirtschaftsberatung (ISPSW), February, p. 1.

129 For a discussion about the use of military power to secure Russian energy interests in the Arctic, see Zysk, K. (2009) 'Russia and the High-North. Security and Defense Perspectives' in *Security Prospects in the High-North: Geostrategic Thaw or Freeze?* Rome, Italy: NATO Defence College, pp. 102-129.

130 Oldberg, I. (2010) 'Russia's Great Power Strategy under Putin and Medvedev.' *UI Occasional Papers*, 1, Swedish Institute of International Affairs.

131 A group of State Duma deputies from the ruling United Russia succeeded in introducing a law toughening regulations for nonprofit organizations working in the political sphere that are funded from abroad. Essentially, the law grants these externally-funded, politically-active nonprofit organizations the status of a foreign agent. Representatives of the nonprofits say the authorities fear the import of an "Orange revolution-style" mood to Russia.

132 The 2010 Military Doctrine of the Russian Federation names NATO expansion as a threat to Russian security.

133 The use of military bases in former Soviet countries in exchange for energy deals: the Russian lease on the naval port in Sevastopol was prolonged to 25 years by Viktor Yanukovich in exchange for a ten-year discount on the price of gas. This is just one instance of Russia using its military bases as a means of pressure against CIS states. These bases are also used to stage military activities – as was the case in Georgia in 2008.

between energy security and military alliances indicating a pivot towards, and closer cooperation with, Asia¹³⁴; and anger at Conventional Forces in Europe¹³⁵, arms limitation¹³⁶ and US plans to build missile defenses in Eastern Europe¹³⁷ all seem to suggest that Russia is also attempting to reassert itself as a regional power with global influence. Given the fact that Russia still possesses a stockpile of Soviet-era nuclear weapons and delivery systems, as well as some advanced technological capacity, the notion that Russia is trying to reinvent itself as a regional power through energy is wholly realistic.¹³⁸ Arguably, this is possible by funneling energy wealth into the modernization of the Russian military and defense sector.¹³⁹ Most notably, the \$650 billion defense spending increase pushed through in 2011, the planned increase of defense as a percentage of GDP to 4.1% for 2015, as well as large-scale efforts to modernize the Russian military serve to illustrate this trend.

3.3.1 Nord Stream and the former Soviet bloc

The fact that the energy supply to these nations was subsidized in the past now factors into Russia's ability to wield influence in the region. This can be argued based on discriminatory pricing strategies as well as a history of physical disruptions of energy supplies to the region. Coupled with the physical manipulation of energy supplies, these countries perceive Russia's energy policy as a security threat by way of discrimination in price. The fact that gas prices were subsidized and kept artificially low for the Baltic States and Central-Eastern European countries during Soviet times has made the price of gas a lever with which Gazprom can now wield influence in the region, since there exists no objective standard for pricing in the world gas market.

The price levels of gas supplied by Gazprom are set according to a formula which links natural gas price to global oil prices. Furthermore, individual prices mainly depend

134 For a discussion of CSTO-SCO ties, see Lin, C. (2009) 'The Prince of Rosh: Russian Energy Imperialism and the Emerging Eurasian Military Alliance of the Shanghai Cooperation Organisation', Berlin: Institut für Strategie- Politik- Sicherheits- und Wirtschaftsberatung (ISPSW), February, pp. 1-10.

135 The CFE Treaty has provided an unprecedented level of transparency, predictability, and stability to European security and the U.S.-Russian relationship by destroying thousands of Soviet-era weapons. There have been long-running disputes over CFE implementation and the inability of key parties to reach common ground, however. For example, according to Victoria Nuland, spokesperson for the US State Department: "Following Russia's decision in 2007 to cease implementation with respect to all other CFE States [...] Russia has refused to accept inspections and ceased to provide information to other CFE Treaty parties on its military forces as required by the Treaty" (Kimball, D. (2011) "Whither the Conventional Forces in Europe Treaty?" 22 November).

136 Although the implementation of the New START (Strategic Arms Reduction Treaty) agreement is going well, there are sharp differences in Washington and Moscow over where to go next. Moscow's main concerns focus on U.S. missile defense and U.S. superiority in conventional forces. Both conditions work against Russia's willingness to cut its offensive nuclear forces even further, which is the U.S. priority (Weitz, Richard. (2012) "Global Insights: U.S.-Russia Arms Control Prospects Under Putin." *World Politics Review*. 6 March.)

137 The stationing of Iskander missiles in Kaliningrad.

138 Critics point to the 'resource curse' as an argument against this claim; however, the Russian economy – though highly dependent on revenues from the energy sector – is well diversified, as opposed to traditional energy-dependent economies.

139 Zysk, K. (2008) 'Russian Military Power and the Arctic.' *Russian Foreign Policy*, Brussels, Belgium: The EU-Russia Center, No. 8, pp. 80-86.

on the cost of gas transmission services through local distributors, plus taxes. The prices of gas are comparatively higher for the countries of the BSR and other former Socialist countries in relation to Western Europe, indicating an uneven pricing strategy and adding weight to the argument that Russia uses energy as a political lever to exert influence within its former sphere of influence. Lithuanian Prime Minister Andrius Kubilius has said that Lithuania now pays USD 490 per 1,000 cubic meters of natural gas, while Estonia and Latvia pay around 11 percent and 20 percent less, respectively, and other European countries pay about USD 100 less.¹⁴⁰ Some sources say that Gazprom is pressing Lithuanian gas importers to sign new long-term agreements in order to ensure gas supplies for another 10-15 years and change the price formula.

Exports of gas are based on long-term contracts (up to 25 years) since, according to Gazprom, “only long-term deals can guarantee the producer and exporter returns on multibillion dollar investments required for the implementation of major gas export projects, and assure steady and uninterrupted gas deliveries for the importer in the long run.”¹⁴¹ Therefore, European consumers are often committed to their agreements, even in light of the take-or-pay provision which requires payment regardless of whether or not the shipment is fully delivered. As can be seen from Table 3-1 on the following page, which features information taken from Gazprom’s website, a number of European countries have recently renewed, extended or concluded new gas import contracts with Gazprom, indicating they are more than willing to cooperate.

After the gas crises of 2006 and 2009, the security dimension of stable energy supply was brought to the fore within the rest of the EU and was particularly underlined in the countries of the BSR. The impact of the politically-motivated gas supply cut-off to Ukraine in 2009 was especially felt by the EU Member States that depend on the transit of Russian gas through the territory of Ukraine.¹⁴² In 2007, Belarus experienced a similar incident involving the cut-off of gas supplies, despite being the Kremlin’s closest political ally.¹⁴³

The first gas supply disruption to Ukraine in 2006 affected eight Member States and inspired the European Commission’s first Green Paper entitled “A European Strategy for Sustainable, Competitive and Secure Energy,” which underlined the importance of a stable, secure energy supply to Europe. However, no concrete actions were taken to put in place mechanisms which would mitigate the effects of a repeated incident in the future. The widespread consequences of the gas cut-off to Ukraine three years later clearly illustrated the effects of such inaction. This incident not only made Russia seem like an unreliable and unpredictable partner in energy relations, it also showed the far-reaching effects of politically-motivated supply disruptions within Russia’s former sphere of influence.

140 *15min.lt* (2012) “Lietuvos Dujos asked to cut gas price for Lithuania by more than 15 percent.” 10 February.

141 Available: <http://www.gazprom.ru>.

142 Ukraine transits 80% of Gazprom’s exports to the European Union. In light of the two-week cut-off in 2009 to Ukraine, 16 European countries faced supply cuts.

143 Belarus transits the remaining 20% of gas export to the European Union that otherwise goes through Ukraine.

Table 3-1 Extension of gas import contracts between Gazprom and select EU Member States

Company and Corresponding EU Member State		Extensions of Gas Import Contracts with Gazprom
GDF SUEZ	FRANCE	2030
E.ON Ruhrgas	GERMANY	2035
Wintershall Holding	GERMANY	2030
Gasum	FINLAND	2026
RWE Transgas	CZECH REPUBLIC	2035
Eni	ITALY	2035
EconGas GWH Centrex	AUSTRIA	2027
Conef Energy	ROMANIA	2030
WIEE	SWITZERLAND	2013-2030
WIEH	GERMANY	2027
Vemex	CZECH REPUBLIC	Period up to 2013
PremiumGas	ITALY	2024
Sinergie Italiane	ITALY	2022

Source: Gazprom

After the supply cuts in 2009, Gazprom refused to apologize to its customers, insisting instead on the take-or-pay provision which forced them to pay for the undelivered gas supplies. Since then, however, there has been a cut in the price of gas for a select group of EU Member States in 2012: Germany, France, Italy and Slovakia. Furthermore, Gazprom has reduced the contract gas price for long-term contracts for consumers in Europe by an average 10% – prices for France, Germany, Slovakia, and Turkey were lowered in 2011 based on an “excess offer of gas on the world market”.¹⁴⁴ The German company Wingas; France’s GdF Suez; Austria’s Econgas; Italy’s Singerie Italiane; and Slovakia’s SPP when taken together, buy about 35 billion cubic meters of Russian gas annually – a quarter of Gazprom’s exports onto the European market.¹⁴⁵

Though these cut-offs impacted the wider EU for the first time, the use of a “coercive energy policy” by Russia was not a new phenomenon, as shown in a study carried out by the Swedish Defense Research Agency.¹⁴⁶ The authors cited 55 incidents of supply cuts, coercive price policies, and sabotage from 1991 until 2006. The authors of the study concluded that 36 of these incidents were politically motivated and 48 were economically underpinned, with Gazprom as the dominant actor in 16 of the cases. The main targets of these incidents were shown to be Lithuania, Georgia, Belarus, Ukraine and Moldova, indicating that Russia’s coercive gas policy towards post-Soviet countries appears to be habitual.¹⁴⁷ Russia’s use of coercive energy policies does not solely rest in the delivery of gas supplies, however. In 2008, Russia reduced the flow of oil to the Czech Republic via the Southern Druzhba pipeline following

144 *The Voice of Russia* (2012) “Gazprom reduces gas price for long-term contracts for Europe.” 17 February.

145 Pyszyc, Ewa. (2012) “Gazprom lowers its prices for selected customers” OSW, January 25.

146 Hedenskog and Larsson (2007) *Russian Leverage on the CIS and the Baltic States*, Stockholm: Swedish Defense Research Agency.

147 Aslund, A. (2010) “Gazprom: Challenged Giant in Need of Reform,” 151-168 in Aslund, Guriev and Kuchins, *Russia after the Global Economic Crisis*.

the signing of an agreement between Prague and Washington on radar installation for a missile defense system. Again, this seems to illustrate a politically-motivated move on the part of Russia towards a country which falls within its former sphere of influence.

The case of Russia's two biggest recent infrastructural projects, the Nord Stream and South Stream pipelines, further illustrate the varying approach of Russia towards the countries of the post-Soviet bloc versus Western Europe more generally. The Nord Stream pipeline, which was already touched upon briefly, came online in November 2011 with a capacity of 55 billion cubic meters (one third of gas imports to the EU) and connects Russia to Germany through the Baltic Sea (See Figure 3-13). It bypasses the transit countries of Ukraine, Belarus and Poland, leaving them more vulnerable to supply disruptions. As a result, plans to construct this pipeline inspired wide-spread opposition among countries of the former Communist bloc. Conversely, the proposed South Stream pipeline which is planned to travel along the Black Sea through the Balkans to Italy. This is another illustration of the varying stance of Russia and Gazprom towards different European countries. Nord Stream is clearly unfavorable for those countries in Russia's former sphere of influence (Ukraine, the Baltic States and Poland). Furthermore, the \$15 billion price tag on the Nord Stream pipeline indicates a politically-motivated measure taken by Gazprom in dealing with former Socialist countries since the project essentially made no commercial sense given the fact that a relatively smaller investment of \$3.5 billion for the 2009 EU-Ukraine declaration would secure gas transit system capacity through Ukraine.. The Nord Stream pipeline also highlighted the diverging priorities of individual countries and highlighted the divisions within the EU "on those who considered the increased import levels of Russian gas an opportunity and those who saw it as a potential threat".¹⁴⁸

Figure 3-13 The Nord Stream gas pipeline



Source: Gazprom

148 Loskot-Strachota, A. (2011) "The European Union's external energy policy and its relations with its neighbors to the East" in *Baltic Rim Economies*, Quarterly Review 6-2011, Expert article 929.

The Nord Stream project also spurred discussion within the EU about principles for investment in strategic infrastructural projects, as well as the wider debate on cooperation with third countries.¹⁴⁹ The underlying arguments revolved around keeping Gazprom from gaining influence in EU energy infrastructure and the export of the EU's principles of a liberalized energy market to external partners. It was argued that the EU's own laws and standards should dictate external energy relations. This adaptation of EU market rules to external partners runs counter to the strategies of Russian state-controlled energy companies – most notably, Gazprom. For example, the EU's Third Energy Package, which dictates the unbundling of production from processing and distribution networks, is unfavorable as Gazprom would be forced to sell parts of its assets in the EU. This would decrease its influence on the internal EU market (See Figure 13 on page 64 for Gazprom's engagement in the final gas market of the EU). Furthermore, as mentioned before, the third party access rule, which would grant third countries access to infrastructure and distribution networks, is still a contentious issue between the EU and Russia, as evidenced by Russia's refusal to ratify the Energy Charter Treaty on account of its Transit Protocol provision.

3.3.2 Belarus and Ukraine as transit countries

Russian energy relations with Belarus and Ukraine deserve particular attention in this context since their strategic position as transit countries for energy supplies to Europe has been central in shaping Russia's policies towards them. Furthermore, given their historical, political, social, cultural and economic ties to Russia, their energy relations with Russia are interesting when viewed together with those of the three Baltic States and Poland, which are all part of Russia's former sphere of influence, but are now EU Member States.

Like Belarus and Ukraine, Poland is also a key transit country for energy supplies to Europe, but has a very different relationship and level of engagement with Russia as a result of its EU membership and influence on EU Energy Policy. Poland's position as a transit country and EU Member State will be discussed in the following section.

As mentioned earlier, Russia heavily subsidized gas exports to its former Soviet republics following the collapse of the Soviet Union. Some estimates suggest that Gazprom and the Russian government provided \$75 billion in hidden gas subsidies to former Soviet states between 1992 and 2008 – with about \$47 billion going to Ukraine alone.¹⁵⁰ This situation dramatically changed after the 2005 summit of the Commonwealth of Independent States (CIS), during which Russian Foreign Minister Sergei Lavrov suggested Russia should switch to free market trade relations with its CIS partners and eliminate significant subsidies to former Soviet republics. Beginning in January 2006, Gazprom started increasing gas prices to these countries, including Belarus and Ukraine.

149 Ibidem.

150 Bochkarev, D. (2009) "European' Gas Prices: Implications Of Gazprom's Strategic Engagement With Central Asia." East West Institute, June, Vol. 236, No. 6.

Given the significant rise in energy prices that followed, Gazprom offered these countries two options: to either pay market prices for gas or to pay lower prices in return for a partial takeover of their pipeline systems. For example, Gazprom used this strategy in Belarus after a 2006 dispute with Minsk and acquired a 50% stake in Beltransgaz (the Belarusian pipeline operator) in return for significant price concessions. The following year, however, Gazprom revoked the deal and began charging Minsk market prices (minus gas export duties and the costs incurred for using Belarusian infrastructure to deliver gas to Poland). As a result, the price for Belarus rose to USD 200/Mcm in 2009 – a 68% increase in just two years. However, at the end of 2011, Belarus signed agreements on oil and gas prices in the framework of the Common Economic Zone of Belarus, Kazakhstan and Russia, resulting in a decrease of the price of gas from USD 263.5 per 1,000 cubic meters in 2011 to USD 165.6 in 2012 and the elimination of its debts for gas and electricity.¹⁵¹ In exchange, debt-ridden Belarus gave over full control of its gas pipelines and transmission network from Beltransgaz to Gazprom. It is clear that by conceding its 7490 km of gas pipelines, 5 linear compressor stations, 3 underground gasometers, 233 gas-distribution stations, and 7 gas-measuring stations, Belarus enjoys a ‘preferred customer’ price – one that is three times less than what Western Europe pays. At the same time, however, Belarus is allowing Russia to increase its influence within the former USSR.

Conversely, Ukraine has been more resistant to Gazprom’s attempts to rent or buy into its pipeline system. As a result, Kiev has been in a more precarious position regarding gas prices. In 2008, Kiev paid USD 179.5/Mcm for gas – all 55 Bcm of which were imported through RusUkrEnergo. Since Ukraine (as opposed to Belarus) refused to give up control of its 1,100-km pipeline system to Gazprom during the January 2009 gas crisis, RusUkrEnergo was excluded from the bilateral gas trade between Ukraine and Russia and replaced with a long-term sale and transit contract between Gazprom and Ukraine’s Naftogaz.

Under the new contract, Ukraine received an 80% discount on average European gas prices until January 2010 in exchange for preferential transit tariffs for Russian gas going to Europe through Ukraine’s pipeline system. In January 2010, however, the transit tariffs were calculated on a commercial basis and subsequently increased by 65%. As compared to Belarus, Ukraine’s Naftogaz paid a significantly higher price for retaining control over its pipelines and giving Russia preferential tariffs: \$360/Mcm in the first quarter of 2009, marking a 100% increase. In order to reduce its USD 14.4 million gas bill, Ukraine cut gas import levels from 55 Bcm in 2008 to 33 Bcm in 2009.

More recent negotiations between Ukraine’s Naftogaz and Gazprom regarding a discount on the price of gas have been unsuccessful, driving Ukraine to once again seek modification of imported volumes from 52 bcm to 27 bcm a year. Moscow has said it would cut the price of gas for Ukraine (currently at \$425 per 1,000 cubic meters in the second quarter of 2012, up from \$416 in the first quarter¹⁵²) only if Gazprom were able to buy into the Ukrainian gas pipeline system. However, Ukraine has refused the trade-off despite the cash-strapped state of Naftogaz and the country itself, which pays upwards of \$1 billion a month. As a result, Gazprom has insisted on sticking to its current gas supply agreement with Ukraine and refuses to decrease the amount of imported gas. The volume is set to stay

151 Belarus News (2012) “Belarus has no debt for gas, electricity imports, says vice premier.” June 22.

152 Reuters (2012) “UPDATE 1-Russia refuses to let Ukraine cut gas imports.” June 27.

at the 2009 levels of import – 52 bcm a year. The priorities for Ukraine (which imports about two-thirds of its gas from Russia) are to reduce imports in the short-term, replacing them in the long-term by saving energy, switching to coal, increasing domestic gas production and diversifying imports. Steps have been made in this direction, as Ukrainian gas imports from Russia fell 49% year-on-year in January-May to 12.8 bcm.¹⁵³

As can be seen from the examples of Belarus and Ukraine, Russia employs different strategies even within its former sphere of influence depending on the extent to which these countries are willing to yield to Russian influence and their bargaining position. Belarus, which is considered to be Moscow's closest ally, enjoys favorable pricing and elimination of debt in exchange for relinquishing control of its gas pipelines and transmission infrastructure. Ukraine, which is more resistant to Gazprom's expansion, has failed to obtain price discounts and decreases in imported volumes of gas. Instead, Ukraine is paying increasingly higher prices for gas, driving Naftogaz and the Ukrainian state itself deeper and deeper into debt and into the arms of Gazprom for loans and advance payments on gas transit.

3.3.3 Poland as a major player in European energy relations

Poland's geopolitical position as well as its relative lack of complete dependency on Russia for energy has given it a special role in mediating EU-Russia energy relations. Unlike many of its Central and Eastern European neighbors including the Baltic States, Poland still avoids being entirely dependent on Russian gas imports, putting it in a unique position to both influence the EU's long-term energy strategy as well as develop a more immediate response to greater regional energy cooperation.¹⁵⁴ Recent estimates of shale gas reserves have sparked the interest of foreign investors and indicate that Poland may become an emerging energy producer and potential regional supplier.

In terms of regional energy cooperation, there have been several projects planned such as the joint Polish-Lithuanian LitPolLink project to connect electrical grids. Furthermore, a feasibility study and tender for connecting Polish and Lithuanian gas pipelines have been carried out. A pipeline connecting Poland to Lithuania would decrease overall Baltic regional dependence on Russia as a gas supplier since Poland is connected to the wider EU through Germany, and Latvia has vast underground gas storage facilities which could be used to alleviate dependence on Russia and safeguard against supply disruptions. The LNG terminal in Swinoujscie – despite being a national project – is intended to serve as a regional hub for the transportation and distribution of liquefied natural gas.

Arguably, Poland has been the most proactive of the 'new' EU Member States in the development of EU Energy Policy.¹⁵⁵ Since the Russian-Ukrainian gas dispute in 2006, the

153 Ibidem.

154 *Warsaw Business Journal* (2010) "The dynamics of Poland's energy security." November 10

155 Sharples, J. (2012) "Russo-Polish energy security relations: a case of threatening dependency, supply guarantee, or regional energy security dynamics?" *Political Perspectives*, Vol 6 (1), pp. 27-50.

Polish Government has pushed for EU ‘energy solidarity,’ calling for an ‘Energy NATO’ or European Energy Security Treaty. Although the initiative failed, Poland succeeded in

inserting references to a ‘spirit of solidarity’ into the Lisbon Treaty (article 100; article 176) and undoubtedly influenced the 2008 Energy Security and Solidarity Action Plan (European Union, 2007b; European Commission, 2008). Thus, Poland has consistently attempted, with varying degrees of success, to Europeanise its energy security priorities (i.e. to upload its national energy security priorities to the European level) (Maltby, 2010: 15).¹⁵⁶

More recently, Poland made energy policy one of the key priorities of its EU Presidency during the second half of 2011.¹⁵⁷ It sought to balance between the two pillars of the EU’s energy policy: strengthening and developing the internal market of the EU and addressing the external dimension of EU relations with energy exporters.¹⁵⁸ The former internal dimension was given priority status, suggesting the importance of unifying market and regulatory systems within the EU before crafting a unified approach in external energy relations with transit and supplier countries. The internal focus mainly concerned strengthening the legal basis of a common EU energy market and developing internal infrastructure through regulation – namely, the implementation of the EU’s Third Energy Package. Energy policy was seen as part of a complex set of energy-related questions stretching from the internal market to infrastructure and external relations.

3.3.4 Gazprom Engagement in the Baltic Sea Region

The level of engagement of Gazprom in the internal energy markets of the three Baltic States and Poland is one of the main reasons for the different energy security strategies among these countries.

Gazprom’s share in the final gas markets of the Baltic States is the largest among EU Member States (See Figure 3-14). Gazprom is the exclusive supplier of gas to Lithuania and Estonia, while the Russian state-owned company provides 70% and controls all gas supplies to Latvia.¹⁵⁹ This overwhelming dependence is a direct result of the privatization of state-owned monopolies in the Baltic States and Russia’s apparent interest in keeping influence in the region. Following privatization, Gazprom gained nearly a third of shares in each of the three Baltic States’ enterprises –Lithuania’s *Lietuvos Dujos*, Latvia’s *Latvijas Gaze*

156 Ibidem.

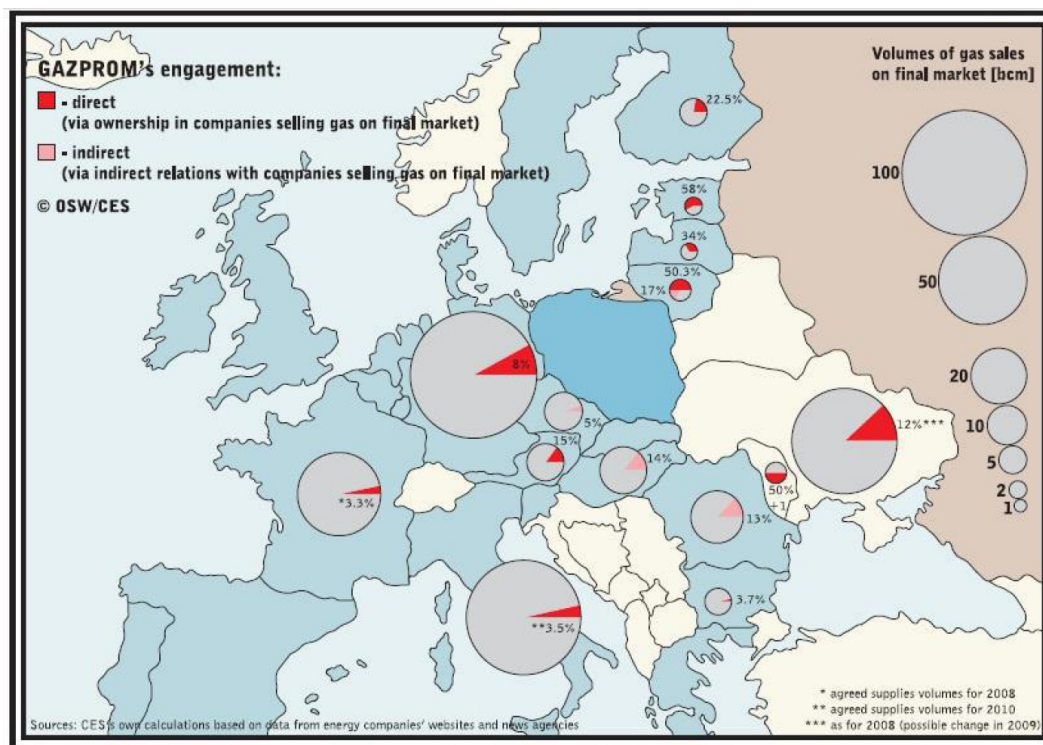
157 The Polish presidency of the EC is considered to be the last significant presidency for a long time in terms of representing Central-Eastern European interests in EU external energy relations. The most recent one prior to the Polish presidency was that of the Czech Republic in 2009. Denmark and Cyprus do not have major energy interests in the region and are unlikely to consider relations with the East as major issues.

158 Binhack, P. (2011) “Energy Priorities of the Polish Presidency of the EU Council: The Czech Perspective.” *EUROPEUM Institute for European Policy*, August.

159 The other 30% is provided by ITERA Latvija, which became the first Latvian private company dealing with natural gas in 1996. Itera Latvija owns a 16% stake (plus one share) in the joint-stock gas supply company Latvijas Gaze, which holds the monopoly of the natural gas market in Latvia.

and Estonia's *Eesti Gaas*. Various private companies operating on the Baltic States' internal markets such as Estonia's *Nitrofert* and Lithuania's *Dujotekana* also import gas directly from Gazprom and are said to have "informal links with Gazprom."¹⁶⁰ Figure 3-15 illustrates Gazprom's engagement in the Baltic gas sector and shows the far-reaching influence it has achieved within the natural gas markets of the three Baltic States.

Figure 3-14 Gazprom's share in the European final gas market



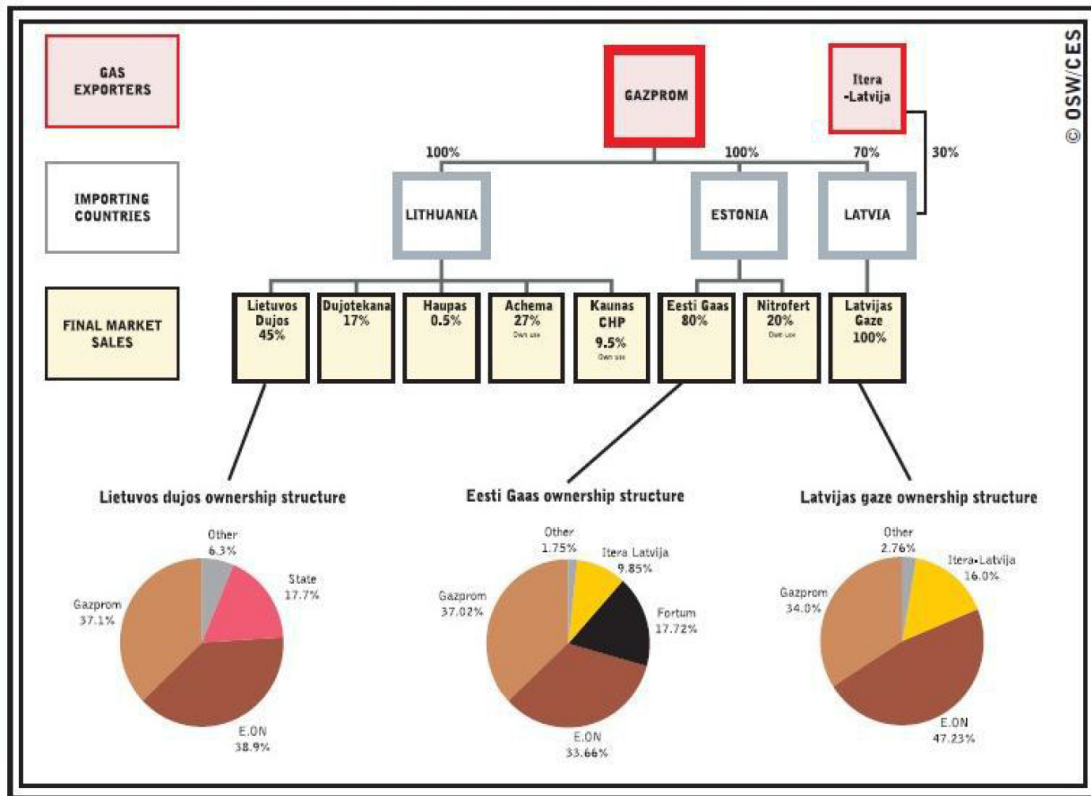
Source: OSW

Conversely, Gazprom's engagement in Poland is comparatively smaller (See Figure 3-16). Gazprom has not invested much in the Polish gas sector and does not sell gas on Poland's final market. The only direct investment is the stake it holds in EuroPolGaz, which owns the Polish section of the Yamal-Europe export gas pipeline. Its control is still however, smaller than that of the Polish company PGNiG (48.64% compared to 49.74%).¹⁶¹ A possible means by which Gazprom intends to increase its influence is by selling gas to Polish end users either directly or through affiliated companies, such as the Hungarian *Emfesz*, which is indirectly linked to Gazprom. Poland's geographical position and infrastructural interconnections allow to import not only from Gazprom, but also RosUkrEnergo – together, they are the largest supplies of gas onto the Polish market.

¹⁶⁰ Łoskot-Strachota, A. and Nałęcz. (2009) "Gazprom's expansion in the EU – cooperation or domination?" OSW, Warsaw, April.

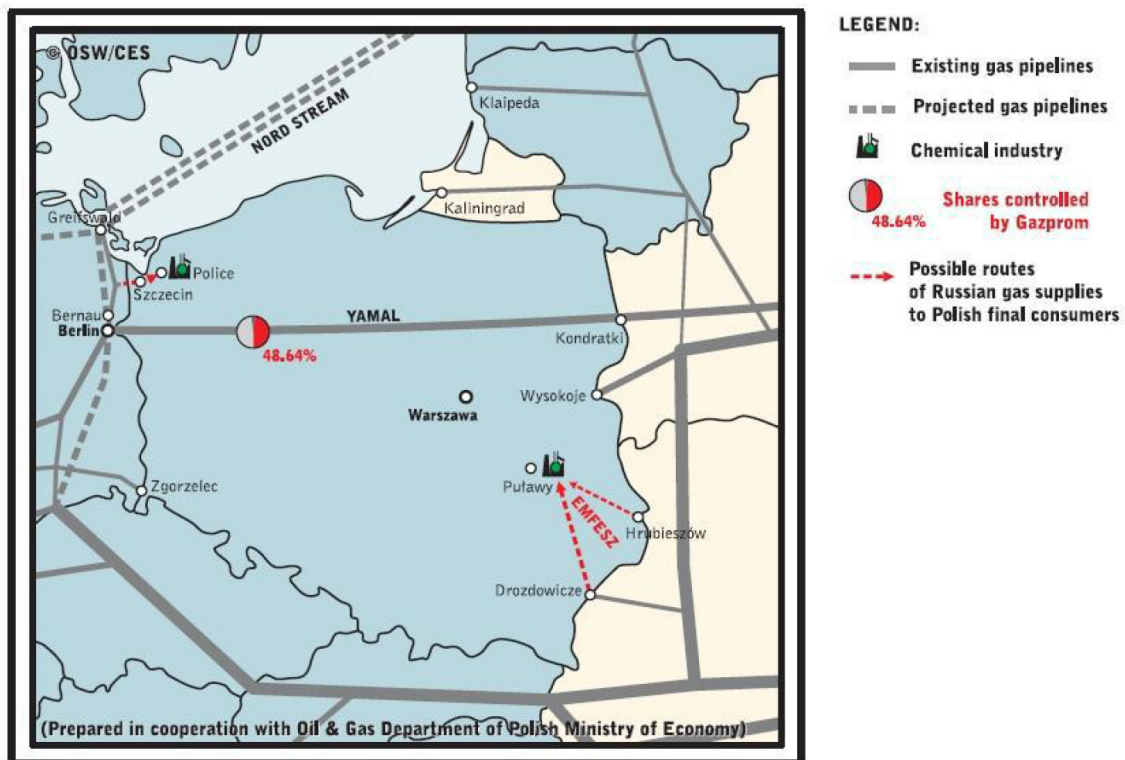
¹⁶¹ Ibidem.

Figure 3-15 Gas Sector in the Baltic States – Gazprom’s Strong Engagement



Source: OSW

Figure 3-16 Poland’s resistance to Gazprom expansion



Source: OSW

3.4 Existing structures and future prospects for Baltic regional cooperation

The previous sections have outlined the energy security strategies of the three Baltic States and Poland and explained their impact on other sectors of security. Given the closely-related interests and objectives that have formed this *Regional Energy Security Complex*, there is much room for cooperation between these Baltic countries in the energy sector. This is particularly true for Poland and Lithuania due to their geographical proximity. It is important to begin this discussion by assessing the already-existing structures and formats for regional cooperation and then proceed with prospects for future cooperation.

3.4.1 Baltic Market Interconnection Plan (BEMIP)

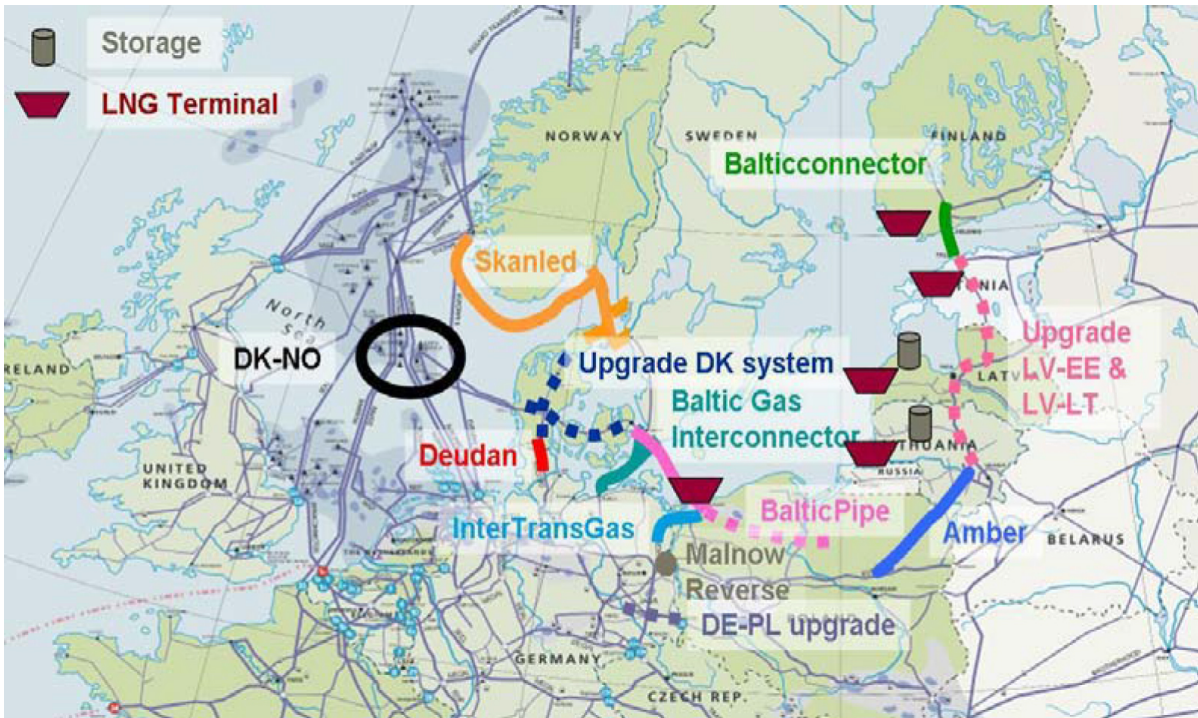
The EU's main initiative for the BSR has been the **Baltic Energy Market Interconnection Plan** (BEMIP), which was signed by eight countries in the BSR and the European Commission.¹⁶² The main objectives of the BEMIP are the full integration of the three Baltic States into the European energy market through the strengthening of interconnections with their neighboring EU countries¹⁶³; in other words, market integration and infrastructure development.

Before 2007, all three Baltic States were entirely dependent on Russia's IPS/UPS synchronous transmission grid for electricity imports. Besides Estonia, which now partially diversifies its electricity imports through EstLink-1 – a 350 MW single power transmission line that runs between Finland and Estonia – Latvia and Lithuania remain entirely dependent on the Eastern system for the import of electricity. In order to interconnect the BSR with the synchronous grid of Continental Europe, the BEMIP includes the establishment of power interconnections between Lithuania and Poland (Lit-PolLink, 1000 MW capacity, first stage – 500 MW – to be completed by 2015, second stage by 2020), between Lithuania and Sweden (NordBalt - formerly SwedLink, 1000 MW capacity to be launched in 2016) and an additional line between Finland and Estonia (EstLink-2, 650 MW capacity) (See Figures 3-17, 3-18 and 3-19).

¹⁶² The BEMIP was signed by Denmark, Poland, Lithuania, Latvia, Estonia, Finland, Sweden and Germany.

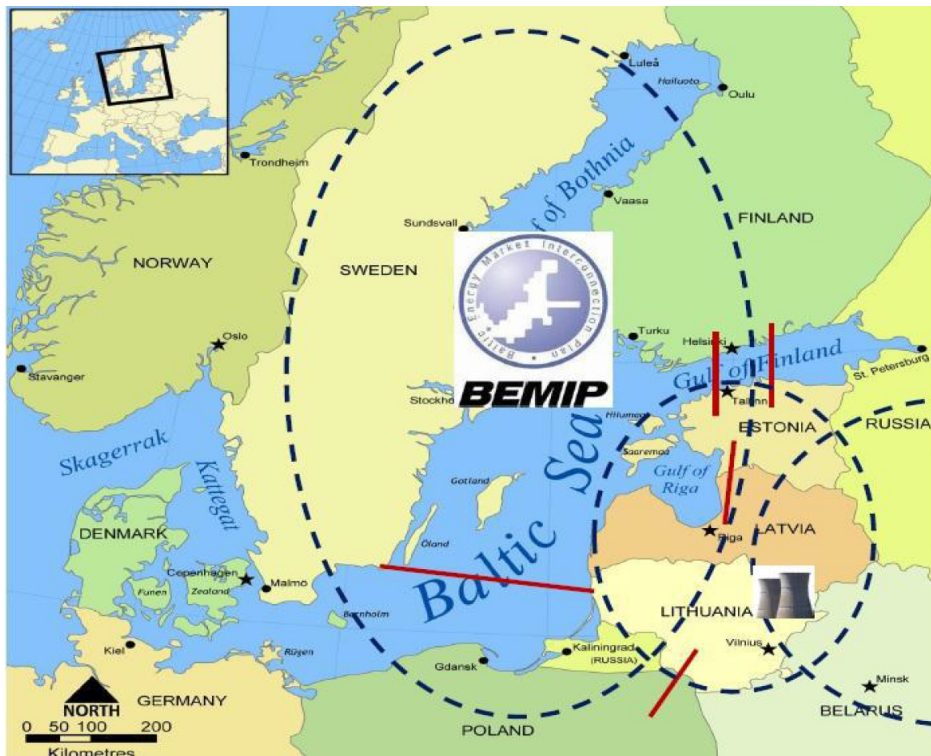
¹⁶³ European Commission (2009) *Baltic Energy Market Interconnection Plan*.

Figure 3-17 Baltic Energy Market Interconnection Plan (BEMIP)



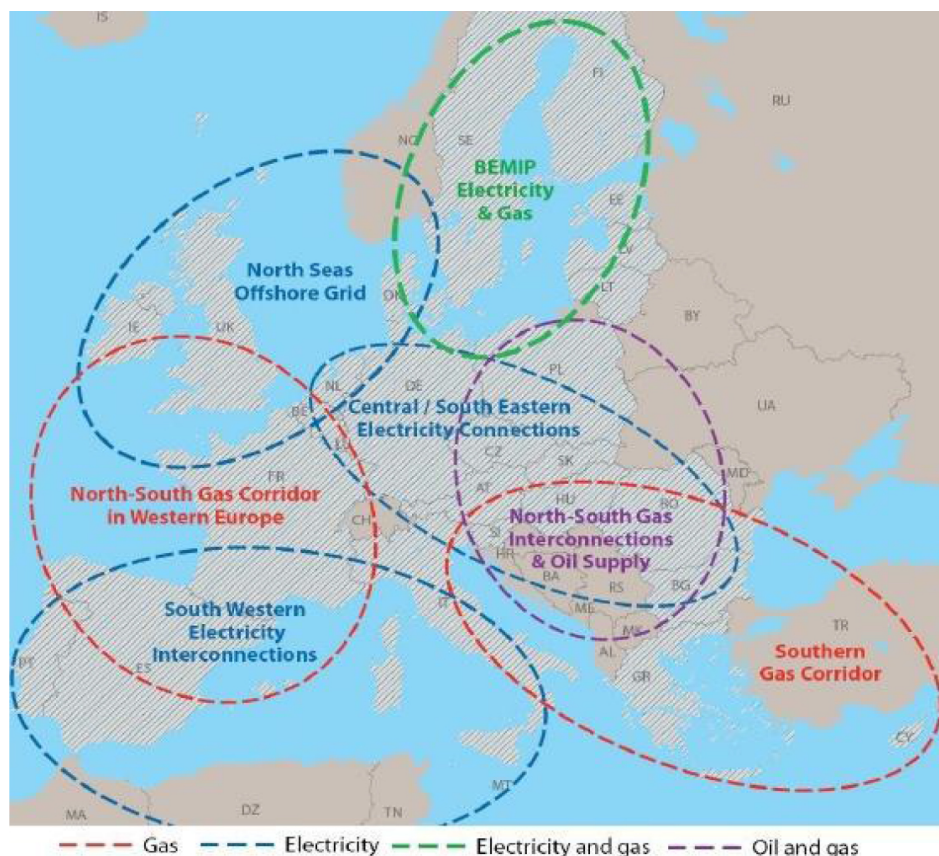
Source: European Commission

Figure 3-18 BEMIP Closed Baltic electricity ring



Source: European Commission

Figure 3-19 EU Priorities until 2020 – Electricity and Gas Interconnections



Source: European Union Directorate for Energy, 2010

Together with this energy infrastructure development, the liberalization of the distribution market within the Baltic States through the EU's **Third Energy Package** is meant to help the Baltic States overcome their energy vulnerabilities. The three options for ownership unbundling – separating production from processing and distribution – in the EU's Third Energy Package are:

1. full ownership unbundling (the strictest option) which entails the full separation of ownership of gas transportation from distribution;
2. Independent System Operator (ISO) retains transmission system operator responsibilities enabling the vertically integrated operators to keep transmission assets on its balance sheet;
3. Independent Transmission Operator (ITO) energy companies retain ownership of their transmission networks, but the transmission subsidiaries are legally independent joint stock companies (ITOs) operating under their own brand name, under a strictly autonomous management and under stringent regulatory control.

In regards to liberalization, however, “Russian electricity production has the advantage of being half as much cheaper than in the EU... It is difficult to apply the open power market principle without letting cheap Russian energy into the market, while not breaking the WTO

rules prohibiting anti-protectionist tariffs.”¹⁶⁴ This highlights the importance of strengthening infrastructural interconnections between East and West while creating a common Nordic-Baltic energy market. By consolidating the internal energy market within the region, the Baltic Sea will be interconnected with the rest of the EU and “an important step for the further development of the EU’s external energy relations” will have been made.¹⁶⁵ The idea is that a common market with common rules and regulations internally will help the EU speak with a more unified voice in its external energy relations.

In this regard, other integral projects under the auspices of the BEMIP are the new regional NPP in Visaginas as well as a joint LNG terminal. As regards the former, diversification through introducing nuclear power can enhance security against price volatility, which is a concern with importing electricity from external suppliers. Despite the dramatic peak in the price of uranium in 2007, it has steadily been decreasing and leveling out since then; furthermore, its share in generation costs is small, with “the cost of uranium or to a lesser extent coal, account[ing] for a much lower share in electricity generating costs than does oil or gas (uranium 2–5%, coal 30–35% and gas 60–70%). This results in electricity generating costs that are more insulated from resource price fluctuations” (IAEA 2007). Although the EU on principle does not finance commercial projects, Lithuania has argued that “the plant will help implement an important regional project, which will also help meet the objectives set for other infrastructural projects financed from the EU budget”¹⁶⁶ – namely, the electric power transmission lines between Lithuania and Poland and Lithuania and Sweden. Visaginas would also “give the countries energy autonomy and ensure a greater energy balance which, in turn, would facilitate the synchronization process.”¹⁶⁷ This could make Lithuania eligible for preferential loans from EURATOM and the European Investment Bank.

Besides building a NPP and constructing a regional LNG terminal, underground gas storage is another way to address market flexibility in the Baltic States. Latvia’s underground gas storage capacity at Incukalns exceeds its annual gas consumption by approximately 150%, meaning its capacity could be further increased and its storage requirements of 90 days extended to help meet regional needs.¹⁶⁸

3.4.2 Prospects for regional cooperation

There are several key sectors that can support regional project initiatives. Although they are promising, there have been some setbacks to cooperation among regional partners. Russia’s “energy nationalism,” which is intended to apply political pressure through coercive energy policies, is also prevalent in the energy policies of the Baltic States them-

164 Maigre, M. (2011) “EU impact in the Baltic: success and challenges.” EU4Seas interview.

165 Korhonen, J. (2011) “The Baltic Sea and the Arctic will increase their importance in the energy security of the European Union.” *Baltic Rim Economies*, Quarterly Review 5-2011, Expert Article 864.

166 Hyndle-Hussein, J. (2012) “Visaginas Nuclear Power Plant – still high-risk investment.” OSW, 26 July.

167 Ibidem.

168 EU accession required the development of 90 day reserves for oil and oil products in all Baltic countries.

selves.¹⁶⁹ Each country tends to strive towards unilateral benefits, sometimes at the expense of cooperation among themselves.

LNG

One of the priority projects of the BEMIP is a regional LNG terminal. However, there is little consensus on which of the three Baltic States should host the terminal. Plans in both, Estonia and Lithuania run against expert advice that one terminal in Riga would be sufficient. Arguments in support of Riga center on the well-developed overland gas transmission pipelines and their high penetration throughout the country, as well as the vast Incukalns gas storage facilities which could help regulate seasonal demand fluctuations and serve as storage for regional gas reserves.¹⁷⁰ In order to make the LNG terminal in Estonia feasible, the current working pipeline would have to be expanded in order to pump gas from the Muuga Port in Tallinn to a terminal which is yet to be designed, and then further on to Incukalns storage facilities in Latvia. Lithuania would have to build a new gas pipeline between Klaipeda and Jurbarkas and then extend the northern branch to Siauliai. On the other hand, Klaipeda has a favorable location as one of the northern-most ice-free ports on the east coast of the Baltic Sea. Lithuania has decided to pursue the terminal in Klaipeda out of ‘national necessity’ despite the fact that a study ordered by the European Commission indicating the best-suited place for an LNG terminal is to be published only later on this year. It is planned that the LNG terminal, estimated to cost about 200 million Euros, will have an annual capacity of 2 billion to 3 billion cubic meters. About a billion cubic meters of gas should be pumped via the terminal in the first year.¹⁷¹

Amid criticism during a conference about Nordic-Baltic relations in Vilnius, former Vice Minister of the Ministry of Energy for Lithuania Romas Svedas (who resigned from his post in 2011) commented that the idea of a single regional LNG terminal could only work if the regulatory and legal framework were uniform across the Baltic States and that the EU’s Third Energy Package were fully implemented in all three countries.¹⁷² In an elaboration during an interview with the Baltic News Service, he cited the fact that Lithuania chose to implement the strictest of the three unbundling options,¹⁷³ whereas Latvia and Estonia were more lenient in their pursuit of EU goals of gas market liberalization¹⁷⁴:

169 Karabeshkin, L. “Energy nationalism and cooperation in the Baltic Sea region.” *Baltic Rim Economies*, Quarterly Review 1-2012, Expert article 987.

170 Ibidem.

171 *15min.lt* (2012) “Cheaper gas to Lithuania - only through breaking Gazprom’s monopoly”, 12 April. Available:

172 Romas Svedas, Energy Security Panel at Conference “Empowering the Nordic Baltic Relations – Challenges of the 21st Century.” May 10-11, 2012. Sponsored by the Institute of International Relations and Political Science of Vilnius University, STETE Finnish Committee for European Security, the Swedish OSCE Network, and the Non-governmental Organisations’ Information and Support Centre. Vilnius, Lithuania.

173 The separation of ownership of gas transportation from distribution in Lithuania was directed at the gas sector monopoly, SC Lietuovos Dujos (38.9% of whose shares are owned by E. On. Ruhrgas, 37.1% by Gazprom, 17.7% by the Lithuanian government, and 6.3% by minority shareholders).

174 Latvia announced that the direction its gas sector will take, as well as the management of natural gas transfer, will be clear by 2017.

“Lithuania has already passed a law to separate the gas transmission pipeline; the Latvians have not done that, nor have the Estonians. We cannot even talk about a common terminal while there is no common legal environment. How will it work? It is impossible to talk about a commercial model for three countries while we do not have a common environment.”¹⁷⁵

Without a uniform regulatory and legal framework that effectively makes vertically-integrated, monopolistic energy companies obsolete in the BSR, the prospect of a single regional LNG terminal seems unlikely. The ways in which the Baltic States have chosen to reorganize their respective gas sectors, their suspicious attitudes towards each other and the perception of energy as a matter of national security as (opposed to regional security) has proven to hamper this development.

The lack of consensus has also, in a way, been provoked by Russia. At the beginning of 2011, Vice-president of Gazprom Valery Golubev announced that Latvia and Estonia will see a 15% price cut, to the exclusion of Lithuania.¹⁷⁶ Reportedly, he said the reason was the “inadequate Vilnius behavior while restructuring the gas sector, and trying to separate the gas transfer pipelines from SC Lietuvos Dujos.”¹⁷⁷

This spurred Lithuania to pursue its own LNG terminal in Klaipeda out of “national necessity.” However, since the facility needs to be commercially viable – meaning a minimum capacity of 1 billion cubic meters of gas per year – and since Lithuania chose a 3.5 billion cubic meter capacity, it is clear that both Latvia and Estonia’s market potential were factored into the decision. On the other hand, problems relating to gas storage¹⁷⁸ and the seasonal demand fluctuations¹⁷⁹ will inevitably add about 10% on to the price of gas for storage fees, making the terminal in Klaipeda less practical in this sense, as it will have to transport its LNG to the underground storage facilities in Latvia anyway.

Latvian Minister of Economics Daniels Pavluts explains the inability of the Baltic States to cooperate on the regional LNG terminal project by two factors: firstly, the countries perceive energy as an issue of state security and consider their national interests very carefully; secondly, “as a newcomer to politics I was shocked that there was so much distrust between the countries,” admits Pavluts.¹⁸⁰ Estonia and Lithuania view the offer to build the regional

175 *The Baltic Times* (2012) Staselis, R. “Lack of agreement sinks common Baltic LNG terminal.” 29 May.

176 *Moskovskie Novosti* (2012) Grivach, Aleksei. “Зампред правления «Газпрома» Валерий Голубев: «Цена газа для Литвы не зависит от состава правления Lietuvos Dujos.» 11 February.

Previously, Lithuania, Latvia, and Estonia belonged to the same department of Gazprom, which was handling gas contracts with the rest of ex-Soviet republics and the negotiations were coordinated by Valery Golubev (former member of St. Petersburg’s KGB clan) current deputy chairman of the Board of Gazprom. In January 2011, Valery Golubev announced that, contrary to Latvia and Estonia, Lithuania shall not see a 15% gas price cut “due to the country’s peculiar approach on the application of the EU III energy package.” (*The Lithuania Tribune*. (2012) “Gazprom recognises the Baltic states’ withdrawal from the Soviet Union.” 17 February.)

177 Reported by *Moskovskie Novosti*, cited in *The Baltic Times* (2012) Staselis, R. “Lack of agreement sinks common Baltic LNG terminal.”, 29 May 29.

178 There will be an inevitable need to search for storage for gas transferred through the Klaipeda terminal during the warm season because of low demand; the most likely destination will be the Incukalns facility in Latvia. The Syderiai underground gas storage facility in Lithuania is moving slowly and is unlikely to be done by 2020 – when the planned LNG terminal in Klaipeda is said to be operational.

179 The amount of gas transferred to Lithuania varies by four to five times depending on the season.

180 *Rebaltica.lv* (2012) Brauna, A. “Lack of trust disrupts gas project.”, 05 May 5.

LNG terminal in Latvia with suspicion, since this could potentially be done in the interest of Gazprom given the especially prominent activity of the Russian state-owned conglomerate in the internal gas market of Latvia. Furthermore, Gazprom continues to have unchallenged control of the pipeline grid in the country, which would allow it to control the transmission and distribution of any non-Russian gas pumped from an LNG terminal into Latvian territory and onwards throughout the Baltic region.¹⁸¹ Latvia has argued that the LNG terminal “would be built by the state-owned Latvenergo, which isn’t connected with Gazprom [so] Latvia couldn’t involve Gazprom even if it wanted to, as the EC wouldn’t finance such a project.”¹⁸²

There is even a lack of consensus within Latvia itself on where to build the regional LNG terminal. Latvijas Gaze CEO Andrians Davis believes the terminal should be built in Estonia: “It will be best if the regional liquefied natural gas terminal is built in Estonia, also involving Finland in the project,” since the cost of maintenance for the huge underground gas storage facility in Incukalna would add to the already high prices Latvian consumers pay for gas, added to the enormous investments required for building the terminal.¹⁸³

Given the high price of constructing an LNG terminal and the relatively small Baltic market, one terminal would most likely be sufficient for the needs of all three Baltic States. The European Commission supports this position and is prepared to co-fund such an initiative since it would decrease dependence on a single supplier and spur the development of a single gas market; however, the lack of consensus among the Baltic States and Lithuania’s own national LNG terminal project suggest that this advice will not be heeded. Lithuania’s Norwegian floating terminal at Klaipeda is planned to begin operations in 2014. On July 3, 2012 an international tender for a pipeline to connect the planned LNG terminal in Klaipeda with the country’s facility in Lithuania is moving slowly and is unlikely to be done by 2020 – when the planned LNG terminal in Klaipeda is said to be operational. gas transmission grid was announced, signaling a strong commitment to this national initiative.

Nuclear Power

The NPP in Visaginas, Lithuania is another priority project within the BEMIP. However, it is also an example where regional cooperation remains tentative and depends on the will of individual countries. Following the closing of the second nuclear reactor at the Ignalina plant in 2009 in accordance with EU regulations (the first reactor was shut down in 2004), Lithuania became heavily dependent on imported electricity (over 60%) primarily coming from Russia. This adds to the already high dependence on supplies of Russian oil and natural gas.

Before Ignalina’s closing, Lithuania produced 70% (9.8 billion kWh out of 14.0 billion kWh gross) of its electricity at the Ignalina plant, with a much smaller percent (17%, or 2.4 billion kWh) being produced from gas,¹⁸⁴ consequently, the closing of Ignalina heavily increased

181 Socor, V. (2012) “Baltic LNG Terminals Conditioned by Gas Sector Reform.” *Eurasia Daily Monitor*, Volume: 9 Issue: 128, 06 July.

182 Ibidem.

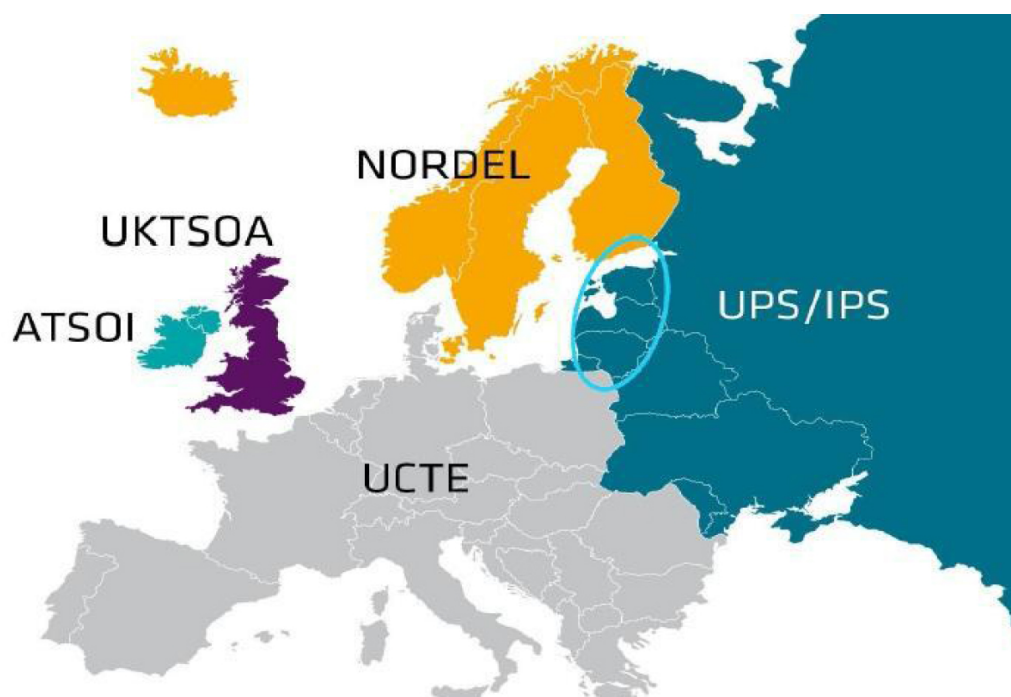
183 *The Baltic Course*. (2012) Petrova, A. “Latvijas Gaze: regional LNG terminal should be built in Estonia.” 06 July.

184 World Nuclear Association (2012) Figures are from 2007.

Lithuania's overall dependence on Russia for energy supplies.¹⁸⁵ This development has also had an impact on Latvia and Estonia – particularly Latvia since Estonia has been linked to Finland (and the Scandinavian grid) through the EstLink-1 interconnection after its opening in 2007. Since the electricity produced at Ignalina was exported to both Latvia and Estonia, the two countries likewise became more dependent on electricity imports after its closing. With electricity consumption in the three Baltic countries expected to rise to 29-33 billion kWh/yr by 2020 and electricity imports from the EU forecast to double by 2016¹⁸⁶ as NordBalt and LitPolLink come online, a new regional NPP is seen as a realistic option in helping to meet that growing demand.

Without a regional NPP, only two-thirds of the Baltic States' projected consumption will be met by remaining capacities.¹⁸⁷ Latvia has thermoelectric-power plants and hydroelectric power plants for electricity generation; however a NPP would ensure a stable electric energy supply in the long-term and would not infringe on the EU's CO₂ emission standards. In the case of Lithuania, a NPP would mean energy independence. When the planned interconnectors with Poland and Sweden become operational in 2016, electricity imports from Russia are projected to cease completely.¹⁸⁸ Latvia's energy dependence would be decreased as well, since Lithuanian and Latvian power systems are closely connected, meaning electricity can be supplied from one country to another without any major restrictions. The interconnections with Poland and Sweden will connect the Baltic States into the synchronous electrical grid of the Nordic countries (NORDEL) and of Continental Europe (UCTE) as illustrated in Figure 3-20.¹⁸⁹

Figure 3-20 Synchronous Connection of Baltic States to Grids of Europe



Source: Elering

185 Lithuania is 80% dependent on Russia for energy in general.

186 Figures from the World Nuclear Association.

187 Ibidem.

188 Ibidem.

189 *The Baltic Course*. (2012) Vaida, P. "Latvenergo: no alternatives to Visaginas NPP in Baltics" 14 August.

One precondition to the development of a regional NPP is ensuring the required capacities to satisfy the needs of each respective country as stakeholders in the project. Currently, the project company will initially have only two shareholders: VAE SPB¹⁹⁰ and Hitachi Visaginas Project Investment. Latvia's Latvenergo and Estonia's Eesti Energia are expected to join in at a later stage, despite growing tensions between the regional partners. Hitachi would own 20 percent of shares in the project company; Lithuania would hold 38 percent and Latvia and Estonia would take stakes of 20 percent and 22 percent, respectively.¹⁹¹ The Visaginas project is estimated to cost up to 5 billion euros at current prices and around 6.8 billion euros including interest, inflation and changes in the investment value due to exchange rate fluctuations. Under the plan, around 4 billion Euros could be borrowed, and VAE, the Latvian and Estonian companies and Hitachi could provide 2.8 billion Euros in their own funds.¹⁹² The ownership stakes could change somewhat if Poland joined the project. Last December, the Polish energy company *Polska Grupa Energetyczna* (PGE) decided to freeze its participation in the Visaginas project in Lithuania, naming unacceptable conditions and other important projects as the reasons to pull out.¹⁹³ However, the Polish company said that this did not mean a complete refusal to take part in the joint project, which it deems as critical to the energy security of the Baltic States. Poland's own ambitious national nuclear program, which aims at building three plants by 2030, is one of the main reasons for freezing Polish participation in the regional Visaginas project. There is no doubt that the nuclear program will have certain advantages for the Polish economy in both the short-term and long-term. In addition to helping to meet EU-mandated levels regarding CO₂ emissions, the program can help to stimulate regional economic revival, boost national industry, and help develop Polish R&D resources, as well as new faculties at universities.

Mirosław Lewiński, Advisor to the Minister at the Department of Atomic Energy of the Polish Ministry of Economy, points out that the construction and operation of the plants will “significantly contribute not only to increasing energy (and economic) security of Poland and the region, but will also provide energy at reasonable prices to the Polish population - for example, regardless of the price of CO₂ emissions and subsidies for renewable energy.”¹⁹⁴ When asked to analyze the potential regional impact of the Polish nuclear program on wider Baltic Sea regional cooperation (specifically regarding the Visaginas NPP in Lithuania), Mr. Lewiński stated:

“Frankly, I do not understand why Lithuania considers the nuclear power plant in Visaginas as a regional project. Two to three years ago, there were talks about Polish participation in the project in exchange for a minimum 1000 MW of power for our needs. However, as a result of the activities of the Lithuanian side, all companies interested in the project withdrew, leaving only GE. Current numbers show the projected power to be at 1300 MW (practically, what Poland demanded). This means that from the standpoint of energy requirements, the project is not interesting for Poland (it will probably cover the energy needs of the Baltic States - although there remains the question of the power grid and connections between them).”¹⁹⁵

190 Visagino Atomine Elektrinė – Specialios Paskirties Bendrovė – “Visaginas Nuclear Power Plant – Special Purpose Vehicle”.

191 *15min.lt.* (2012) “Lithuania will not sign concession deal with Japan's Hitachi in June.” 25 June.

192 *Ibidem.*

193 *The Baltic Course* (2012) Vaida, P. “Kubilius: Visaginas NPP door open for Poland.” 8 June.

194 Email interview. November 18, 2011.

195 Email interview. November 18, 2011.

Mr. Lewinski believes that the Visaginas plant can be regarded as a regional project, but only “in terms of the connection of Lithuania (and the Baltic states), with Poland and the EU (construction of connections is underway). The Polish nuclear energy program (with a capacity of at least 4,500 MW) will work for Polish needs, but the possibility of allocating a part of our power to other countries in the region is not excluded.”¹⁹⁶

So, it seems that although the nuclear initiatives in Kaliningrad and Belarus are considered to be competition for the planned Polish plants, their potential impact has been disregarded based on a lack of interconnection to lucrative Western European markets. It is worth noting, however, that infrastructural interconnections are relatively inexpensive and realistic projects, especially given the competitive prices that will be set by both Kaliningrad and Belarus given the fact that the construction of their plants will not require loans as opposed to Visaginas or the Polish plants. It is clear that from Mr. Lewinski’s comments, the Polish government is clearly pursuing projects that will help meet domestic needs and strategic national interests. If implemented according to plan, they will help meet the growing domestic need for fuel and energy while meeting EU-mandated levels for carbon emission. The allocation of a portion of this supply for export to other countries in the region is also a possibility. This could help strengthen plans for the construction of interconnections between countries of the BSR, fostering closer regional cooperation and helping to achieve the EU’s goals under the BEMIP.

Another possible scenario would be a decrease in the dependence of the Baltic Region on Russia for electricity. The Polish plants (along with the necessary regional interconnection projects) would provide an alternative source of energy to states in the region, helping to decrease dependence on Russia. The competing plants planned in Kaliningrad and Belarus could, however, pose a threat to this scenario. Relatively inexpensive infrastructure projects could connect these competing NPPs with markets in Western Europe. Furthermore, these two plants could pose a security risk depending on their adherence to international environmental safety standards. When asked about the competing nuclear initiatives in Kaliningrad and Belarus, Mr. Lewinski commented:

The power plant in Kaliningrad is competition for our plant. However, it has no direct influence on Polish plans, because there is no possibility of importing electricity from Kaliningrad into Poland. The power plant in Belarus would be built primarily for the purpose of Belarus and it seems that export opportunities are limited (it will be interesting to see what kind of clauses on energy exports are included in the contracts concluded by Belarus with Rosatom?). I believe that these stations will not affect regional energy security. I think the focus should be on their nuclear safety (for example, subjecting them to the requirements worked out based on stress tests - Russia, moreover, voluntarily expressed interest in participating in the stress tests).

Analysis of the combined sources of information contained in this paper suggests that the hesitation on the part of Poland in the regional Visaginas NPP project is a result of two factors – both purely economic in nature.¹⁹⁷ The first is the fact that the capacity of the regional NPP is too small to meet the needs of Poland to be attractive. Second, the past expe-

196 Ibidem.

197 This economic rationale reflects the wider, more pragmatic stance of Poland in energy relations.

rience of Polish companies in the Lithuanian energy market has not been entirely positive and in this context, Poland is not yet satisfied with the business conditions associated with the Visaginas project. The apprehension on the part of Poland is connected to the blockage of railways from the Mazieiku oil refinery (which is owned by Polish *PKN Orlen Lietuva*) to Latvia, making the transport of oil products much more expensive given the longer route by which they must be transported. The fuel now must first be shipped to Lithuania and then transported to Mazeikiai by train – significantly increasing the cost of production, which has prompted *PKN Orlen* to consider selling its Lithuanian asset.

Furthermore, Ambassador of Poland in Lithuania, Mr. Janusz Skolimowski, in an interview cited the “long lasting logistic problems caused by Lithuanian side, with no perspective for quick solution despite many economic and financial proposals” (referring to the blocked railway to Latvia) as another issue standing in the way of regional security in the oil sector.¹⁹⁸ Some experts also believe this incident has clouded wider cooperation in energy projects, namely the Visaginas NPP project.

The lack of guarantees for the project’s financial viability has also caused reluctance on the part of Latvia and Estonia. At the end of June 2012, Latvian Prime Minister Valdis Dombrovskis sent an official letter to the Lithuanian government, stating that his country “could withdraw from the project if it did not receive assurances of tangible benefits.”¹⁹⁹ Estonia has also had doubts and “must decide between purchasing 300 MW from Visaginas and rebuilding an additional block with the same capacity at its shale gas power plant in Narva.”²⁰⁰ The underlying issue is that Lithuanian government has not yet presented the detailed estimates which support its claim that Visaginas would produce electricity at a highly competitive price. The financial soundness of the project will ultimately determine whether or not the regional partners cooperate on Visaginas.

Other factors being taken into account by regional partners are the planned NPP projects in Belarus and Kaliningrad: the Ostrovets NPP being constructed in Belarus and the Baltiiskaya NPP in Kaliningrad (See Figure 3-21). Besides geopolitical reasons given the Russian influence in both of these projects, the concern is primarily due to environmental issues – the impact of which would directly affect all the countries in the region. The Ostrovets plant is of particular concern to Lithuania, since its planned site is a mere 50 km from Vilnius, near Belarus’s western border with Lithuania. Furthermore, the fact that the intergovernmental agreement with Russia regarding the Ostrovets plant was ratified in secret²⁰¹ due to its significance to national security, Belarusian ecologists were outraged at the lack of compliance with the Aarhus Convention on the right of civil society to participate in the decision-making process on environmental issues.²⁰² Furthermore, the refus-

198 Interview with Mr. Janusz Skolimowski in *Best in Lithuania* – Magazine about Business, Science and Culture leaders in Lithuania. Issue Nr. 2 (10), 2010.

199 Hyndle-Hussein (2012).

200 Ibidem.

201 It has, however, been made public on the website of the Ministry of Foreign Affairs of Russia.

202 Belarusian authorities have tried to downplay the environmental protection dimension, focusing instead on the ostensible increased energy independence that will result from the construction of the plant. However, in a report carried out by the Environmental Geochemistry Institute under the Ukrainian National Academy of Science released in October 2011, the shocking conclusion that “the operations of the Ostrovets NPP or a possible accident will not have a major im-

al of Belarus and Russia to be subject to EU stress tests and to accept a mission of the International Atomic Energy Agency (IAEA) to objectively evaluate the plant's safety have sparked widespread concern across the Baltic littoral states.²⁰³

Adding to the environmental concerns of the Baltic States and Poland is the political implication of both the Baltiiskaya and Ostrovets NPPs. The cooperation with Russia, which is key in the development, design, construction and operation of both plants, is looked upon by these countries with suspicion, given their high levels of securitization of energy dependence on Russia and historical *enmity* in line with Barry Buzan's Regional Security Complex Theory. With two NPPs within the region that are being constructed under Russian influence, the apprehension of Lithuania, Latvia, Estonia and Poland can hardly come as a surprise. Furthermore, the NPP in Visaginas will have to compete with the ones in Kaliningrad and Belarus, since they will undoubtedly offer electricity imports at a cheaper price given the fact that the project will be financed without loans.

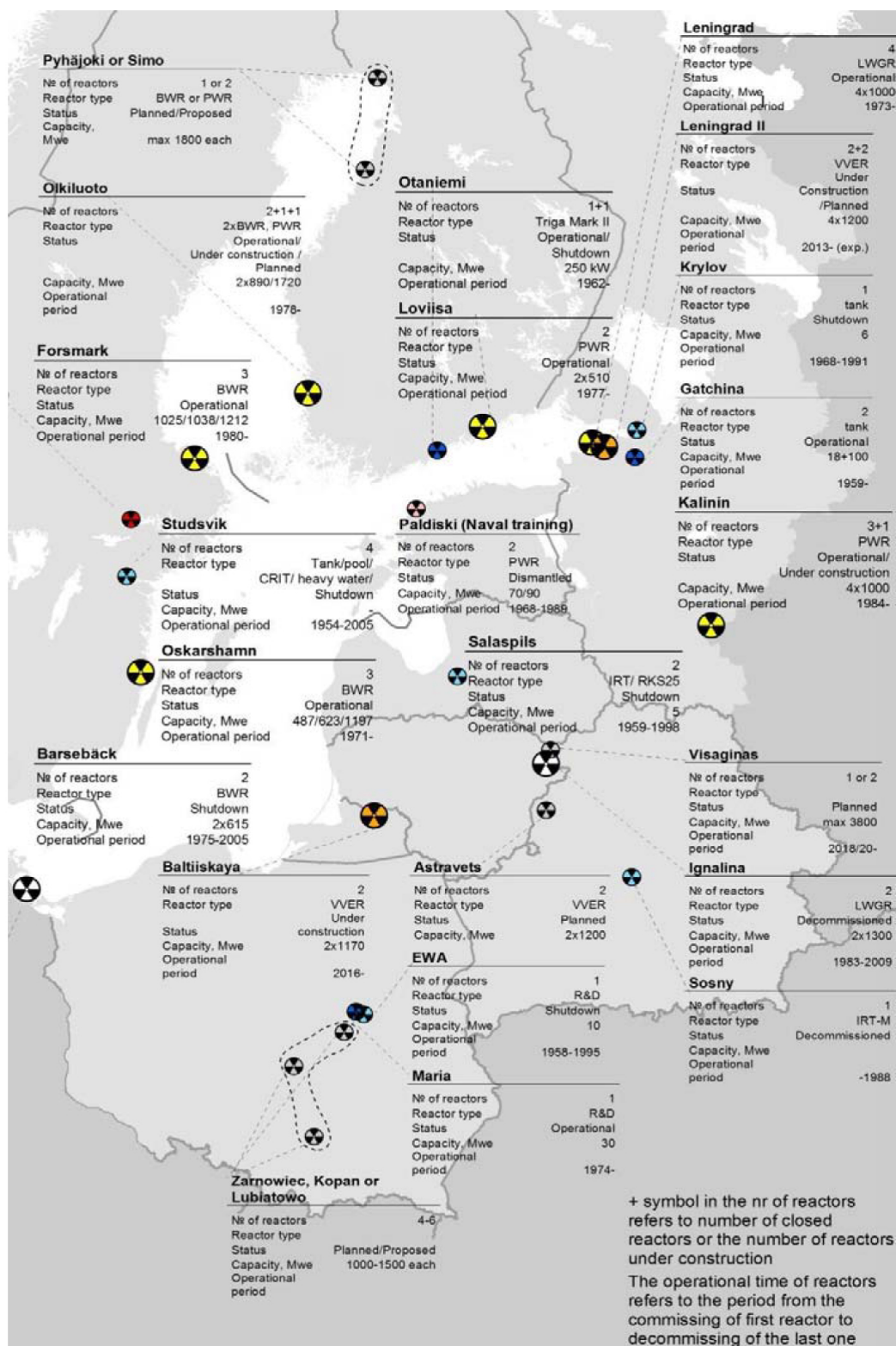
Russia has on various occasions proposed to include Poland and Lithuania in discussions and to open the door to regional participation in the nuclear project being planned in Kaliningrad. This is based on an economic justification and a strategic interest in being included into the dynamics of regional energy networks. By including Lithuania and Poland in the project, an economically viable undertaking – which would necessarily include an agreement to link electricity systems – would be ensured.²⁰⁴ However, given the Lithuanian initiative of the Visaginas NPP and the Polish government's ambitious nuclear program which would include at least three nuclear power units before 2030 with the construction of one to be completed by 2020 – regional support among the BSR for the plant in Kaliningrad is effectively nonexistent. The prospect of yet another NPP in the region is looked on as unfavorable in terms of competition and in terms of questionable safety standards. However, the idea that Russia should be included into the discussions regarding the building of a NPP is valuable.

pact on the environment or people" has been made. Furthermore, neither Lithuania nor the impact of the plant on its citizens is mentioned anywhere in the document, further leading to the apprehension of not only Lithuania, but the other Baltic States and Poland, about the construction of the plant. (Molis, A. (2011) "Construction of the Ostrovets Nuclear Power Plant: Whom to Trust and What to Expect?" *Energy Security Highlights*.)

203 Ibidem.

204 Following the collapse of the Soviet Union and independence of the three Baltic States in 1991, Kaliningrad became an isolated Russian exclave completely dependent on energy transit routes through Lithuanian territory.

Figure 3-21 Nuclear power plants and reactors in the BSR, 2011



Source: Nordic Centre for Spatial Development, 2011

Shale Gas

One of the biggest potential game changers in the BSR could be the emergence of shale gas as a viable source of energy. Large reserves of shale gas are believed to be located in Poland, with reports saying Poland could transform from an energy-dependent country into a net exporter of energy. The shale gas boom in the United States inspired

a host of American companies to take interest in the Polish energy market, as the BSR could become the new location of a “shale boom.” Initial reports by the Energy Information Administration (EIA) estimated that Poland might hold 5.3 trillion cubic meters of shale gas, making them the largest reserves in Europe. However, newer studies done by the Polish Geological Institute cut that estimate by 90%, with 768 billion cubic meters as a more realistic amount. As a result, ExxonMobil ended exploration after tests failed to find gas in commercial quantities.²⁰⁵ Waldemar Pawlak, Poland’s Minister of Economy, suggested that ExxonMobil’s agreement with Rosneft the previous week to develop tight oil reserves in Siberia were to blame for its sudden loss of interest in Polish shale gas reserves.²⁰⁶ The Polish government continues to support the exploration of shale gas²⁰⁷ and although the lower estimates are unlikely to turn Poland into the net gas exporter it hoped to be, it would significantly decrease gas imports from Russia – which currently supplies about two-thirds of the 14bn cubic meters of gas the country consumes annually. Mikołaj Budzanowski, Minister of the Treasury, estimates that the first commercial shale gas extraction should begin in 2014-2015, with up to 1 billion cubic meters initially coming to market. Production would eventually be increased to 5-10 billion cubic meters a year.

However, as mentioned at the beginning of this chapter when discussing the Polish energy strategy, there are several setbacks to shale gas development – namely mineral rights and environmental concerns related to the controversial ‘fracking’ technique, which involves pumping water at a high pressure deep under the ground in order to fracture rock, releasing trapped oil and gas. The NIMBY (not in my backyard) attitude prevalent throughout Europe towards shale gas extraction (particularly in France) is not as big of a problem in Poland, which first and foremost aims at decreasing energy dependence on Russia.

205 *Financial Times* (2012) Cienski, J. “ExxonMobil ends shale gas tests in Poland.” 18 June.

206 *Ibidem*.

207 The Polish government has handed out 109 shale gas exploration concessions. The other companies still looking for the shale gas include Chevron, ConocoPhillips and Poland’s PGNiG, as well as a host of smaller groups specializing in shale gas exploration.

Chapter 4. Conclusions

It has been the ultimate goal of this work to present the regional approach to energy security among the Baltic Sea countries as a way to achieve common energy policy goals within the wider EU. Despite the fact that the three Baltic States and Poland have unique energy profiles, they share a common historical interdependence and are highly dependent on Russian energy supplies. This common past presents both, energy security risks as well as room for potential benefits. By taking into account national priorities and security goals while balancing initiatives which support broader regional interests, a valuable example is being set for the whole EU in terms of coordinating national energy policies.

How “energy security” is understood within the BSR:

The understanding of energy security as it relates to the BSR incorporates scientific, economic, environmental, sociopolitical and geopolitical factors that call for a balance of national and regional interests, as well as EU-wide priorities.

The threats associated with this understanding of energy security could then be listed as:

- Politically-motivated increases in the price of strategic energy supplies from Russia
- Physical disruptions of vital energy resources due to changing political situations
- Sudden changes in market conditions (increased influence of Russian companies on the internal markets of Poland, Lithuania, Latvia and Estonia)
- A lack of domestic political support and an uneven level of market liberalization in the Baltic countries, which includes the ownership unbundling of production from processing and distribution (i.e the uneven implementation of the EU’s Third Energy Package);
- The ageing of vital energy infrastructure (oil shale plants in Estonia, gas-fired plants in Lithuania, gas infrastructure in Latvia) and lack of diversification routes and alternate suppliers
- The depletion of traditional energy resources and their late substitution by alternative sources (particularly oil shale in Estonia)

Historical and analytical framework explaining the high level of securitization of energy dependence within the region:

By applying Barry Buzan’s analytical approach of *Regional Security Complexes* to the BSR and energy dependence, it is possible to conclude that:

- Since Poland, Lithuania, Estonia and Latvia are in such a geographically-concentrated area and are oftentimes interconnected via critical energy infrastructure (as is the case with the three Baltic States), their energy security policies must take into account the regional context, as developments in one country affect developments in another.
- Since Poland, Lithuania, Estonia and Latvia share a common historical *enmity* associated with the post-Soviet, post-Communist legacy, their energy dependence on Russia is collectively perceived as *negative*. This has been compounded by more recent politically-motivated supply disruptions and price discrimination towards the countries in the post-Soviet, post-Communist bloc.

The theory of *interdependence* sheds light on the diverging interests of national governments within the region, and across the EU more generally. Individual energy profiles and situations make some countries more dependent on Russia than others. This uneven level of dependence in the region is based on the reliance of each country on particular energy sources for their respective energy mixes. For example, Estonia is less dependent on electricity imports from Russia since its domestic production of oil shale essentially makes it self-sufficient in terms of electricity generation. Poland's domestic coal production as well as domestic sources of natural gas (and infrastructural interconnection to Ukraine which allows for diversification) decrease its dependence on Russia for natural gas and electricity. In comparison, Latvia is much more dependent on Russia for the import of both, electricity and natural gas, as the latter source of energy is now used to generate electricity after the closure of the Ignalina NPP in Lithuania which exported electricity to Latvia prior to 2009. The closure of Ignalina in turn, made Lithuania overwhelmingly dependent on Russia not only for the import of oil, but also electricity and gas.

More widely, the dependence of Western EU Member States is largely seen as mutual or positive, as opposed to the negative perception of the Central and Eastern European EU Member States, to which Poland, Lithuania, Latvia and Estonia belong. Their asymmetrical dependence on Russian energy supplies by virtue of physical interconnection and geographical proximity, as well as a lack of infrastructural interconnection and market integration with the wider EU, results in a high level of securitization of energy dependence.

The geopolitical context of energy trade within the BSR:

De-securitization of energy policy in the BSR is unlikely to occur so long as Russia remains the dominant energy supplier to the region and continues to use its energy resources as political leverage over its former sphere of influence, particularly through its 'selective' supply and pricing strategies.

Although there is no single solution for enhancing energy security in the BSR and despite the fact that the three Baltic States and Poland have very different energy profiles, there are several common objectives in the energy sector:

- decrease dependence on the single supplier;
- diversify energy sources;

- integrate internal markets;
- increase security through infrastructural interconnections; and
- build sustainability by developing new technologies and reducing inefficiency^y

Factors that influence energy security strategies and policy formulation in the BSR:

The key factors can be summarized as:

- Energy producers vs. energy consumers (domestic energy sources and consumption trends)
- Relations with the single supplier in the region, Russia (all negative, Poland and Lithuania more so)
- Levels of dependence on Russian imports (import and export structures; dependence structures and vulnerability to supply disruption due to energy infrastructure interconnection)
- National priorities regarding EU Energy Policy (Poland –CO2 emissions, shale + nuclear; Lithuania – nuclear, LNG, gas + electric grid interconnections, efficiency; Latvia – LNG, NPP; Estonia – efficiency, NPP)
- Unilateralism vs. a unified approach (LNG terminals, Poland and NPPs)
- Differences in the scope of policies and their implementation; (Lithuania most strict unbundling option; Latvia and Estonia less so)
- Prospects for the development of infrastructure (Riga most suitable for LNG terminal)
- Taken together, these factors serve to illustrate how the political, economic, and social phenomena affect energy policy formulation.

How these factors affect policy formulation in Poland, Lithuania, Latvia and Estonia:

- Energy producers vs. energy consumers (domestic energy sources and consumption trends)
 - **Poland:** a high reliance on domestic coal has shaped its strategy, which focuses on cleaner sources of energy like shale gas and nuclear power.
 - **Lithuania:** a lack of domestic sources of energy makes Lithuania overwhelmingly dependent on the import of all vital energy supplies: oil, gas and electricity. Biomass is viewed as a promising solution for increasing the efficiency of the inefficient heating sector.
 - **Latvia:** much like Lithuania, Latvia lacks significant domestic sources of energy; however, its underground gas storage capabilities due to particular geological conditions are seen as key to its energy security strategy.
 - **Estonia:** oil shale figures centrally in Estonia's strategy, as domestic reserves are used to generate electricity for domestic consumption.
- Relations with the single supplier in the region, Russia
 - While relations with Russia within all four countries are marked by historical *enmity* if we are to use Barry Buzan's terminology, Poland and Lithuania have

been more vocal about their negatively perceived dependence, particularly when it comes to Russian natural gas and the pricing policies of Gazprom. As a result, Poland and Lithuania pay some of the highest prices in the EU for gas imports; furthermore, Lithuania pays 15% more than do Latvia and Estonia.

- Levels of dependence on Russian imports
 - **Poland:** because of its large dependence on Russia for gas and fuel, Poland's priorities are to decrease dependence by diversifying, building sustainability and finding new sources of energy like shale gas and nuclear power. The fact that Poland hosts the Yamal natural gas pipeline on its territory makes it vulnerable to supply disruptions.
 - **Lithuania:** Lithuania's overwhelming dependence on Russian imports of oil, gas and electricity as well as its interconnection with the post-Soviet electric grid and gas and oil infrastructure increases vulnerability in terms of supply disruptions.
 - **Latvia:** Latvia's overwhelming dependence on Russian imports of oil, electricity and particularly gas, as well as its interconnection with the post-Soviet electric grid and gas and oil infrastructure increases its vulnerability in terms of supply disruptions.
 - **Estonia:** an interconnection with Finland through the EstLink-1 power link as well as its domestic production of electricity make decreasing the high dependence on Russian imports of oil and gas a priority. Latvia is connected to the post-Soviet electric grid and gas and oil infrastructure increases its vulnerability in terms of supply disruptions.

- National priorities regarding EU Energy Policy
 - **Poland:** meeting the EU's CO₂ emission standards through exploring shale gas and nuclear power
 - **Lithuania:** market liberalization through implementation of the Third Energy Package; pursuing alternative resources like nuclear power, LNG, and biomass; building gas and electric grid interconnections; improving inefficiency of the energy sector.
 - **Latvia:** market liberalization through implementation of the Third Energy Package; pursuing alternative resources.
 - **Estonia:** meeting the EU's CO₂ emission standards through addressing inefficiency and exploring alternative sources of energy like nuclear power; market liberalization through implementation of the Third Energy Package.

- Unilateralism vs. a unified approach
 - The competition among the three Baltic States to host the regional LNG terminal, with Lithuania pursuing its own terminal regardless of the fact that Riga is best suited.
 - Poland's hesitance to cooperating in the regional NPP in Ignalina in favor of its own nuclear program.

- Differences in the scope of policies and their implementation
 - In terms of the Third Energy Package, Lithuania has chosen the strictest option for full ownership unbundling, while Latvia has chosen the legal unbundling option (the Independent Transmission Operator – ITO option) to retain ownership of its transmission networks, but having legally independent transmission subsidiaries; Estonia plans to pursue full ownership unbundling.
- Prospects for the development of infrastructure (Riga most suitable for LNG terminal)
 - Poland's priorities are to construct an LNG terminal; pursue an ambitious nuclear power program; interconnect electric grids with Lithuania; extend the Odesa-Brody oil pipeline to Plock and Gdansk; and

The impact of energy security on other sectors of security:

Since natural gas is the most geopolitically strategic energy source within the BSR, a dependence on Russia is seen as a threat to national security for the following reasons:

- **Vulnerability to supply disruptions:** the gas pipeline system in the Baltic States is not connected to EU Member State transmission lines and is currently solely connected to the Russian system
- **Economic effects as a result of price discrimination.** The small size of the Baltic internal energy markets makes competing with larger countries for Russian energy supplies more difficult and hinders other gas vendors from investing in alternative gas transmission infrastructures that would allow source diversification
- **Security implications of an increasing connection between the Russian energy sector and the military:** The Nord Stream pipeline not only dramatically reduced the ability to counterbalance dependence by controlling the transport of energy supplies through national territory, it also increased Russian military presence in the Baltic region, particularly during construction. Large-scale military exercises were also carried out to demonstrate the capacity of Russia to safeguard the pipeline. Furthermore, given the concealed installation of a fiber optic cable along the Yamal pipeline in Poland, it is not implausible that the pipeline is being used to gather intelligence. The Russian lease on the naval port in Sevastopol to 25 years by Viktor Yanukovich in exchange for a ten-year discount on the price of gas is also an indication of this growing interconnection.

4.1 Future prospects and possible developments

The key initiatives and future prospects for regional energy cooperation:

Energy security in the BSR can be strengthened through the realization of several key projects:

- **The interconnection of electric grids** to stabilize prices and diversify supply – *Lit-PolLink* between Lithuania and Poland, *NordBalt* between Lithuania and Sweden and *EstLink-2* between Estonia and Finland are the main projects;
- **Exploring nuclear energy** as a clean and important source of energy. Regional cooperation in the Visaginas NPP is the key to decreasing dependence on Russia for electricity imports to the three Baltic States after the closure of Ignalina;
- **The construction of gas infrastructure** to connect the Central and Eastern European countries more firmly to Western Europe – the ‘*Amber*’ gas pipeline between Lithuania and Poland is particularly important in this regard;
 - **The construction of a regional LNG terminal** to offer an alternate route for the transport of gas supplies – the best suited location is Riga, but a national terminal in Lithuania is also being pursued;
 - **The expansion of underground natural gas storage capacities** to regulate seasonal demand and store reserves. Increasing the capacity of Incukalns in Latvia is key, but also building facilities in Lithuania;
- **Exploring the development of alternative sources of energy** like shale gas in Poland and to a lesser extent in Lithuania as viable energy sources and adapting the technology that is necessary to do so. This would allow for diversification, but also, investments related to shale gas and LNG are based on spot pricing, as opposed to the traditional rigid and non-transparent pricing policies in the oil and gas energy sectors.
- **The integration of markets with the rest of the EU** through the implementation of EU regulations for market liberalization – namely, the EU’s Third Energy Package that mandates ownership unbundling.
- **The Scandinavian direction** can serve as another strategy. Given the hydrocarbon-producing status of Norway and its position as a non-EU country that is considered a major actor within the BSR, an alternative supply of energy is realistic, but must be accompanied by the above-mentioned initiatives.

How this regional approach can contribute to a more unified EU Energy Policy:

The regional approach explored in this work could prove to be the first step in remedying the lack of convergence between the European Commission's policy goals for the EU as a whole and the goals of national governments and in-country priorities within regional blocs of the EU. Progress in the BSR can ultimately reflect if and how Europe will be able to manage balancing national, regional and EU-wide goals in energy policy. The kind of regional approach presented here can counter conflicting considerations of foreign and security policy by collectively decreasing dependency, diversifying energy sources, increasing security through infrastructural and market interconnections, and building sustainability through the development of new technologies. Furthermore, developments in the BSR could ultimately stimulate and support:

- **transparency in energy pricing policies and principles** for investment in strategic infrastructural projects;
- **adaptation of EU market rules to external partners** and the strengthening of cooperation with third countries;
- **ratification of the Energy Charter Treaty by Russia**, including the third party access rule, which would grant third countries access to infrastructure and distribution networks; and
- **the strengthening and unification of the legal basis for a common EU energy market and regulatory system** – namely, through the implementation of the EU's Third Energy Package.

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