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PART 3

ENERGY POLICY: THE ACHILLES HEEL OF THE BALTIC STATES

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INTRODUCTION

Nearly a decade following EU accession, the energy sector remains the most vulnerable national arena for Estonia, Latvia and Lithuania – an “Achilles heel” of the three Baltic states. The vulnerability stems from the fact that the energy sectors of the three states remain inextricably linked to and fully depended on Russia while they are virtually isolated from the rest of the EU, making them “energy islands”. This predicament is not only of concern to statesmen and strategists as energy affects almost every aspect of the Baltic states – the economy, industry and the wellbeing of citizens. The rapid inflation of the mid 2000s leading to the economic overheating and eventual economic crisis in 2008 was in part due to the rapidly accelerating costs of Russian gas and oil. Industry which accounts for a significant portion of total gas consumed (50%¹ of total gas consumed in Lithuania, 21%² in Estonia, 14%³ in Latvia) was also hard-hit. Gas prices are particularly sensitive for households who depend on gas for heating in the winter months, making up 10%⁴ of total gas used in Estonia in 2011, 9%⁵ in Latvia, and 5%⁶ in Lithuania, which represents 10 to 15% of their post-tax income⁷.

1. Calculated by the author according to the 2011 data of Statistics Lithuania. Statistics Lithuania, “M8020304: Fuel in natural units by fuel, year”, 11 May 2013.
2. Calculated by the author according to the 2011 data of Statistics Estonia. Statistics Estonia, “FE061: Consumption of fuels by Year, Branch of economy and Type of fuel”, 11 May 2013.
3. 2011 Central Statistical Bureau of Latvia. “Consumption of energy resources in Latvia in 2011”, 9 May 2012.
4. Calculated by the author according to the data of Statistics Estonia. *Op. cit.*, “FE061: Consumption of fuels by Year, Branch of economy and Type of fuel”, 11 May 2013.
5. *Op. cit.*, “Consumption of energy resources in Latvia in 2011”, 9 May 2012.
6. Calculated by the author according to the data of Lithuanian National Control Commission for Prices and Energy. Valstybinė kainų ir energetikos kontrolės komisija, “2011 metų energetikos sektoriaus plėtros apžvalga”, p. 7.
7. Grigas Agnia, *The Politics of Energy and Memory between the Baltic States and Russia*, Farnham, Surrey: Ashgate Publishing, 2013, p. 83.

In face of the pressures of the existing energy predicament, the priorities of the Baltic countries have generally coincided with the objectives of EU energy policy. Diversification and security of energy sources, increasing the competitiveness of domestic energy markets and a focus on renewables are all within the interests of the three countries. In fact at times, the three Baltic states have been drivers of EU's energy policy and at times passive recipients. Lithuania and to some extent Estonia have been less compromising towards Russia and more willing to take the lead in liberalisation and security of supply policies, while Latvia has preferred a slower and more cautious approach. In terms of sustainability and renewables, Latvia has set the most ambitious targets. It is of no surprise that when Lithuania takes the helm of the EU presidency in July 2013, energy will figure among the main objectives. Vilnius will seek to promote energy security through consolidation of energy infrastructure and strengthening of the position of EU's common external energy policy. Vilnius will also support the EU's Strategy for the Baltic Sea Region (EUSBSR) which is engaged in a number of energy flagship projects, particularly improving access to, and the efficiency and security of energy markets for eight EU member states that border the Baltic Sea⁸.

The following paper seeks to provide an overview of the contemporary Baltic energy realities and policies and to assess the successes and challenges that the three states face as they try meet the EU energy policy objectives. First a brief summary of the Baltic gas, oil and electricity sectors will be provided. The second section will focus on the political implications of the isolation and energy dependence on domestic politics, bilateral relations with Russia, and EU-Russia relationship. Lastly, the progress and effectiveness of EU's energy policy of liberalisation, integration and diversification for the Baltic energy markets and region will be assessed. The conclusion will offer insights to where the EU's energy policy has provided real value added for the Baltic states and where EU energy policy must be strengthened to be most effective in the Baltic region and for the EU overall.

8. European Commission, "Action Plan for the European Union Strategy for the Baltic Sea Region", February 2013.

1. Baltic Energy Sector

1.1. Gas Sector

Just as a few other EU states such as Bulgaria, Romania, Slovakia, and Finland, the Baltic states likewise rely solely on Russia for gas imports⁹. The Baltics are more vulnerable in terms of gas than most other EU states not only because of their import dependence on a single and potentially hostile source, but also due to their gas transport and delivery infrastructure. Baltic gas infrastructure was built in the Soviet era and depends on Gazprom-owned pipelines that deliver Russian gas. Only Finland and Bulgaria have comparable conditions. The Baltic states are still not connected to the gas pipelines of other EU states and have no means of accessing non-Russian gas or liquefied natural gas (LNG). Furthermore, Russian interests dominate the Baltic gas sector since Gazprom became an investor in the national gas companies of all three states: Eesti Gaas (37%), Latvijas Gāze (34%), and Lietuvos Dujos (37%) (Table 1).

⁹. Eurostat, "Energy dependence", 2012; International Energy Agency, "Country reports", 2012.

TABLE 1 ➤ **Gazprom's Penetration of Baltic National Gas Companies**

COUNTRY AND FIRM	OWNERSHIP OF FIRM BY RUSSIAN COMPANIES (rounded to nearest %)	OWNERSHIP OF FIRM (rounded to the nearest %)	MAIN ACTIVITY OF FIRM
Estonia Eesti Gaas	47% (Gazprom + Itera)	37% Gazprom 34% E.ON Ruhrgas 18% Fortum Oil and Gas 10% Itera Latvija 2% Private investors	Import, transmission (including ownership of pipelines), and sales of natural gas
Latvia Latvijas Gāze	50% (Gazprom + Itera)	47% E.ON Ruhrgas 34% Gazprom 16% Itera Latvija 3% Private investors	Import, transmission, storage and sales of natural gas
Lithuania Lietuvos Dujos	37% (Gazprom)	39% E.ON Ruhrgas 37% Gazprom 18% Lithuanian state 6% Private investors	Import, transmission, distribution, and sales of natural gas

Source: Eesti Gaas, Latvijas Gāze, and Lietuvos Dujos websites as of May 2013.

Despite this general gas vulnerability, Latvia and Lithuania each benefit from unique circumstances that to-date have mitigated their gas sectors' weakness. Latvia's comparative advantage and guarantee of gas supply is Inčukalns, the only significant gas storage facility in the region¹⁰. Besides Latvia it also serves Lithuania, Estonia, and northwest Russia in the winter period¹¹ and could ensure supply in case Russia interrupts provision of gas as it did to Ukraine (March 2005; March 2008; December 2008) and to Belarus (February 2004; January 2010). However, some analysts are cautious of Inčukalns' mitigating effect since Gazprom is its partial owner via its shares in Latvijas Gāze.

In Lithuania, the gas transit from Russia to its Kaliningrad territory via Lithuania serves as a sort of guarantee of gas supply for Vilnius since any interruption to Lithuania would directly affect Kaliningrad. Vilnius has used Kaliningrad's reliance on Lithuania for gas, oil, and electricity transit and

10. (The present capacity (4.4 billion cubic meters of which 2.3 billion cubic meters is active) exceeds Latvia's annual consumption of gas, which in 2011 was 1.6 billion cubic meters. *Op. cit.*, "Consumption of energy resources in Latvia in 2011", 11 May 2013.

11. Sprūds Andris, "Latvia's Energy Strategy: Between Structural Entrapments and Policy Choices", in Rostoks Toms, eds., *Energy: Pulling the Baltic Sea Region Together or Apart?*, Latvian Institute of International Affairs, Riga, 2009, p. 228.

supply as a bargaining tool with Moscow in the 1990s and again in the more recent years. However, since the 2000s Moscow sought to make gas supply independent from transit by completing gas storage facilities in Kaliningrad (by 2010 and by 2015) and planning to link Kaliningrad with the Nord Stream gas pipeline which delivers Russian gas via the Baltic Sea directly to Germany, thereby bypassing the Baltic states.¹²

MAP 1 ► Energy and Gas Pipeline Infrastructure in the Baltic Region



Source: Grigas Agnia, "The Gas Relationship between the Baltic States and Russia - politics and commercial realities", Oxford Institute for Energy Studies, October 2012, p. 7.

12. *Op. cit.*, *The Politics of Energy and Memory between the Baltic States and Russia*, p. 81.

Shale gas also holds promise for the Baltic countries. Most recent estimates suggest that Lithuania may possess the greatest reserves – 10 billion cubic meters – yet this could supply Lithuania only for 3 years since the country imports 3 billion cubic meters of gas annually from Russia¹³. However, test drilling will be completed only by 2020 and further investment and exploration will depend on those results and environmental regulation decisions¹⁴. In Latvia, the United States Geological Survey in 2012 re-assessed Soviet-era research on shale gas in Latvia¹⁵. The results were not optimistic, but the Latvian Prime Ministry of Economics hopes to continue the examination¹⁶. Meanwhile, Estonia has yet to confirm any reserves.

Overall it is too early to assume that shale gas will change the Baltic energy balance as it did in the United States. For instance, neighbouring Poland's test drills of 2011 did not justify the optimistic projections¹⁷. Furthermore, EC regulation on drilling procedures expected in late 2013 may create limits to shale gas exploration. Absent regulations, it is likely the Baltic states will be more aggressive considering in shale gas exploration than many European countries led by Austria, France, Netherlands, Luxembourg, Romania, Bulgaria and Czech Republic who have expressed caution regarding shale gas development.

1.2. Oil Sector

The Baltic states import nearly 100% of their oil from Russia. Despite their ability to import non-Russian sources of oil, historically Baltic oil terminals (Estonia's Muuga Port, Paldiski South harbour and Paljassaare Harbour; Latvia's Ventspils and Liepāja; Lithuania's Būtingė) primarily import Russian oil and export it westwards on the Baltic Sea. Since 2000, all three states have experienced Russian oil sanctions. Latvia's port facility Ventspils Nafta and Lithuania's oil refinery Mažeikių Nafta were both cut-off from Russian oil supply since 2003 and 2006 respectively¹⁸. Both halts in supply occurred following the refusal of Riga and Vilnius to sell the shares of Ventspils Nafta and Mažeikių

13. www.DELFI.lt, "Amerikiečių skaičiavimai laidoja Lietuvos skalūnų viltis", 12 June 2013.

14. *Ibid.*

15. news2biz LATVIA, "Low perspectives for shale gas in Latvia", 18 October 2012.

16. www.DELFI.lt, "Latvija su pavydu žiūri į Lietuvos skalūnų dujas", 15 April 2013.

17. KPMG Global Energy Institute, "Central and Eastern European Shale Gas Outlook", 2012, p. 34.

18. For more information on the closure see *op. cit.*, *The Politics of Energy and Memory between the Baltic States and Russia*, pp. 49-67.

Nafta to Russian investors. Estonia similarly experienced a halt and then a reduction in its supplies of oil products in 2007, following a political standoff between Tallinn and Moscow over a Soviet bronze soldier war memorial¹⁹.

While all three states have invoked help from the EU to assist in returning oil deliveries, even the sale of Ventspils Nafta and Mažeikių Nafta to a Russian investor is unlikely to resume the deliveries and the Baltic states will likely be completely eliminated from the transit of Russian oil. Since 2000s Russia has been notably and purposefully re-orientating its energy export flows (to western clients) away from old routes via the Eastern European states to new direct routes to Western Europe through Russian territory and ports and eliminating transit states such as the Baltics. Russia has been updating its energy export infrastructure through completion of Baltic Pipeline System (BPS) in 2001, the Primorsk two oil terminals in 2006 and 2008. Going forward Moscow aims to expand BPS to completely bypass Belarus and the Baltic states and to nearly double the capacity of Russia's north-western ports of Ust-Luga, Primorsk, Vysotsk, Kaliningrad, and Murmansk by 2015.

1.3. Electricity Sector

The domestic electricity market of the Baltic states is unique, each relying on different domestic resources or lack thereof for electricity production. Estonia relies on its resources of oil shale, which is used to generate 90% of the country's electricity²⁰. Despite EU environmental regulations Estonia will open the world's biggest shale oil plant Enfit280 in mid 2013 and double Eesti Energia's oil output to 10,000 barrels a day²¹. For electricity Latvia depends on three hydroelectric power plants on the Daugava river: Keguma HES, Plavīnu HES and Rigas HES, which in 2011 supplied 48% domestically produced electricity²². Lithuania closed its last nuclear reactor, which accounted for 77% of domestic electricity production, due to EU regulation in 2009 and went from

19. For more information on the Soviet bronze soldier war memorial see *ibid.*, pp. 67-72.

20. *Op. cit.*, "A study on the EU oil shale industry – viewed in the light of the Estonian experience", May 2007, p. 14.

21. Bloomberg.com, "Eesti Energia Shale Oil Plant Delayed to Next Year, CEO Says", 28 November 2012.

22. Calculated by the author according to the data of Central Statistical Bureau of Latvia. *Op. cit.*, "Consumption of energy resources in Latvia in 2011", 9 May 2012.

being an electricity exporter to depending on imports from Russia, Estonia, Latvia and Belarus.²³

For nearly a decade Lithuania has been planning to build a new regional nuclear power plant in Visaginas with the help of Poland, Estonia, and Latvia. A bureaucratic stalemate, disagreement among political parties, Russia's meddling, lack of interest among commercial investors and scepticism in Warsaw, Tallinn, and Riga have been the main culprits for delay. Furthermore, the 2012 national referendum in Lithuania showed that only 34% participants were in favour of nuclear power plant construction while 63% were against. The new government led by the Social Democrats and Prime Minister Algirdas Butkevičius is sceptical regarding a new nuclear power plant calling it "unwise" and too expensive²⁴. The final decision will be voted by Lithuanian Parliament but regardless of the decision the Visaginas NPP will face a long delay²⁵.

Estonia is also considering nuclear power to diversify energy sources by either building a domestic nuclear power plant or participating in Lithuanian Visaginas²⁶. Neighbouring Kaliningrad and Belarus have also discussed projects for competing nuclear plans. Sceptics say that these projects would produce a regional electricity surplus and serve to confuse and put off potential investors in Lithuania's Visaginas²⁷.

23. U.S. Energy Information Administration, "Lithuania", 11 May 2013.

24. www.DELFI.lt, "A. Butkevičius: Visagino AE statybos būtų neišmintingas sprendimas", 23 April 2013.

25. www.DELFI.lt, "A. Kubilius: judame į Kaliningrado glėbį", 24 April 2013.

26. European Commission, Joint Research Centre, Institute for Energy and Transport, "Estonia", 11 May 2013.

27. Grigas Agnia, "Legacies, Coercion and Soft Power: Russian Influence in the Baltic states", Chatham House, August 2012, p. 8.

2. Political Implications of Baltic Energy Dependency on Russia

The acute Baltic dependence on Russia has had an influence on domestic political processes, particularly by entrenching energy interest groups. With corruption and lack of transparency in the financing of political parties still a risk factor, the influence of energy-related business interests has been more significant. The most powerful interests groups in the Baltics, particularly in Latvia and Lithuania, are in the business of energy imports from Russia and in energy transit. These include national gas companies such as Eesti Gaas, Latvijas Gāze, and Lietuvos Dujos as well as Russian gas distribution company Itera that has daughter companies operating in Latvia and Estonia, as well as local gas distributors such as Lithuania's Dujotekana, Stella Vitae and Vikonda whose ownership structure has been linked to Gazprom. While there is limited verifiable documentation of the influence of business groups, unofficial testimony from Baltic decision-makers and media accounts shed light on such activities²⁸. The resulting domestic conditions often make it difficult for the three Baltic states to carry out coherent energy policy or foreign policy towards Russia.

To counter Moscow's and energy-interest groups' influence in domestic politics, the Baltic states have tried to leverage their EU membership. As a result, tensions have escalated both in Baltic-Russia and EU-Russia context. In 2008 Lithuania tried to veto EU's negotiations to renew the Partnership and Cooperation Agreement (PCA) with Russia primarily over the oil halt to Mažeikių Nafta. Most recently the main flashpoint has been in the gas sector. In the 2010s the Baltic states, particularly Lithuania, voiced concerns that Russia discriminates them in terms of gas pricing, imposing politically rather than commercially derived prices. Following a complaint by Lithuania, in September 2012 the European Commission's Directorate General for Competition launched a formal antitrust investigation against Gazprom's practices in Central and Eastern Europe, which include imposing unfair oil-based pricing, hindering the free flow of gas from one country to another and preventing diversification

²⁸. *Ibid.*, p. 3.

of supply of gas²⁹. However, if the Commission fails to alter Gazprom's pricing model from oil-linked to hub-based prices, the Baltic states will be further disadvantaged as Europe moves towards hub-based prices because the Baltics are not connected to European gas markets and are not close to any hubs that would allow them access to gas at competitive market prices³⁰.

In the future the European Commission (EC) involvement in Baltic negotiations of gas supply contracts with Russia could be another source of tensions. While the EC has had a history of pressuring energy companies to adhere to EU competition norms, involvement in bilateral relations between a EU member state and external energy supplier was unprecedented until 2010 when EC got involved in Poland's negotiations with Russia over gas transit and supply as well as Bulgaria's negotiations with Russia over South Stream pipeline project³¹. Following this example, in 2013 Lithuania officially asked for EC involvement when renegotiating its gas supply with Gazprom as its long-term contract is due to end in 2015³². Estonia is also due to renew its gas supply contract from Gazprom in 2015 and various lobbies and media reports have called for EU involvement in the negotiations though no official arrangements have been made³³. Meanwhile though the EC promised to support Latvia in their gas supply negotiations³⁴, Latvia so far has not elected to involve the EU in the process. Unofficial reports indicate that Gazprom has been offering Riga a 20% discount on gas (Estonia and Latvia allegedly already pay 10-15% less than Lithuania) in exchange for a delay implementation of EU's Third Energy Package³⁵. EU's involvement in the Baltic re-negotiation of gas supply contracts with Gazprom is crucial not only for the Baltic negotiation position but also to EC's efforts in liberalising EU's gas market and ensuring that the resulting contracts conform with EU laws and regulation³⁶. To better leverage EC support, greater cooperation between the Baltic countries, Finland and the EC regarding Gazprom will be necessary³⁷.

29. European Commission press release, "Antitrust: Commission opens proceedings against Gazprom", 4 September 2012.

30. Grigas Agnia, "Can EU face Russia down over energy policy?", oDRussia, 18 March 2013.

31. Łoskot-Strachota Agata, "The EU internal market – a stake or a tool in European-Russian gas relations", 24 June 2011.

32. Grigolyte Rūta, www.lrt.lt, "Ar Lietuva pasirošusi nusikratyti „Gazprom“ gniaužtų?", 30 April 2013.

33. The Baltic course, "Estonian home owners: EU should buy gas from Gazprom jointly", 29 March 2012.

34. BNN, "European Commission promises to support Latvia in negotiations with Gazprom", 6 September 2010.

35. eurotopics.com, "Gazprom wraps Latvia around its finger", 24 April 2013.

36. *Op. cit.*, "The EU internal market – a stake or a tool in European-Russian gas relations", 24 June 2011.

37. BNN, "Baltics, Finland and EC to coordinate their position in talks with Gazprom", 7 March 2013.

3. EU Energy Policy and the Baltic States

3.1. Liberalisation of EU Internal Market by 2014

EU's energy policy's is centred on creating an internal market through energy sector liberalisation and integration of European energy networks. Liberalisation of the energy market seeks to give consumers a choice between different gas and electricity companies as well as making the market entry accessible for all suppliers. For the Baltic states a truly competitive and integrated internal EU market can help achieve diversification and thus security of supply³⁸. In order to liberalise the energy market, three legislative packages were adopted from 1996 to 2009. The Third Energy Package effective since March 2011 seeks to prevent energy monopolies by separating energy production from transmission activities ("ownership unbundling") for electricity and gas companies.

Baltic unbundling and liberalisation has achieved greater success in the electricity sector rather than the gas sector. In Estonia and Lithuania the electricity market has been liberalised for all customers, including households since 2013³⁹. In Estonia the electricity transmission system operator (TSO) Elering AS is 100% owned by the state and separated from all other electricity production and sale undertakings since 2010, while the independence of the transmission network has been enforced since 2012⁴⁰. Yet, while Estonian households can now choose from seven electricity providers, the majority of consumers remain customers of the market incumbent Eesti Energia. Paradoxically, market liberalisation is expected to result in electricity price increases due to the lack of real competition on the open electricity market and Estonia's limited integration with the EU market⁴¹. In Lithuania the situation is similar – while electricity transmission and distribution activities are separate since 2010, households continue to pay higher price for Russia-sourced electricity

38. Summaries of EU legislation, "Internal energy market", 11 May 2013.

39. news2biz, "Latvia to delay electricity market liberalisation", 26 March 2013.

40. Estonian Competition Authority, *Estonian Electricity and Gas Market. Report 2011*, Tallinn, 2012, p. 8.

41. The Baltic Times, "Electricity market opens to consumers", 9 January 2013.

since most users remain clients of the national electricity provider LESTO and Lithuania lacks electricity links to Scandinavia and Poland⁴².

Though Latvia has fully unbundled its electricity TSO, in contrast to Estonia and Lithuania, Latvia has been slower with its market liberalisation reforms and is likely to delay it further. Smaller enterprises and households still remain on the regulated electricity market and thus are customers of Latvenergo⁴³. Thus, while *de jure* liberalisation of the electricity market has proceeded with some success, *de facto* the Baltic households will not benefit from liberalisation until the three states remain outside the EU electricity markets due to lacking infrastructure.

The liberalisation and unbundling of the Baltic gas sector has been more problematic because it requires separating Gazprom's ownership of operations supplying gas to consumers from ownership of the gas transmission and distribution pipelines. Lithuania has been the most aggressive in pursuing unbundling among the three Baltic states, trailed by Estonia with Latvia lagging behind. Of the three EC unbundling options – ownership unbundling (OU), independent system operator (ISO) and independent transmission system operator (ITO) – Lithuania selected the most stringent Commission-preferred option of OU. With OU both the management and the assets of gas networks are sold by the vertically integrated companies, to other companies which have no interests in gas production or supply. A 2010 Lithuanian law proposed that the transmission business of Lietuvos Dujos (37% owned by Gazprom) would be separated from the distribution business by July 2013 and distribution activities will be transferred to a newly-established subsidiary by October 2014⁴⁴. In response, in March 2012 Gazprom took Lithuania to international arbitration at the UN, according to UNCITRAL rules, over Vilnius' plans to break up Lietuvos Dujos, and disagreements over heat tariffs in Kaunas where Gazprom owns a thermal power plant. While a partial agreement that unbundling will proceed was reached between Lithuania and Gazprom in May 2012, Gazprom reserved its arbitration rights.

42. Kolisova Vitalija, "Be jungčių elektros rinka – kreiva", *Atgimimas*, 14 January 2013.

43. Balticexport.com, "The energy sector is adapting slowly", 11 May 2013.

44. en.15min.lt, "Lithuanian Gas submits unbundling terms for regulatory approval", 1 February 2013.

In contrast to Lithuania, both Estonia and Latvia initially sought an exemption from the new EU gas directive until 2014, which was available to them as EU members whose energy infrastructure is not connected to the rest of the EU. Initially both opted for the ITO option, which allows energy companies to retain ownership of their transmission networks but makes the transmission subsidiaries legally independent stock companies operating under their own brand name, different management and strict regulatory oversight. This was the least stringent and the most favourable option for Gazprom. By 2012 Estonia's policies changed course towards "unbundling" OU rather than the ITO model. The Estonian government passed legislation in June 2012 directing the national gas company Eesti Gaas (Gazprom owns 37%, E.ON Ruhrgas 34%) to sell its pipeline unit by 2015⁴⁵. Meanwhile, in February 2013 the Latvian Parliament agreed to postpone gas market liberalisation and continue taking advantage of its exemption option from unbundling⁴⁶. In a further move that suggest the lobbying powers of Russian gas interests, in March 2013⁴⁷, Latvian MPs sought to ensure that Latvijas Gāze and its shareholder Gazprom would be the only suppliers of natural gas in the country⁴⁸. While the final policies will be determined in the months to come, tensions will run high between various government groups, established gas interests and constraints of EU obligations⁴⁹.

In summary, the liberalisation and unbundling efforts in Baltic electricity and gas sectors have not resulted in a competitive energy market due to the lack of alternative suppliers and lack of links to European energy networks. The Baltic example illustrates the discrepancy between the EU liberalisation process and the real integration of energy markets within the EU.

45. European Commission, "Single market for gas & electricity. Estonia", 11 May 2013.

46. The Baltic Times, "Saeima committee reverses progress on gas market liberalization", 6 March 2013.

47. BNN, "Latvijas Gāze attempts to lobby Gazprom's interest in the parliament", 11 March 2013.

48. BNN, "Economy Minister: certain players wish to stop gas market liberalization", 25 March 2013.

49. BNN, "Specific Saeima officials call to delay the progress of the gas liberalization bill", 4 April 2013.

3.2. Integration of EU Internal Market by 2015

The Baltic case demonstrates that integrating energy infrastructure by connecting pipelines and establishing electricity links between EU member states is necessary for the functioning of the single EU energy market. EU's integration policies are driven by EC's 2011 conclusions that "No EU member state should remain isolated from the European gas and electricity networks after 2015 or see its energy security jeopardised by lack of the appropriate connections"⁵⁰. The main mechanism to achieve this in the Baltic states has been EC's **Baltic Energy Market Interconnection Plan (BEMIP)**, which plans for several interconnection projects in the gas and electricity sector⁵¹.

There are two strategic Baltic gas interconnection projects: GIPL⁵², a gas pipeline with 2.3 Bcm per annum connecting Poland to Lithuania and Balticconnector, an offshore pipeline between Finland and Estonia. GIPL is included in the European Network of Transmission System Operators (ENTSO-G) Ten-year Development Plan for 2011-2020, as well as the BEMIP Regional Transmission System Operators Gas Regional Investment Plan for 2012-2021. The estimated costs of the pipeline are around EUR 500 million with the EU likely to be the primary funder and Lithuania's Lietuvos Dujos and Polish GAZ-SYSTEM to contribute funds⁵³. Though Warsaw has been lukewarm on the project due to projected gas over-supply in 2017-2020 in Poland⁵⁴, the recent appointment of Polish-Lithuanian and member of Lithuania's Electoral Action of Poles party, Jaroslavas Neverovičius, as Lithuania's Minister of Energy is hoped to be a facilitating factor. Still the success of the project will very much depend on EU's support and financing if it is to be completed by the 2017 deadline. The Balticconnector seeks to connect Baltic and Finnish gas grids to enable two-way gas flows between Finland and Estonia and provide more gas supply capacity and flexibility for the whole region⁵⁵. The pipeline's capacity will reach 2.4 bcm/year, cost €96 million and is scheduled to be implemented in 2015⁵⁶.

50. European Council, "Conclusions on Energy", 4 February 2011, p. 2.

51. European Commission, "Baltic Energy Market Interconnection Plan. 4th progress report, June 2011-May 2012", June 2012.

52. Hockertz Joachim, Wittmann Rafat, "Gas Interconnection Poland-Lithuania (GIPL): Backbone of Regional Market Development", BEMIP Regional Conference, 14 September 2012, Vilnius.

53. Staselis Rytas, "Vamzdis „pirk arba mokek", 8 March 2013.

54. *Ibid.*

55. Gasum, "Balticconnector - interconnecting gas markets around northern Baltic Sea", 11 May 2013.

56. Gasum, Balticconnector Executive Summary, February 2011.

BEMIP-supported electricity links include Nordbalt (Sweden-Lithuania-Latvia), Estlink2 (Estonia-Finland), LitPol Link (Lithuania-Poland) and an Estonian-Latvian 3rd interconnection⁵⁷. Implementation of these projects has gained new momentum with the promise of EU funds. The electricity connection projects as well as the gas connection projects have been submitted to be considered as EU Projects of Common Interest (PCI) in energy infrastructure⁵⁸. The PCI list will be confirmed in end of 2013 and could qualify for funding from the “New Package”, which designated €5.1 billion from the EU’s 2014-2020 budget to upgrade Europe’s energy infrastructure⁵⁹.

After years of delay due to Latvia’s and Lithuania’s disagreement over whose territory will receive the cable from Sweden, Nordbalt interconnection is scheduled for launching into operation in December 2015⁶⁰. Meanwhile, EstLink2, the second⁶¹ undersea cable between Estonia and Finland, is scheduled for early 2014⁶². LitPol Link planned for 2015⁶³ would for the first time allow Lithuania and other Baltic states to join the Western European Electricity System via Poland⁶⁴. The project had experienced years of delay primarily because of lack of Polish interest and difficulty finding agreement with the various Polish land owners of the territory where LitPol Link will pass through. However, in 2012 when the EU designated €214 million and EBRD with Lithuanian government agencies offered an additional €2 million and €4 million respectively, progress started to accelerate⁶⁵. Following the interconnection of Lithuanian and Polish transmission grids, a new back-to-back converter station and strengthening of Polish and Lithuanian internal high voltage transmission grids is planned.

In the meantime, the electricity systems of the Baltic states continue to operate on the grid of Belarus, Russia, Estonia, Latvia and Lithuania (BRELL) which

57. The third interconnection is planned to increase of the available EE-LV interconnection transfer capacity, and to be introduced in 2018-2020 (now in preparatory phase).

58. European Commission, “List of projects submitted to be considered as potential Projects of Common Interest in energy infrastructure – Electricity”, 11 May 2013.

59. European Council, “Conclusions (Multiannual financial framework)”, 7/8 February 2013, p. 9.

60. Litgrid, “NordBalt”, 11 May 2013.

61. In December 2006, Estonia completed Estlink, an electricity cable that links Estonia and Finland, which is at the moment the only working power linkage to outside the region in the Baltic states.

62. Fingrid, “EstLink2”, 11 May 2013.

63. Ministry of Energy of the Republic of Lithuania, “LitPol Link (Lithuania - Poland electricity link)”, 11 May 2013.

64. LitPol Link, “About LITPOL Link”, 11 May 2013.

65. Global Transmission Report, “LitPol Link, Lithuania – Poland”, 1 September 2012; BNS, “Litgrid – iki 15 mln. litų ES paramos transformatorių pastatymo rekonstrukcijai”, 27 June 2012; Lankininkaitė Rūta, LRT Televizijos Naujienų tarnyba, “Elektros jungtis juda į priekį”, 15 March 2013.

is controlled by Moscow. While operation of the electricity systems has been secure, consistent and not subject to Moscow's political pressure to date, the market and management of the system is not consistent with EU requirements and impairs the full implementation of the Third Energy Package⁶⁶. Operation on BRELL has made it difficult for the Baltic states to manage congestion and develop intra-day market for electricity, while the cross-border loop flows from and to the Russian Federation, for which the Baltic states are used as transit countries, require significant reductions of capacity on the market or taking high network security risks. An ongoing feasibility study financed by TEN-E on the integration of the Baltic states to the EU Internal Electricity Market is planned to be completed in the second half of 2013. Since 2012 the EC has been negotiating an agreement with Russia and Belarus to facilitate the implementation of the EU internal market rules in the Baltic states power systems⁶⁷.

3.3. Diversification of Sources and Resources

Liberalisation and integration of the Baltic energy markets will also require diversification of sources away from Russian gas and diversification of resources towards renewables. LNG, as an alternative to natural gas piped by Gazprom, has been in Baltic discussions for several decades. After the EC expressed its support, in 2011 the idea of building a land-based LNG terminal gained traction in all three Baltic states. Currently there are plans for a regional land-based terminal to meet the needs of the Baltic states and Finland. According to EU studies, the terminal should not have larger capacity than 4 Bcm/year and would serve to diversify the Baltic supply mix to 60% of Russian gas, 20% LNG, 20% gas imported from European network⁶⁸. The overall investment for the LNG terminal and the proposed pipeline interconnector projects would be about €1.3 billion⁶⁹. In November 2012 the EC released study suggesting to build it on the shore of the Gulf of Finland⁷⁰, but its location is still undecided with Estonia and Finland both in competition and the EC

66. *Op. cit.*, "Baltic Energy Market Interconnection Plan. 4th progress report, June 2011-May 2012", June 2012, p. 12.

67. *Ibid.*

68. Booz & Co, *Analysis of costs and benefits of regional Liquefied Natural Gas solution in the East-Baltic area, including proposal for location and technical options under the Baltic ENERGY Market Interconnection Plan*, 20 November 2012, p. 5.

69. Botzki Annemarie, "Oettinger highlights need for Baltic LNG terminal", 29 November 2012.

70. *Op. cit.*, "Analysis of costs and benefits of regional Liquefied Natural Gas solution in the East-Baltic area, including proposal for location and technical options under the Baltic ENERGY Market Interconnection Plan", 20 November 2012.

to make a decision this year⁷¹. To attract EU funds the project has been proposed as a Project of Common Interest (PCI) candidate by likely participant, Finnish gas company, Gasum⁷². However, without an agreement, the terminal can not be included in the EU's list of PCIs, which will be announced in Vilnius in November 2013.

Lithuania has its own plans to build a floating LNG terminal using regasification ship technology in Klaipėda which would be quicker, easier and less costly to set up than a land-based terminal. The Euro200 million project will be carried out by the government-controlled oil terminal operator Klaipėdos Nafta. A 20% stake may be offered to outside investors, with Norwegian Hoegh to be the LNG vessel provider and American Cheniere Energy, a possible LNG provider. In 2012, the Lithuanian parliament approved the plans for the floating LNG terminal, which is scheduled to be completed by the end of 2014. While the new government elected in October 2012 initially expressed doubt on the project, prime minister Butkevičius' support for the project has reduced some of the uncertainty⁷³.

Both the floating terminal in Lithuania and the land-based terminal in the Gulf of Finland would significantly alter the region's gas security by providing the possibility of alternative sources of gas from the LNG market, strengthening the Baltic bargaining position vis-à-vis Gazprom and reducing the likelihood that Russia would use a gas cut off as a political weapon. Lithuanian preliminary estimates suggest that a floating LNG terminal in Klaipėda working at full capacity would be able to fully meet Lithuania's gas needs and reduce gas prices for end-consumers by 30%. However, with the fluctuation of LNG prices and the fact that LNG would have to be shipped from distant sources (for instance, in the Middle East, north or sub-Saharan Africa and North America), it is highly uncertain if an LNG terminal would actually reduce the price of gas to Baltic consumers. The main benefit would be improving gas security.

In terms of renewable energy, the Baltic states are also under obligation to meet Europe 2020 strategy and raise their share of renewable energy sources

71. The Baltic Course, "Estonia and Finland didn't reach an agreement on LNG terminal", 28 March 2013.

72. *Op. cit.*, "Oettinger highlights need for Baltic LNG terminal", 29 November 2012.

73. Irytas.lt, "Premjeras tiki, kad dujų terminalas bus pastatytas laiku", 15 March 2013.

(RES) consumption to at least 20% by 2020 and according to the “Green Paper” to 30% by 2013⁷⁴. In fact, each of the states has raised more ambitious targets with Estonia seeking 25% in renewables, Latvia 40%, and Lithuania 23% by 2020 (*Table 2*)⁷⁵. In the latest 2011 annual reports, the share of RES in gross final energy consumption in Estonia was 25,9%, Latvia 33,1% and Lithuania 20,3%⁷⁶. The Baltic performance has been exemplary with Latvia having the second highest RES percentage after Sweden in the EU⁷⁷ and Estonia being the first member state to exceed its Europe 2020 target in 2011⁷⁸.

Estonia’s high levels of RES is linked to electricity production from biomass which is used in co-burning with oil shale, but is criticised for high levels of carbon dioxide emissions. Estonia’s greatest potential in renewables lies with biomass, wind power which rose 23% due to three new wind parks⁷⁹, and small-scale hydro-power (*Table 3*)⁸⁰. Latvia has historically benefited from hydro power as its most significant RES but also has potential in biomass while solar energy is still only generated by pilot projects⁸¹. Lithuania’s greatest RES potential to-date appears to be biofuel, biodegrading industrial and communal waste, solar energy and possibly wind energy⁸². However, the higher prices of RES have received a backlash from the Lithuanian government, which plans to re-assess government subsidies and seek more EU funds for financing renewables⁸³.

74. European Commission, “National Renewable Energy Action Plans Estonia, Latvia, Lithuania”, 11 May 2013; European Commission, “Green Paper. A 2030 framework for climate and energy policies”, 27 March 2013, p. 3.

75. Statistics Estonia, “Share of renewable energy in gross final energy consumption”, 11 May 2013.

76. Eurostat, “Europe 2020 Indicators”, 11 May 2013.

77. The Baltic Times, “Latvia registers EU’s second highest share of renewable energy in 2011”, 29 April 2013.

78. The Baltic Times, “Estonia fulfilled the aim of consumption of green energy”, 29 April 2013.

79. Bloomberg.com, “Estonian Renewable Energy Rose to 14.9% of Consumption in 2012”, 28 January 2013.

80. Elering, “Renewable Energy”, 11 May 2013.

81. Ministry of Economics of the Republic of Latvia, “Renewable Energy”, 11 May 2013.

82. Lithuanian Confederation of Renewable Resources, “What is current situation in Lithuania?”, 11 May 2013.

83. www.DELFI.lt, “J.Neverovičius: ketiname mažinti atsinaujinančios energetikos subsidijas”, 14 February 2013.

TABLE 2 ➤ Share of Renewable Energy Sources in the Baltics in 2011

SHARE OF RENEWABLE ENERGY SOURCES (%)	ESTONIA		LATVIA		LITHUANIA	
	2020 TARGET	2011	2020 TARGET	2011	2020 TARGET	2011
in final energy consumption	25%	25.9%	40%	33.1%	23%	20.3%
in heating and cooling	17.6%	46%	53.4%	44.7%	39%	33.8%
in electricity	4.8%	12.3%	59.8%	44.7%	21%	9%
in transport	2.7%	0.2%	10%	4.8%	10%	3.7%

Source: European Commission, "National Renewable Energy Action Plans Estonia, Latvia, Lithuania", 11 May 2013; Eurostat, "Energy SHARES 2011", 11 May 2013.

TABLE 3 ➤ Primary Production of Renewable Energy in the Baltics (1000 Tonne of Oil Equivalent) in 2011

	SOLAR ENERGY	BIOMASS AND WASTE	GEO THERMAL ENERGY	HYDROPOWER ENERGY	WIND ENERGY	BIOFUELS
Estonia	0	942	0	3	32	0
Latvia	0	1,817	0	248	6	54
Lithuania	0	1,077	3	41	41	82

Source: Eurostat, "Energy statistics", 11 May 2013.

3.4. Regional Cooperation in the Baltic States

Creation of a single EU energy market, integration of the Baltic energy sectors, and the aforementioned diversification projects naturally depend on regional cooperation. There are a number of existing frameworks for energy cooperation. The Council of the Baltic Sea States (CBSS)'s intergovernmental Baltic Sea Energy Co-operation (BASREC), initiated by the EC and the Baltic Sea countries, supports the creation of competitive, efficient and well-functioning energy markets and pursuing energy efficiency and renewable energy measures⁸⁴. The Permanent Partnership Council (PPC) is another framework for

84. Baltic Sea Region Energy Cooperation, "Baltic Sea Region Energy Cooperation", 11 May 2013.

cooperation and is the main working body governing the Russia-EU relationship, which since 2012 focuses on four themes of energy markets and strategies, electricity, energy efficiency and innovation, and nuclear issues. The Baltic Electricity regional initiative comprised of the three Baltic national regulators is working in elaborating a “European Energy Work Plan 2011-2014” both for electricity and gas at the request of the EC⁸⁵. The Baltic electricity transmission system operators (TSO) in 2012 signed a Memorandum of Understanding to cooperating on common research and development projects related to transmission grid planning, operation and market modelling⁸⁶. The Baltic TSOs also cooperate and form a regional group in the framework of European Network of Transmission System Operators for Electricity⁸⁷.

To-date the success of Baltic cooperation has been limited as the three states often compete with one another for the EU funding and locations of energy integration and diversification projects. Likewise, as interconnection projects such as LitPol Link have demonstrated, cooperation with neighbouring states is fruitless if there is no promise of EU funding and support. However, without cooperation, progress of Baltic integration into EU energy markets or diversification of energy supplies is unlikely. As small economies, small energy markets, and rather weak bureaucracies, none of the three Baltic states is capable of implementing large energy infrastructure or production projects on their own.

85. ACER, “Baltic Region Electricity Regional Initiative Work Plan 2011-2014”, November 2011.

86. Elering, “Baltic electricity TSO-s agreed on R&D cooperation”, 12 November 2012.

87. ENTSOE, “Regional Group Baltic”, 11 May 2013.

4. Conclusion

While EU energy policy has not yet translated into a liberalised and integrated energy market for the Baltic states, it has had a notable impact on the Baltic energy sector. The next five years is likely to see greater liberalisation of Baltic energy markets, gas and electricity interconnection with neighbouring EU states, and even diversification of energy sources. The real added value of EU energy policy has been moving Baltic energy projects from wish-lists and memorandums to a workable agenda. This has had two effects. First, Baltic governments had to put action to their proclamations on energy security. Second, the EU agenda has made it more difficult for Baltic governments to backpedal in the face of pressure from political parties and energy interest groups that benefit from the current dependence on Russia. This has been most evident in the gas market unbundling and gas source diversification efforts. EU 2020 and 2030 plans also helped make renewable resources a priority – an area that had long failed to garner sufficient domestic support in the face of entrenched energy interest groups. Lastly, the Baltic inability to fund and implement energy interconnection and diversification projects during the past decade of EU membership highlights that without ambitious economic instruments for financing common energy projects, progress in EU's common internal energy market and renewables objectives will be slow and difficult. Certainly to date the Baltic states have been both unable and unwilling to finance the necessary energy projects and thus, EU planification, financing, R&D and institutional support will prove crucial.

The case of the Baltic states also draws attention to a number of issues highlighted by *Notre Europe – Jacques Delors Institute* regarding EU's energy policy. The Baltic ability to implement energy reforms is greatly tied to EU's external actors such as Russia and Gazprom. Furthermore, the implementation of the Third Energy Package and other objectives has translated into a flash-point in relations between the Baltic states and Russia. Without EU support in their relations with Moscow, the Baltic states will have difficulty adopting the EU energy agenda. Yet the EU currently has limited capacity for external action beyond EU borders to project its interests and guarantee its objectives at the international level. While the EC has flexed its muscles with its investigation of Gazprom's monopolistic practices, as *Notre Europe – Jacques*

Delors Institute highlights, most EU initiatives regarding external gas policy remain statements and resolutions without binding commitments⁸⁸. Likewise, while the EC may start playing a greater role in helping member states negotiate with their international energy suppliers in the future, the current vulnerability of the Baltic states in their relationship with Gazprom persists. As the *Notre Europe – Jacques Delors Institute* proposes, the only effective solution would be a mandate to the EC to negotiate with external suppliers and transit countries on behalf of the EU or the creation of EU-level fossil fuels purchasing groups. In the absence of such mechanisms the Baltic states continue to be played against one another in their gas pricing contracts while Baltic decision makers are coerced to renege on their EU-stipulated energy reforms and diversification projects. While the Baltic states have not suffered Gazprom's gas cut off since the early 1990s, the lack of adequate EU strategic and crisis-management energy reserves and access to these reserves as outlined by *Notre Europe*⁸⁹ enable Russia to subject the three states to continuous political pressure. The Baltic "Achilles heel" still remains vulnerable.

88. Andoura Sami, d'Oultremont Clémentine, "The Role of Gas in the External Dimension of the EU Energy Transition", *Policy Paper No. 79, Notre Europe – Jacques Delors Institute*, March 2013.

89. Andoura Sami, Hancher Leigh and Van der Woude Marc, "Towards a European Energy Community: A Policy Proposal", Foreword by Jacques Delors, *Studies & Research No. 70, Notre Europe*, March 2010.