Policy Paper

Going Past Monopoly

Developing a Balanced Baltic Sea Regional Gas Market

| Emmet Tuohy |

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Cover page photo: The LNG carrier, a tank ship designed for transporting liquefied natural gas, "Arctic Voyager" is towed in the port of Rotterdam, The Netherlands on July 6, 2011. AFP PHOTO/ANP/XTRA/ Lex van Lieshout

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Introduction

"Safety and certainty," contended Winston Churchill in a parliamentary debate about energy security on the eve of the First World War, "lie in variety, and in variety alone."[1] Today, Churchill's words ring as true as they did when they were first uttered; supply diversification remains arguably the key element of any strategy aimed at achieving energy security. Perhaps nowhere is the importance of this principle more apparent than in the Baltic states (including – as the term was understood a century ago – Finland as well).[2] Indeed, when ICDS last addressed this topic in 2013, the four countries enjoyed neither safety nor certainty in terms of natural gas; cut off from the rest of the EU as "energy islands," they were all completely dependent on a single supplier for natural gas: Russia.[3] As a result, they were uniquely vulnerable to supply interruptions – whether technical or political in nature.

Accordingly, these countries represented perhaps the most outstanding example of the problems faced by EU energy policy at the time. Even taking into account other energy sources, Russian gas still made up approximately 33% of total primary consumption – a more comprehensive measure of energy security – in Latvia and Lithuania, and 15% in Estonia (far higher than the contemporary EU average of 6.5%.) Indeed, the nature of their energy relationship with the eastern neighbor arguably helped spur the creation of the EU's Energy Union in the first place.[4]

[1] House of Commons Debates vol. 55, col. 1477 (July 17, 1913), https://api.parliament.uk/historic-hansard/commons/1913/jul/17/shipbuilding-repairs-maintenance-etc#column_1477 (accessed October 26, 2018).

[2] Andres Kasekamp, *A History of the Baltic States*, 2nd edition (London: Palgrave, 2018), p. ix.

[3] Matthew Bryza and Emmet Tuohy, *Connecting the Baltic States to Europe's Gas Market* (Tallinn: ICDS, 2013).

[4] European Commission, "Energy Union Factsheet", February 25, 2015, http://europa.eu/rapid/press-release_MEMO-15-4485_en.htm (accessed December 2, 2018).

Now, a half-decade later, the trend in the region is not only markedly more positive, but also seems to be moving in the opposite direction. The share of the three modern Baltic states' gas imports from Russia has declined dramatically, with similar developments expected in Finland beginning in 2019. Now, thanks to a slate of infrastructure projects, from domestic and regional gas pipelines (both completed or in the design or construction phases) as well as a set of ongoing market reforms, the three countries have access to more diversified sources of supply – their gas is increasingly traded on a transparent basis on liberalized markets, notably GET Baltic. In this respect, the Baltic states have arguably gone against the trend prevalent in the EU as a whole, where dependence on Russian gas imports is only increasing.

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Despite the ambitions of the Commission and the Energy Union, EU member states are now if anything more divided on energy issues, even within regions (contrast the Danish approach to Nord Stream 2 – where legislation was amended to allow national security considerations to be reflected in the permit-approval process – with those of other Nordic countries).

Of course, the Baltic states themselves have never been precisely united on energy issues either, reflecting their distinctly different resource endowments and the diverging policy choices that each state has made since regaining independence. Indeed, this lack of unity has been the cause of many project delays, missed opportunities, and political tensions. Nevertheless, as the final agreement on electricity grid synchronization with the synchronous grid of Continental Europe reached this year shows, the three countries have shown increasing willingness to cooperate – and to make concessions – in order to advance common overarching interests.

Thanks to the existing electricity links north, south, and west – and the forthcoming gas connections to the north and south – the

Baltic nations are no longer energy islands, but increasingly more of a strategic energy isthmus connecting Central Europe and the Nordic countries. This, however, does not mean that the work of constructing a balanced and integrated Baltic energy market – especially in natural gas – is complete.

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Although the most immediate consequences of total dependence on the former monopoly supplier continue to fade, this fact itself brings a risk of complacency. Certainly, there are signs of excellent cooperation on a working level among the three Baltic states as well as Finland and Poland; moreover, this is accompanied by visible (if irregular and imperfectly coordinated) high-level political commitment as well. Nevertheless, there is a lack of consensus on many of the important steps that remain to be taken – and the longer such consensus is absent, the easier it is for outside players to target public opinion, business leaders, and political actors in order to magnify opposition to projects leading to more complete energy diversification.

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Not only is the disconnect between official statements and pragmatic reality often considerable, moreover; that reality itself is changing. As economic, environmental, and technological change – not least the longer-term "energy transition" away from fossil fuel use towards a substantially greener economy – disrupt the assumptions on which short-term energy policy is made, complacency could be truly fatal for business and policymakers alike.

Still, at least in the short term, it is positive that in light of the danger both of complacency and of other economic, geopolitical, and political factors that threaten the "safety and certainty" of the market integration process, a variety of choices remain on the table. But are they sufficient to guarantee results? After first briefly reviewing how the Baltic states came to have any choices at all, this paper presents a critical overview of the gas-market development options (whether infrastructure or regulatory in nature) on the table. It then concludes by outlining the risks that may stop these solutions from being implemented – and offers recommendations for mitigating these risks.

1. Variety of Options: A Review of Infrastructure and Regulatory Solutions

1.1 Historical evolution

While much about the reality of Soviet life was – to put it mildly – far removed from the theoretical tenets of Marxism-Leninism, the natural gas transmission system constructed in the Baltics after the Second World War did indeed follow the principle "from each according to his ability, to each according to his needs." Of course, those needs were not the needs of each individual Soviet republic. Designed for a much larger population, the Soviet gas grid took advantage of local strengths – the unique geological properties of Latvia's Inčukalns area was used to meet needs elsewhere (notably, to store gas produced in summer and then use it to heat the city of Leningrad in winter – a pattern that continued even after Latvia regained independence, and that city regained its original moniker of St. Petersburg.)

This historical legacy is not merely one of purely historical interest – not only did it result in infrastructure that isolated the three countries from each other and, of course, the world beyond the borders of the USSR, but it also concealed what proved to be major and lasting differences among the three Baltic states themselves. Some differences include the notably greater energy independence (and correspondingly lower relative gas demand)

of Estonia, the closer business ties to Russia enjoyed by Latvia (which arguably delayed market liberalization in that country), and the stronger push from Lithuania towards energy independence given the import needs that followed the closure of its Ignalina nuclear facility. With differing priorities (and levels of urgency), it is perhaps not surprising that they were unable to reach agreement on the necessary interconnectors – or their relative importance – for so long.

Nevertheless, the mix of solutions (legal and otherwise) that were needed to end the countries' isolated status – and reduce the political and economic risks of dependence – were well known for some time, even before the advent of the active EU energy policy in the region. Indeed, the Ramboll consulting report delivered to the European Commission nearly ten years ago essentially laid out in full the exact same mix of physical and regulatory interconnectors being discussed at present – even if they took longer to implement in reality.

1.2 Pipelines – Russia

Provided it is sold at market conditions and in a transparent way, there will clearly be some role for Russian pipeline gas to the Baltic states for the foreseeable future. It may be possible – given the infrastructure options listed in the remainder of this section – for its market share to approach zero, but commercially and even otherwise, eliminating all imports is not justifiable. It is particularly not advisable given that pipeline gas imports can serve as a more reliable source of fuel in a crisis situation, due to the longer transit times required for LNG.[5] Already in, for example, Lithuania, the exact market share held by Russian gas fluctuates; but provided that Moscow continues to operate according to EU market access principles, these ups and downs do not raise any undue concerns. Certainly, however, questions remain about the best way to ensure the trading of this gas – including those relating to the right auction system – as well as the depth of Gazprom's commitment to play by market rules in the future. (The company is being pulled in different directions, as its shareholders apply financial pressure on the firm to make money, while the Kremlin exerts political pressure to ensure that Gazprom's activities advance Moscow's foreign policy objectives).

A further question surrounds the ability of Russia to supply sufficient volumes to guarantee security of supply in the medium-term future due to the construction of Nord Stream 2

A further question surrounds the ability of Russia to supply sufficient volumes to guarantee security of supply in the medium-term future due to the construction of Nord Stream 2 (NS2) and increased use of Nord Stream 1 to supply Western Europe. Although some interviewed experts and officials downplay the issue, there is evidence that the use of Nord Stream has some impact. As early as 2013, observers noted that "The supply situation in Finland is exposed to a situation where the country is located supply-wise after large consumption centers like St. Petersburg , and….first and second Nord Stream pipelines."[6] Other issues with Russian gas deliveries – even in the absence of political leverage – also include technical failures (estimated by many sources to be equivalent to that in magnitude and likelihood as a political cutoff decision) as well as simple accidents or human error, such as the illegal digging that "caused disruption" to Latvian consumers earlier in the decade.[7]

Provided it is sold at market conditions and in a transparent way, there will clearly be some role for Russian pipeline gas to the Baltic states for the foreseeable future

[5] Alex Barnes, "EU Gas Import Infrastructure: Why More is Good, and Why Looking at Annual Utilization Figures Alone is Wrong," *The Baltic Times*, July 31-August 28, 2018, p. 6.

[6] Ando Leppiman, et al, "Future Outlook and Current Situation for Security of Gas Supply in Eastern Baltic Region," *International Journal of Energy and Power Engineering* 7:11 (2013), p. 2969.

[7] Focus Group on Regional Cooperation, Baltic Energy Market Interconnection Plan: Joint Risk Assessment of Security of Gas Supply of Estonia, Latvia, Lithuania 2012 (Tallinn: Competition Authority, 2013), https://www.konkurentsiamet.ee/?id=23348, p. 55.

Another factor is increased demand from Sweden, which may soon need to replace its aging nuclear plants with gas-fired facilities – and could then likely be drawing on the same fields currently used to produce the gas consumed in the Baltic states and Finland.

Russia's relations with Belarus cause further concerns regarding import of gas to Lithuania – the Baltic country most dependent on gas for electricity generation

Accordingly, this may affect the reliability and price of pipeline gas to the Baltic region – as might the entry of Russia into the global LNG export market, and the apparently increased willingness of the Putin regime to tolerate intra-Russian gas export competition (with Novatek, for instance, as well as Rosneft edging in on Gazprom's formerly exclusive role in selling gas to Europe.)[8]

Russia's relations with Belarus cause further concerns regarding import of gas to Lithuania – the Baltic country most dependent on gas for electricity generation. In the past, worsening Russia-Belarus political ties have resulted in cutoffs to Belarus which – in turn – have reduced pressure to Lithuania. In 2004, for instance, Lithuania would have been itself completely cut off from gas supplies after a dispute between Minsk and Moscow; it was able to draw upon gas from the Inčukalns facility in Latvia, but "due to the limited capacities Latvia was only able to deliver a half of the necessary gas volume."[9] Latvia-Lithuania transit capacity has since increased, but – as discussed below – the future of Inčukalns itself as a regional hub is now in question.

Finally, for its Kaliningrad enclave, Russia is building more generation capacity and providing for the possibility of LNG imports via a floating terminal. While transit to the territory via Lithuania and Belarus remains cheaper – and Lithuanian officials argue that there "will always be a baseline demand" for such transit flows – in the event of a political crisis Russia should soon be able to bypass both states, albeit at cost. In any case, given the relatively small volumes, Lithuania does not remotely depend on transit revenues as a source of political or economic leverage to the same extent as has, e.g., Ukraine.

1.3 Pipelines – Poland and Finland

Poland has ambitions to become the "gas hub" of Europe at the center of east-west and north-south corridors, and its interconnection plans in all directions have already borne fruit. Poland can (or soon will be able to) draw on storage capacities in Ukraine, additional import possibilities via Germany (physical and virtual alike), interconnections to the Czech Republic and Slovakia, as well as LNG via Świnoujście from both spot, medium-term

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(US) and long-term (Qatar) contracts. It has already received EU PCI funding to develop the Baltic Pipe connection to Denmark and, through it, the Swedish market, as well as Norwegian gas fields (some of which are even owned directly by Polish gas provider PGNiG). All of these connections will strengthen the attractiveness of the Polish gas market, with direct effects for the Baltic states via the forthcoming Gas Interconnector Poland-Lithuania (GIPL) pipeline.

The case for GIPL was apparent even before Poland developed its connections in non-Russian directions; as the Baltic states' joint risk assessment observed in 2012, "GIPL would provide an access to the EU gas markets and create an opportunity of using the Polish LNG terminal in Świnoujście."[10]

GIPL also will offer the opportunity for Baltic companies to supply currently-isolated northeast Poland – which remains separate from the main Polish gas grid – with gas, for example from Klaipėda LNG. (Conversely, however, thanks to EU third-party access rules,

[8] Interview with Dr. Andrei Belyi, University of Eastern Finland, November 2018.

[9] Focus Group on Regional Cooperation, *Joint Risk Assessment*, p. 63.

[10] *Ibid*, p. 40

Russian firms could also supply these same customers with LNG shipped first to Kaliningrad and then onward via the Lithuanian distribution network. Given Poland's attitude toward Russian imports and its currently strained relations with the European Commission, Warsaw might well use this as an excuse to limit the throughput capacity of GIPL, at least in a southbound direction.[11]

GIPL also will offer the opportunity for Baltic companies to supply currently-isolated northeast Poland

Ultimately, as regards the political risk of increased gas trade with Poland, the issue is not one of potential dependence (as was the case, for instance, with electricity synchronization), given the country's own interest in (re-) exporting gas (as it already does with, for example, Ukraine).[12] In the end – as uncomfortable as it might be to admit in Tallinn – Poland and Estonia are in relatively similar positions with regard to their dependence on heavily-polluting domestic fossil fuel production (and their reluctance to phase it out given the outsized political and economic importance of the coal and oil shale sectors, respectively. Both are at least ostensibly working nonetheless to reduce the carbon emissions of their energy sectors – with "põxit" [a pun derived from *põlevkivi*, the Estonian word for oil shale] a term heard increasingly often in political debate in Tallinn, and with Poland "reducing all the damaging substances our energy production emits" by phasing out old production facilities.[13]

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Meanwhile, the Balticconnector pipeline between Finland and Estonia is finally under construction after considerable political delays while disagreements were resolved – not just among the Baltic states, but including the withdrawal of Finnish TSO Gasum from the project before it was replaced by a new government-funded joint venture. The pipeline will connect to a larger regional facility in Finland and as a whole will bring clear security and market benefits to the Baltic states. The Balticconnector pipeline will also contribute to liberalization of the Finnish gas market, though questions as always remain about the independence of Finnish energy policy; despite the country's total dependence on Russia for gas imports, Finland has always enjoyed security of supply due to the fuel-switching capabilities of its power and heat generating plants, and may not perceive the geopolitical risk of dependence on eastern imports with the same urgency as do the Baltic countries.

The Balticconnector pipeline will also contribute to liberalization of the Finnish gas market, though questions as always remain about the independence of Finnish energy policy

Given the difficulty in consensus-building, as well as the small (and shrinking) size of the Baltic gas markets, LNG remains the most politically contentious issue

1.4 LNG

Given the difficulty in consensus-building, as well as the small (and shrinking) size of the Baltic gas markets, LNG remains the most politically contentious issue in the region's gas market future. Described provocatively if not inaccurately as a "saga" of regional disagreement, the three Baltic states remain unable to agree on a firm final solution as to how many regional terminals there should be.

[11] Interview with Giedrius Česnakas, Vilnius, Lithuania, October 2018.

[12] Polish Oil and Natural Gas Company [PGNiG], *Annual Report 2017* (Warsaw: PGNiG, 2017), p. 14.

[13] Krzysztof Tchorzewski, remarks at the Economic Forum, Krynica, Poland, September 4, 2018.

Lithuania is committed to using its leased Klaipėda LNG facility, which despite some doubts earlier this year, it will soon purchase, even though it has received no European Commission funding for this purpose. The increased cost of the facility has already led to a "death spiral" in gas use in Lithuania, which has dramatically increased its dual-fuel capacity and reduced gas consumption for non-industrial purposes; moreover, its officials express doubts about the wisdom of any further LNG terminals in the Baltic countries. For now, Klaipėda clearly has a role to play in supplying gas to the other Baltic states, and soon (after Balticconnector is completed) to Finland. It is nevertheless true that agreement on market rules will be needed to take full advantage of these possibilities. Currently, modest transit tariffs are added at both the Lithuanian/Latvian and Latvian/Estonian borders on shipments of gas from Klaipėda to Estonia, for instance (even if – without any market rules in place – Estonian companies were able to purchase gas from the facility soon after began operation).[14]

Klaipėda clearly has a role to play in supplying gas to the other Baltic states. It is nevertheless true that agreement on market rules will be needed to take full advantage of these possibilities

According to ministerial-level officials interviewed for this paper, Estonia has reportedly been extremely supportive of the use of Klaipėda to supply the entire region on a political level, while Latvia has gone in the other direction, even reviving the formerly moribund notion of a regional terminal at Skulte outside Riga. Estonian firms continue to pursue terminal projects of their own (Eesti Gaas, for instance, has announced the purchase of a marine bunkering ship, though this will not connect to the national grid), and Alexela's project of a regional terminal at Paldiski may yet obtain EU funding (and is supported by Finland), but uncertainties remain – including about LNG sources.

As far as the latter are concerned, the United States arguably attracts the most headline attention, such as by American companies' primarily symbolic deliveries to Lithuania (or more substantial medium-term contracts to supply Świnoujście in Poland). Certainly, US LNG capacity continues to grow (by 2024, it will equal Gazprom's current exports to Europe, as Alan Riley has observed), but there remains a considerable disconnect between official American rhetoric and private statements, even from US energy officials.[15] Simply put, American political support for its allies does not mean that it is willing to dictate where commercial gas shipments should go – especially as current market conditions and prices mean that exporting LNG to Asia is simply more profitable.

American political support for its allies does not mean that it is willing to dictate where commercial gas shipments should go

1.5 Storage – Latvia

As recently as two years ago, the large natural gas storage facility at Inčukalns, Latvia, was universally seen as essential to providing security of supply and liquidity to the Baltic gas market. It served as a source of essential winter deliveries not only to Latvia but also to the other Baltic states and even Belarus as well as Russia. Although storage technology is slowly evolving, and projects in other states have been investigated, the unique, geographically concentrated geological formations in the region (specifically porous sandstone into which gas can be pumped – covered by an impenetrable layer that prevents gas from escaping) is hard to duplicate.[16] Accordingly, it was seen by leading experts – even those not inclined to hyperbole – to be "of the utmost importance."[17] Moreover, since

[14] Arūnas Molis and Giedrius Česnakas, "Reducing Energy Reliance", *per Concordiam* 6:2 (2015), p. 33.

[15] Alan Riley, "Can Nord Stream 2 Really Replace Groningen," *The American Interest*, October 2, 2018, https://www.the-american-interest.com/2018/10/02/can-nord-stream-2-really-replace-groningen/ (accessed December 2, 2018).

[16] Edvins Karnitis, "Strategy and Efficient Mechanisms to Improve Security and Sustainability of the Natural Gas Supply in Baltic States," *Journal of Security and Sustainability Issues* 1:1 (2011), p. 6.

[17] Leppiman et al, "Future Outlook and Current Situation," p. 2974.

in the absence of other interconnections the facility could not supply the entire Baltic region in the event of gas shortages (such as those in the winters of 2004 and 2012), the original BEMIP plans included funding to expand the size of Inčukalns, to some 3.2 bcm.

The main obstacle to Inčukalns eventually becoming the integrated hub of a regional Baltic gas market was in fact political and regulatory

The main obstacle to Inčukalns eventually becoming the integrated hub of a regional Baltic gas market was in fact political and regulatory, thanks to Latvia's delayed market liberalization (in part due to its longer-term contract with Gazprom) as well as ownership issues – more specifically the former majority Russian stake – with the facility itself. However, Russia's decision to stop relying on the facility (after completing upgrades to the Northwest Russian transmission system, among other factors) has now raised significant worries about the commercial viability of Inčukalns as a seasonal-storage solution for the Baltic region.

The Latvian government remains committed to the future of Inčukalns

For its part, the Latvian government remains committed to the future of Inčukalns, applying in October 2018 for EU funding to invest in upgrades, and maintaining a strategic supply reserve in the facility (albeit by paying companies not to withdraw gas). While continuing to seek EU funding for expanding and improving Inčukalns, Latvian officials – notably Conexus Baltic Grid [the country's gas TSO] chair Zane Kotāne – have accordingly recognized that there are limitations to the seasonal-storage model. In Kotāne's view, the situation with the facility has "reached a market crossroads" at which "it is necessary to find new ways" of using the facility.[18] In addition to the non-market uses such as security of supply, she pointed to potential sources of added value such as short-term supply optimization (which creates some commercial need for storage due to "calendar, weather, and [other] commercial issues," as a recent Ramboll study explains) as well as meeting peak demand during unusual cold spells.[19] Furthermore, Finnish officials interviewed for this study did express confidence that Inčukalns can supply that country's southern population centers after Balticconnector comes online.

Nevertheless, in the views of others (especially in Estonia and Lithuania), Inčukalns is simply no longer an essential piece of the regional puzzle. One independent expert, describing the political situation of support (or lack thereof) for the facility, complained that "even though Lithuania's [LNG] import capacity and Latvia's storage capacity are natural complements, this is proof that the Baltic brothers yet again can't get along." Others made critical observations about the weakened quality of Latvian domestic infrastructure (such as lower gas pressure) or the technical qualities of the facility itself – complaints that are much more significant given that there is now sufficient non-Russian import capacity for the other two Baltic countries to do without Latvian storage, even in wintertime.

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1.6 Market Design

The unbundling and other requirements of the EU's Third Energy Package have already contributed to the emergence of a more liquid gas market in the Baltic states, even if liberalization was delayed considerably in Latvia (implemented only in 2017) and is slated for later this year in Finland. Already, the GET Baltic exchange in Lithuania has contributed to

[18] "Conexus – We Need New Ways of Using Inčukalns Storage Facility", *Baltic News Network*, February 9, 2018, https://bnn-news.com/conexus-we-need-new-ways-of-using-incukalns-gas-storage-facility-179740 (accessed February 10, 2019).

[19] Per Jørgensen, Frederik Roose Øvlisen, et al., Inčukalns *Gas Storage: Study of Increased Flexibility and Use as Strategic Gas Storage* (Copenhagen: Ramboll AS, November 2017), p. 3, http://www.conexus.lv/uploads/filedir/171126_incukalns_gas_storage_-_2_page_summary_final.pdf (accessed February 10, 2019).

reducing market concentration and permitting cross-border trading. Nevertheless, as things currently stand, more work is needed to bring maximum liquidity (and with it, benefits to consumers and to national security alike) to the region.

To date, the countries in the region have been rather active in contributing to regular working group meetings and task forces (comprised of representatives, respectively, of TSOs, national regulatory agencies, and ministries) in order to ensure the implementation of ACER framework guidelines, ENTSO-G network codes, and to discuss potential further Commission regulatory steps for Europe as a whole. Disagreement remains on the exact design of the future market in the region, however.

Disagreement remains on the exact design of the future market in the region

Writing in an academic capacity, experts have agreed for some time that the maximal option for market design – a single entry-exit model (in short, completely merging the Baltic and Finnish gas markets) – would bring tangible security and commercial benefits. As Leppiman et al noted in 2013, the single entry-exit zone "eases the introduction of gas companies and gas dealers to the East Baltic area, independent from" EU third party access rules.[20] A few years later, Lithuanian presidential advisor Arūnas Molis wrote that "the presence of infrastructure is not anymore a problem," and instead contended that a market merger and even public joint venture [along the lines of what has been adopted for Rail Baltic] would be preferable.[21]

Finnish and other officials blame Lithuania for blocking the implementation solution

At the moment, consensus seems further away in practice, however. For their part, even as Lithuanian officials interviewed for this paper acknowledged that a market merger is in the end "completely feasible and doable," they contended that it is "not crucial" and "should [instead] be seen as something extra on top."[22] Privately, by contrast, Finnish and other officials blame Lithuania for blocking the implementation solution (which requires more work at harmonizing regulations, settling on allocation rules, and agreeing on inter-TSO as well as settling costs among TSOs), noting that "this is the principal area of disagreement" in the region.[23] Publicly, Finnish, Estonian, and Latvian TSOs have by contrast signed an MoU on creating a full market merger – the most radical of all models described by ACER – even if due to Finland's own delayed market liberalization this will begin with Estonia and Latvia first. (In addition, the memorandum of understanding among the three parties also requires a separate political decision – not yet taken – to be implemented.)

2. Variety of Risks: Overcoming Final Obstacles

While justifiably proud of the progress they have made so far, Baltic policymakers cannot afford to focus on rhetoric or indulge in complacency

While justifiably proud of the progress they have made so far, Baltic policymakers cannot afford to focus on rhetoric or indulge in complacency

– literally so, as the next EU funding period (2021-2027), especially in a post-Brexit context, may simply not provide the same degree of support for completing the Baltic regional gas market. Not only can the Baltic states not take the current high level of European Commission interest in their energy security challenges for granted, but in pursuing gas market integration they also variety of other risks – many of them equally urgent in nature. In the interests of facilitating debate in an expedient manner,

[20] *Ibid*.

[21] Arūnas Molis, "Towards a Regional Gas Market in the Baltic States: Political, Economic and Legal Aspects," *Humanities and Social Sciences Latvia* 24:1 (spring-summer 2016), p. 98.

[22] Interview with Amber Grid representative, Vilnius, October 2018.

[23] Interview with Balticonnector representative, Helsinki, November 2018.

these risks – and recommendations for actions to be taken to mitigate them – are presented in this section.

Risk: Political complacency regarding energy security challenges.

Mitigation: Take a more synthetic approach to energy; ultimately, the division of experts and practitioners into hermetically sealed "silos," (e.g., security, environment, etc) each with their own jargon and topics of focus, has to end – and fast. Like with other broad-spectrum challenges, only a whole-of-government (if not whole-of-society) approach can ultimately succeed.

Risk: Belarus-Russia tensions prevent deliveries of Russian gas to Lithuania

Mitigation: First, the Baltic states need to avoid misperceiving Belarus as solely a Russian satellite state – the bilateral Minsk-Moscow relationship is far too complex, including in energy terms (even if the former has lost significant leverage after selling its gas transmission grid to Gazprom in 2015, and "no longer has the option of following in Ukraine's footsteps" by using this grid as a bargaining chip in bilateral relationships.[24] Second, ultimately they should seek a negotiated solution – using the Commission's auspices, if necessary – to the Astravets nuclear plant issue. Ultimately, Lithuania's concerns about safety are indeed warranted (given the somewhat cavalier attitude towards proper procedures reflected so far in the plant's construction), even if Vilnius has frustrated its European allies due to its unyielding stance on the issue. Similarly, for e.g. Latvia, the temptation to purchase electricity from Astravets – thereby reducing its own dependence on natural gas-fired power generation, and thus on Russia – may be too great to bear in future, even if relations with Lithuania were to become frosty as a result. Negotiations are urgently required on this issue.

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Changes in the Lithuanian domestic environment have major regional consequences

Risk: Changes in the Lithuanian domestic environment have major regional consequences. One is a dramatic decrease in gas demand (e.g., if the country's largest consumer Achema disappears from the scene, perhaps due to bankruptcy), another is a domestic political backlash about the high costs of the current government's preferred option of purchasing the Klaipėda floating LNG terminal. The latter could especially lead to a ripple effect, by which Vilnius would be pressured to recoup more of those costs by pushing its Baltic and Finnish partners to use the terminal and/or contribute more to its operation – leading to more antagonism and disunity.

Mitigation: Since more will not be known until after the Lithuanian presidential election – with the Estonian parliamentary election this year presenting another variable – all stakeholders need to display patience while preparing for multiple political constellations and contingencies. While it may be unrealistic to expect that Vilnius will backtrack on its decision to purchase the facility given the political capital it has invested to date, it should proceed cautiously and pursue harmony in future negotiations with its partners in the region.

Finnish relations with Russia present political risks that hamper the pursuit of regional energy independence

Risk: Finnish relations with Russia present political risks that hamper the pursuit of regional energy independence.

Mitigation: First of all, the situation in Finland is not as dire as some – especially in Estonia – sometimes fear. As Kristi Raik recently wrote for the ICDS blog, "Estonian find it difficult

[24] Arkady Moshes, "Crimea 2.0: Will Russia Seek Reunification with Belarus?", *FIIA Comment* 21 (Helsinki: Finnish Institute of International Affairs, November 19, 2018), https://www.fiia.fi/en/publication/crimea-2-0?read (accessed December 3, 2018).

to understand that the naïve-sounding talk is part of the Finnish tradition of coping with Russia," but Finland's "defense willingness is [still] very high," as is its awareness of Russian influence efforts.[25] On energy in particular, the various government agencies on the northern side of the Gulf are very much aware of the political issues of energy dependence on the eastern neighbor. Certainly, Finland still has some distance to go to liberalize its market – and business interests may well be slowing that process further – but the response should be to work with the future Finnish TSO and others in Finland who are enthusiastic about the possibilities raised by gas market liberalization.

A lack of cooperation among the three Baltic states will endanger current progress

Risk: A lack of cooperation among the three Baltic states will endanger current progress.

Mitigation: In the end, interview subjects agreed, there is no going back to the "bad old days"; not only are regulations (and working procedures, such as regular task force meetings) already in place, but the levels of energy security in each of the three countries are in fact converging.[26] The best way to ensure that this continues is to deepen and broaden expert-level cooperation; "the LNG guys don't know the grid business, and the storage guys don't know the LNG market," as one interlocutor noted. Other mitigating steps in this category include: finding a better commercial case for Inčukalns, agreeing on what kind of premium should be paid (and by whom) for greater security of supply – as well as on how much infrastructure ultimately needs to be built. It is naive, in the end, to build infrastructure without thinking about where the gas might come from, or whether it might even be needed in a medium-term environment of falling gas demand. Certainly, pipeline capacity should exceed average-year peak demand for security-of-supply reasons, but too much excess capacity is by no means always a good thing.

Climate policy – specifically, restrictions on fossil-fuel emissions – will force dramatic, disruptive change to the energy mix used in the Baltic region

Risk: Climate policy – specifically, restrictions on fossil-fuel emissions – will force dramatic, disruptive change to the energy mix used in the Baltic region. Moreover, as an ongoing source of uncertainty, it discourages private-sector stakeholders (whether infrastructure builders or energy producers and traders) from making longer-term investments in the region.

Mitigation: Ultimately, the energy transition cannot be avoided. Governments (and energy security specialists) need to stop seeing this as simply an external variable handed down from the Commission, or a concern only for "climate people," but part of a longer-term strategy to prevent potentially catastrophic harm to the planet itself. Given the growing democratic political pressure on governments to increase the use of renewable energy sources (RES) and decrease both carbon and pollution emissions (as recent pre-election political debate and rhetoric suggests), only a whole-of-society approach will enable the political and economic compromises to enable sustainable solutions. The societal costs of – for example – phasing out oil shale aka põxit should not be understated, of course, but if the issue is not taken seriously

There is a serious need to "future-proof" Baltic energy security policies now not twenty years down the road

sooner than later, the technological possibilities may never be successfully exploited.[27] In short, there is a serious need to "future-proof" Baltic

[25] Kristi Raik, "How to Talk About and With Russia? Estonia Has a Thing or Two to Learn from Finland", *ICDS Blog*, October 23, 2018, https://icds.ee/how-to-talk-about-and-with-russia-estonia-has-a-thing-or-two-to-learn-from-finland-about-communicating-with-our-eastern-neighbour/ (accessed December 2, 2018).

[26] Juozas Augutis, Ricardas Krikstolaitis, et al., *Dynamics of Energy Security Level in Lithuania and Comparison with Other Baltic States* (Kaunas, Lithuania: Vytautas Magnus University, November 2018), p. 8.

[27] See e.g. Anna Bulakh, Jordan Kearns, and Emmet Tuohy, *Impacts of Climate Policy on Estonian Energy Security* (Tallinn: World Energy Council, 2016).

energy security policies now – not twenty years down the road.

Risk: Differing attitudes toward state aid will result in intra-Baltic conflict – or incur the wrath of the Commission itself.

Mitigation: To ensure continued interest from Brussels, the three countries (as well as Finland) need to be firm in their support for market principles for gas trading. Outside the region, interlocutors express doubt that the Baltics are ready to allow supply contracts to be made with a minimum of political interference; while the recent ruling on Lithuania's state aid to Klaipėda is a positive sign, state aid cannot be the basis for the regional gas system in the future. Ultimately, if infrastructure debates continue much longer, outside arbitration via "a fair risk mitigation process" should be considered in order to prevent unsustainable competition among incompatible infrastructure projects.[28] This process can be aided by mutual agreement among the three Baltic states (or even among the Nordic-Baltic Eight countries) on what projects should be submitted to the next European Commission for PCI funding in the 2021-2027 window.

State aid cannot be the basis for the regional gas system in the future

Risk: Market participants (notably SMEs and households, as well as industries without experience in energy trading) will not have any incentive to change their behavior.

Mitigation: More education is needed, especially for industrial consumers in the region. As TSOs design more ambitious market integration measures, they need to be aware that most consumers, including in the industrial sector and especially in late-liberalizing markets like Latvia, simply do not know how to take advantage of the opportunities that more gas-on-gas competition can bring. Public awareness campaigns will be needed.

Risk: Lack of agreement on market merger/entry-exit zones continues to persist – and deters potential energy suppliers.

Mitigation: The best solution is a joint one, and so Tallinn together with Riga and Helsinki should push Vilnius to get on board. One possibility is to do so via a joint venture – along the lines of Rail Baltic(a), even given the problems the latter has had – as this both ensures that all participating states equally benefit from (and share in) the risks, and as it has already been endorsed by the three Baltic states' ministers and TSOs before, in 2015. Failing that, the remaining states should still go ahead in a "coalition of the willing" – ultimately, a fully combined market is more attractive to outside suppliers, and the resulting price advantages may well encourage not only Lithuania but also other states in Central Europe to join as well.

[28] Central Europe Energy Partners, *Cross-Border Energy Cooperation in Central Europe* (Brussels: CEEP, 2018), p. 30.

Conclusion

As this paper has sought to demonstrate, Winston Churchill's observation about the importance of energy supply diversification still remains relevant to contemporary debates. However, it is worth underscoring the specific context in which his remarks were made. Churchill was not talking about energy as a whole, but specifically about oil. Much like gas now, oil was seen at the time as of singular and vital importance; it took up much if not all of the political oxygen in the Houses of Parliament and beyond. (The value of natural gas – as a clean, reliable source of power – only became apparent many decades later.) Yet, now as then, there are alternatives – and the pace of technological advancement is such that we may not even envision what form these alternatives will take.

If we are really to pursue variety, then, we need to think more broadly. In the end, neither household consumers nor military commanders are truly concerned with what fuel makes their lights turn on, or their tanks move, so long as they do so – and do so reliably. Fuel switching possibilities have already mitigated total energy (if not gas) dependence on the former monopoly supplier and should be investigated further in the region. The likely future direction of EU energy policy will be to encourage not just "gas-on-gas" competition but competition among energy sources themselves, whether according to price, level of carbon emissions, or more. And the greater the level of inter-fuel competition, the less significant the disruptions from an interruption in any given source.

Developing and pursuing energy policies that avoid a singular focus on particular fuels, while preparing for a post-transition world where sources can both compete and complement each other, would represent a more complete fulfillment of Churchill's vision – and a major contribution to a secure and sustainable future both for the Baltic and for the world.

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