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## The challenge of completing the EU internal market for natural gas

### Abstract

In 2006, natural gas issues in Europe shifted from relative unanimity to political dynamite. Central to European thinking on energy policy has been the notion that liberalization and further integration of markets will enhance energy security, drive down costs, and, in combination with other policies, increase sustainability. For a majority of the EU this approach arguably has already delivered in terms of energy security, though in the current climate of geopolitical rhetoric many analysts and politicians give another impression. The reality is that in 2015 energy security and single source dependence are still problematic for only a handful of Member States where – as explained in this policy analysis – market power abuse and arbitrary pricing are rife. In this context the concept of the Energy Union provides an opportunity to address single source dependence once and for all, and increase gas security throughout the EU. This analysis explores the challenge of completing the EU internal market for natural gas and the role that the Energy Union is expected to play in this process.

### 1 Introduction

The EU debate about energy security overwhelmingly focuses on natural gas, almost exclusively that from Russia. It is worth keeping in mind that this debate primarily concerns a number of Member States in central and eastern Europe. In the majority of EU Member States dependence on Russian gas has never been a valid concern, either because the market share of one source was not prominent or because there was sufficient access to alternative supplies. However, in Member States in central and eastern Europe it has been a real issue, and unfortunately national governments in those Member States on aggregate have done too little to address the problem. Fortunately, in recent years, and in particular since 2009, we have seen substantial improvements, and there is currently only a handful of Member States where single source dependence on a natural gas supplier is still

an issue. Further completion of the internal gas market is complicated. Because of the small size of some national markets, there has been limited interest on the part of the private sector to invest. In addition, the EC has a limited mandate and insufficient financial means to support Member States (and this limited room for manoeuvre is maintained because of disagreement between Member States on how to address the problem). Finally, there is insufficient cooperation between the relevant Member States. What adds to these structural complexities is that gas demand in general has been in steady decline throughout the EU.

The Energy Union offers an excellent opportunity to complete the internal gas market, though some critics query whether, as gas demand in the EU continues to

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dwindle, substantial investments in gas infrastructure should be made.<sup>1</sup> In this analysis, the argument is made that investments are indeed worthwhile for two main reasons. First, it is assumed that in the near future natural gas can be expected to face fierce competition for power generation from cheap coal and subsidized renewables and increased efficiency will continue to drive down demand, but that in due time Europe will get its carbon regime working. In addition, natural gas is used on a significant scale for heating and cooking, and in various industrial processes. Given that natural gas is a relatively clean fossil fuel and is abundantly available, it is expected that it will continue to play an important long-term role in the EU's energy mix. Second, even though the problem of dependence on Russian natural gas is exaggerated in most cases in the EU, in a number of Member States single source dependence is an issue that has to be addressed. Targeted investments in infrastructure along with resolution of regulatory flaws can help address that issue. This analysis will give a brief history of EU market liberalization, infrastructure development, and regulation. In addition, the document will showcase several recent examples where investments made by Member States, sometimes with support from the EU, have reduced the likelihood of market power abuse by increasing that country's access to alternative sources of supply. The document gives an overview of where the existing bottlenecks in natural gas infrastructure are, and where single source dependence prevails. It then describes policy proposals in the Energy Union addressing these problems. The paper then ends with brief conclusions of how the Energy Union could—and should—help address the remaining bottlenecks in the EU gas system.

## 2 Market liberalization, infrastructure development and regulation

The history of energy market liberalization in the EU is long and mostly goes beyond the scope of this policy brief. Suffice to say that since the early 1990s European energy markets have been subject to attempts by European institutions to liberalize them and create one single energy market. This

has worked to some extent, but in 2015 one can observe that regionally there are two impediments to completion of the internal market.

The first is a lack of investment in gas infrastructure in certain parts of the EU, in particular the ones where gas demand is relatively modest (e.g. a number of Member States in central and eastern Europe), and/or the costs and benefits of a project are on different sides of a national border (e.g. additional interconnection capacity between Spain and France). There is some evidence that infrastructure projects with a cross-border component in particular struggle to attract financial means.<sup>2</sup> These missing links in turn prohibit natural gas from flowing freely throughout the continent, which limits some Member States in their ability to attract alternative supplies in case of a supply disruption. Under normal circumstances, in the case of market failure, government actors may step in to help push the market in the desired direction. In this instance that entails making co-investments in gas infrastructure, and this continues to be a sensitive topic in the EU, because investments in energy infrastructure have historically been a Member State affair and not the domain of European institutions.<sup>3</sup> It was not until 2011 that the European Commission proposed an energy infrastructure package, which identified so-called projects of common interest, and provided the Commission for the first time with a structural mandate to co-finance energy infrastructure under the Connecting Europe Facility (CEF).<sup>4</sup>

The second, and partly related, issue is the patchwork of regulatory regimes that one finds throughout the EU. Historically, designing regulation has been a Member State task as well, and even though heterogeneity amongst national regulatory regimes probably does not hinder investments in infrastructure without a cross-border impact, empirical analysis suggests that this is different with regard to gas infrastructure that has an international component such as an interconnector.<sup>5</sup> In 2011 the Agency for the Cooperation of Energy Regulators (ACER) was established

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<sup>1</sup> <http://www.energypost.eu/europes-gas-demand-falling-doesnt-anybody-notice/>.

<sup>2</sup> Ruester, S., von Hirschhausen, C., Marcantonini, C., He, X., Egerer, J., Glachant, J.-M., 2012b. *EU Involvement in Electricity and Natural Gas Transmission Grid Tarification*. Final report. Florence: RSCAS, European University Institute.

<sup>3</sup> Regulation 347 / 2013 on guidelines for trans-European energy infrastructure lays out specific criteria under which certain projects may be eligible for co-financing from European funds, the Connecting Europe Facility to be specific. Though the details of these regulations fall outside the scope of this policy analysis suffice it to say that the EC cannot build energy infrastructure on its own, and the financial bandwidth to support projects is very limited.

<sup>4</sup> For a detailed account, see Boersma, T., 2015. *Energy Security and Natural Gas Markets in Europe – Lessons from the EU and the United States* – <http://www.routledge.com/books/details/9781138795129/>.

<sup>5</sup> Ruester et al. 2012, op.cit.

for better streamlining of different national regulatory regimes in the EU. From the onset the effectiveness of this institution was questioned because of its limited mandate and budget.<sup>6</sup> In July 2015 the European Commission made an early announcement that ACER's mandate will be strengthened in order to improve its oversight, in particular of cross-border electricity and gas flows.<sup>7</sup>

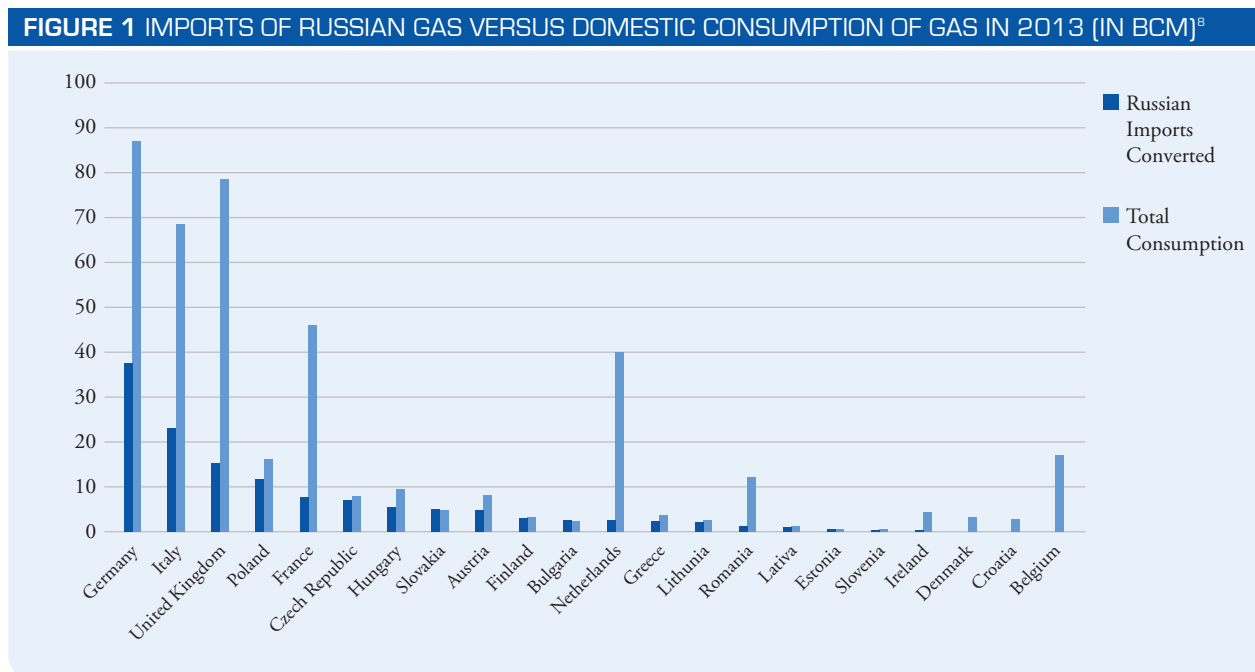
The construction of the internal gas market in the EU is still a work in progress, even though for many years 2014 has been accepted as a final date for completion. In this context, this brief now turns to the small part of the EU market where ongoing dependence on a single supplier is still an issue, and why further completion of the internal market arguably is the right path forward.

### 3 Dependence on one single gas supply, and why market integration works

How significant is the problem of single source dependence in 2015? Figure 1 gives an overview of the amount of Russian natural gas in the respective Member States. At first glance,

there are more than a handful of Member States where the proportion is still very prominent. However, importing a substantial amount of a commodity from one single source is not the same as being vulnerable to supply disruptions, arbitrary pricing, and the like. Consider for example the Czech Republic. Most of its imports of natural gas are Russian. Yet for more than a year now Czech government officials have publicly declared that in fact dependence on Russian natural gas is no longer an issue for the country. This is because it has made additional investments in interconnectors with Germany, and by doing so has effectively become part of the German market, even though the German market is under normal circumstances still importing Russian gas (through Nord Stream and Opal). If necessary, the Czechs are also able to access alternative sources through Germany, like Norwegian and Dutch gas, and LNG (liquefied natural gas).

The case of Poland is another example that shows why market integration works, though there are some caveats as well. Since 2009 the Polish grid operator Gaz-System has



Source: Oxford Institute for Energy Studies and Eurogas.

<sup>6</sup> Coen, D., Thatcher, M., 2008. Network governance and multi-level delegation: European networks of regulatory agencies. *Journal of Public Policy* 28(1): 49f Pu.

<sup>7</sup> <http://www.euractiv.com/sections/energy/eu-energy-regulator-get-enforcement-powers-316175>.

<sup>8</sup> Sources: Ralf Dickel et al., *Reducing European Dependence on Russian Gas: Distinguishing Natural Gas Security from Geopolitics* (Oxford: Oxford Institute for Energy Studies, 2014), p. 3, available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/10/NG-92.pdf>; *New Eurogas Data Confirms Dynamic EU Gas Market*, Eurogas, press release, March 25, 2015, available at: [http://www.eurogas.org/uploads/media/Eurogas\\_Press\\_Release\\_-\\_New\\_Eurogas\\_data\\_confirms\\_dynamic\\_EU\\_gas\\_market.pdf](http://www.eurogas.org/uploads/media/Eurogas_Press_Release_-_New_Eurogas_data_confirms_dynamic_EU_gas_market.pdf).

made multi-million euro investments in grid expansion, interconnectors, and reverse flow options (enabling natural gas to flow from west to east, instead of along the historical unidirectional western route). Additionally, in 2007 Polskie LNG was established with support from the European Commission to construct an LNG regasification terminal off its northern shores, in order to enable imports of LNG. The Polish state oil and gas company PGNiG is responsible for getting supplies to Poland, and, in order to circumvent Gazprom, signed an expensive supply contract with Qatargas, with LNG arriving in Poland at prices higher than those that Gazprom charges.<sup>9</sup> Depending on the specific contract details, there is a risk of becoming locked into unfavourable gas prices.<sup>10</sup> As a result, LNG tariffs will have to be regulated in the country. Moreover, local laws prescribe the maximum percentages of natural gas that can come from a single country.<sup>11</sup> In reality these prescriptions prohibit imports from Germany as well, because that natural gas could well come from Nord Stream (and thus be Russian). Despite these caveats, what is important in the Polish case is that, once the LNG terminal is in operation, Poland will in theory be able to supply 85% of its natural gas through resources other than Russian gas. Again, creating options to purchase alternative supplies helps to enhance energy security, though it always comes at a price. In addition, more work is required in Poland to preserve basic market functioning in line with the EU philosophy of liberalized markets vis-à-vis outright regulated markets. That being so, the Polish case provides an interesting case for further research.

Of course the prime example in the EU of successful market integration is the north-west European market. Here Member States for many years have invested in infrastructure, interconnectors, storage facilities, and the like, resulting in markets where supplies are diverse, trade increasingly takes place on liquid hubs like National Balancing Point and Title Transfer Facility, and competition has eroded the interest of buyers in signing long-term oil-indexed contracts. Instead, shorter-term contracts based on hub prices prevail, a trend that is likely to continue. It is less certain that all parts of the EU gas market will become more liquid, and that trade will prevail. This primarily

has to do with the relatively marginal role that natural gas plays in several Member States, in particular in central and eastern Europe. The limited volumes of gas consumption have prohibited investments on a scale such as that we have seen in north-west Europe. It is in these instances that governments can help push the market in the desired direction, but so far that has been complicated, as described in section 2.

In sum, market integration making investments to reduce single source dependence generates tangible results. This section also shows that substantial progress has been made in enhancing energy security by increasing access to alternative gas supplies. It is worth noting that in some countries this probably does not mean that the actual proportion of Russian gas has decreased significantly. For that to happen, buyers of natural gas would have to be willing to pay a significant premium (and incidentally, as in Poland, authorities may decide that this is a good idea). This is because Russian natural gas can be very competitive on a marginal cost basis. It is for this reason that earlier studies have shown that, despite the political desire for change, it is in fact likely that the proportion of Russian gas in the gas mix of the European Union stays relatively stable, hovering between 120 bcm and 150 bcm per year, predominantly depending on how gas demand develops.<sup>12</sup> Still, several examples in central and eastern Europe have shown that enabling access to alternative supplies can be a successful strategy to increase energy security. Moreover, if one does not lock oneself into expensive long-term contracts for alternative supplies, there is an indication that access to alternatives can also be a hedge to negotiate more competitive prices with Gazprom. However, for access to alternative supplies, it is assumed that gas markets in the EU require sufficient physical connections in order for natural gas to flow freely throughout the EU. Section 4 demonstrates how well individual Member States are currently positioned to attract alternative supplies.

#### **4 Infrastructural bottlenecks in 2015**

Even though the European Commission, headed by President Barroso, for years maintained that the internal energy market (including that of natural gas) would be

<sup>9</sup> <http://www.reuters.com/article/2013/09/09/poland-energy-Ing-idUSL6N0H22WR20130909>

<sup>10</sup> As this 2013 PGNiG annual report suggests, because of the substantial contracted volumes Polish buyers miss out on the opportunity to purchase natural gas on the spot market, which at the time of writing was more competitive - <http://www.pgnig.pl/reports/annualreport2013/en/ar-ryzyka.html#accStyle=0&accContrast=1>.

<sup>11</sup> [http://www.encharter.org/fileadmin/user\\_upload/document/Polish\\_presentation\\_on\\_Baltic\\_pipeline\\_project\\_Feb\\_08.pdf](http://www.encharter.org/fileadmin/user_upload/document/Polish_presentation_on_Baltic_pipeline_project_Feb_08.pdf) - slide 4.

<sup>12</sup> [http://www.brookings.edu/-/media/Research/Files/Papers/2014/10/european-gas-market-import-dependence/business\\_as\\_usual\\_final\\_3.pdf?la=en](http://www.brookings.edu/-/media/Research/Files/Papers/2014/10/european-gas-market-import-dependence/business_as_usual_final_3.pdf?la=en)

completed by 2014, it took until the spring of 2014 before policy-makers in Brussels started acknowledging that in fact this was not going to happen. In the midst of the Ukraine crisis and renewed fears of possible gas supply disruptions, European policy makers in early 2014 scrambled to produce a state-of-the-art overview of energy dependence and vulnerabilities.<sup>13</sup> The analysis showed that even though substantial progress had been made since the most recent supply disruption in 2009, a handful of Member States was still ill-equipped to deal with supply disruption. The analysis also made clear that at this point there was no guarantee that the internal market will be completed by the time that the current European Commission, headed by President Juncker, leaves office in 2019. As an illustration, Table 1 provides an overview of infrastructural bottlenecks in central and eastern Europe. The conclusion is simple: on the basis of the EC's own data, gas infrastructure bottlenecks may be resolved by the end of this decade.

The relevant question for these infrastructure projects is: how necessary are they and what prohibits their construction? For example, in 2014 the EC modelled how much natural gas these Member States would miss in the case of a six-month disruption of Russian gas flows. The outcomes show that, in the non-cooperative (and most realistic) scenario, several Member States in central and (south) eastern Europe would face gas shortages, as would the Baltic States and Finland.<sup>15</sup> Bulgaria would also face problems in the case of a short-term supply disruption. Ironically, Greece is better off in the non-cooperative scenario than in the cooperative scenario (since in the latter it would ship natural gas that it can import in the form of LNG to Bulgaria). Now how would some of these projects help to address this?

- **EL – BG interconnector:** the reverse flow at this interconnector, which would enable gas to flow from Greece to Bulgaria, was scheduled to be operational in

**TABLE 1** INFRASTRUCTURAL BOTTLENECKS IN CENTRAL AND EASTERN EUROPE AND THEIR ESTIMATED COMPLETION TIME, BASED ON EUROPEAN COMMISSION COMMUNICATION ON AN ENERGY STRATEGY FOR EUROPE.<sup>14</sup>

Project name	Details	Finished by
Klaipeda – Kiemena pipeline upgrade	Capacity enhancement of the interconnector between Lithuania and Latvia	2017
EL-BG interconnector	New interconnector between Greece and Bulgaria to support diversification and deliver Shah Deniz gas in Bulgaria	2016
EL-BG reverse flow	Permanent reverse flow on the existing interconnector between Greece and Bulgaria	2014
BG storage upgrade	Increased storage capacity in Chiren, Bulgaria	2017
HU-HR reverse flow	Reverse flow enabling gas flow from Croatia to Hungary	2015
HU-RO reverse flow	Reverse flow enabling gas flow from Romania to Hungary	2016
BG-RS interconnector	New interconnector between Bulgaria and Serbia	2016
SK-HU interconnector	New bi-directional pipeline between Slovakia and Hungary, currently under construction	2015
PL-LT interconnector	New bidirectional pipeline, ending isolation of Baltic states	2019
FI-EE interconnector	New bidirectional pipeline between Finland and Estonia	2019
LV-LT interconnector	Upgrade of existing interconnector between Lithuania and Latvia	2020
PL-CZ interconnector	New bidirectional pipeline between Poland and Czech Republic	2019
PL-SK interconnector	New bidirectional pipeline between Poland and Slovakia	2019
PL: 3 internal pipelines and compressor station	Internal reinforcements required to link Baltics with region south of Poland	2016 – 2018
BG: internal system	Rehabilitation and expansion of transport system needed for regional integration	2017 (tbc)
RO: internal system and reverse flow to UA	Integration of Romanian transit and transmission system + reverse flow to Ukraine	Tbd

<sup>13</sup> For a detailed analysis, see [https://ec.europa.eu/energy/sites/ener/files/documents/20140528\\_energy\\_security\\_study.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/20140528_energy_security_study.pdf)

<sup>14</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0330&from=EN>

<sup>15</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/2014\\_energytestests\\_southeasteuropeanfocusgroup.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2014_energytestests_southeasteuropeanfocusgroup.pdf)

2014, but is now scheduled for 2016. Because Greece has an operational LNG terminal, this interconnector could help ship natural gas to Bulgaria. It is worth noting that in mid-2015 a final investment decision was again postponed, and an operational date of 2019 seems more likely.<sup>16</sup> As of today the capacity remains restricted.<sup>17</sup> Some reports suggested that the countries have diverging interests because both are vying to become an energy hub in the region, Greece by promoting the Trans Adriatic Pipeline (TAP) pipeline and flirting with Russian Turkstream, and Bulgaria by lobbying the EC to endorse a renewed Nabucco to import Iranian supplies.<sup>18</sup> Overall the Bulgarian energy sector comes with significant challenges. Traditionally, policy-makers and the regulatory authority have been more interested in unfeasible mega-projects like South Stream, and put little if any effort into more practical interconnectors with neighbouring countries. Gas supplies have been tied into a long-term contract with Gazprom until 2030. In an evaluation of the Bulgarian energy sector, the European Commission noted a lack of transparency, mismanagement, abuses, and widespread allegations of corruption.<sup>19</sup> A high-ranking EU official was quoted in the spring of 2015 as stating that a lack of political will prohibits meaningful investments in gas infrastructure in Bulgaria to reduce energy dependence.<sup>20</sup> Greece continues to face comparable challenges. In recent years successive governments have quarrelled over the privatization of the gas importer DEPA. In 2013 the privatization of DEPA failed because there were no interested parties except Gazprom. Roughly 66 per cent of Greece's natural gas comes from Russia, and even though it received a 15 per cent price reduction in 2014, Greece's gas costs are amongst the highest in Europe, according to some reports, because the state

monopoly regime of DEPA dominates the market and can make excessive profits.<sup>21</sup>

- **PL – LT interconnector:** for years the Baltic States have been labelled an 'energy island' by the European Commission, and an interconnector between Poland and Lithuania was supposed to end that situation. Even though this interconnector had been discussed for many years, diverging private sector interests on both sides of the border had prohibited progress.<sup>22</sup> Since 2009 Poland has made progress in terms of market integration, but this in turn has complicated the construction of the interconnector with Lithuania, because the regulatory authorities of the Baltic States and Poland quarrelled about cost allocations for the project. In August 2014, under its new mandate, the Agency for the Cooperation of Energy Regulators (ACER) adopted its first cross-border cost allocation, in which it summoned the Baltic States to compensate Poland, because the former were considered net benefiting countries and the regulatory agencies could not reach an agreement.<sup>23,24</sup> Still, it will take until 2019 and up to 70 per cent of EU funding before the interconnector is expected to be in operation.<sup>25</sup>
- **LV – LT interconnector:** in December 2014 Lithuania announced the opening of a floating LNG facility, called 'Independence'. Once fully operational, it has a regasification capacity of 4 bcm, potentially covering 80 per cent of demand of all three Baltic States.<sup>26</sup> Therefore, this is theoretically a win for the other Baltic States as well. It requires expansion of existing gas infrastructure on the Latvian side of the border, however, which is expected to take until 2019.<sup>27</sup> Meanwhile, according to some, Latvia is struggling to implement the Third Energy Package, liberalize its

<sup>16</sup> <http://www.naturalgaseurope.com/conflicting-greek-gas-policy-24174>

<sup>17</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/2014\\_energystressstests\\_southeasteuropeanfocusgroup.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2014_energystressstests_southeasteuropeanfocusgroup.pdf) - page 5.

<sup>18</sup> <http://www.naturalgaseurope.com/greece-and-bulgaria-clashing-gas-hub-ambitions-23720>

<sup>19</sup> <http://www.sofia.diplo.de/contentblob/4047990/Daten/3321520/EUKommissionAnalyseBGEnergiesystem.pdf>

<sup>20</sup> <http://www.euractiv.com/sections/energy/bulgaria-lacks-political-will-build-interconnectors-says-commission-312709>

<sup>21</sup> [http://www.euractiv.com/sections/energy/energy-conundrum-bulgaria-and-greece-314415#group\\_issues](http://www.euractiv.com/sections/energy/energy-conundrum-bulgaria-and-greece-314415#group_issues)

<sup>22</sup> <http://www.euractiv.com/energy/expert-certain-eu-common-energy-interview-530780>

<sup>23</sup> [http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Documents/Notice%20on%20the%20investment%20request%20on%20the%20GIPL%20Project%20of%20Common%20Interest.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Documents/Notice%20on%20the%20investment%20request%20on%20the%20GIPL%20Project%20of%20Common%20Interest.pdf)

<sup>24</sup> <http://www.acer.europa.eu/Media/News/Pages/ACER-adopts-a-decision-on-the-allocation-of-costs-for-the-Gas-Interconnection-project-between-Poland-and-Lithuania.aspx>

<sup>25</sup> <http://af.reuters.com/article/energyOilNews/idAFL5N0R53P120140904>

<sup>26</sup> <http://www.bloomberg.com/news/articles/2014-10-27/lithuania-grabs-lng-in-effort-to-curb-russian-dominance>

<sup>27</sup> <http://www.lg.lv/?id=3377&lang=eng>

market, and unbundle the incumbent gas company.<sup>28</sup> As investors in Finland and Estonia too are embarking on possible LNG import facilities, without dialogue and coordination between them it seems highly questionable that these investments will be profitable given the very limited volumes of natural gas that these countries consume. This example underlines how badly EU Member States sometimes cooperate to address energy security concerns. This comes on top of outdated market models, delayed implementation of EU legislation, and an overall lack of competition and market functioning.

These examples suggest a long and arguably bumpy road ahead towards one internal gas market. Section 5 deals with the Energy Union, and discusses to what extent this concept may help enhance energy security in the EU.

## 5 An Energy Union: The way forward

The European Commission headed by President Juncker has made energy security one of its key priorities. To underline that the EC meant business, a Vice-President for the Energy Union was appointed in the autumn of 2014 when the Commission came to power who is supported by a Commissioner for Energy and Climate Action. At the time of writing, discussions between the EU Member States about what exactly an Energy Union entails are ongoing, and it is likely that it will take until 2016 before final decisions are made. However, in the light of the draft plan for an Energy Union, which was published in February 2015, and successive press reports, it is possible to portray some initial impressions of where the Energy Union may be heading in terms of completing the internal gas market.<sup>29</sup>

- Fundamental shifts unlikely

The debate on the Energy Union was in fact kicked off by then Polish Prime Minister Tusk in the spring of 2014. In an op-ed in the *Financial Times*, Tusk called for drastic reform of the EU approach to energy, and in particular its relations with Russia.<sup>30</sup> Amongst other items Tusk called for a common purchasing vehicle for natural gas, so that price differences throughout the EU could be ended and there would be no more bilateral deals.

The idea was controversial, because it essentially ran counter to two decades of market reforms that the European Commission had been propagating. At the same time, the status quo generated substantial dissatisfaction amongst particular Member States in central and eastern Europe, who believed that other Member States did not take their calls seriously and were too busy closing bilateral deals in their own interest.

With hindsight, it is now apparent that Tusk's proposal is unlikely to be part of the Energy Union. Draft documents that have been published still mention voluntary common purchasing mechanisms as an option, if in line with existing EU and global trade legislation.

- High-level groups to break energy barriers, Central East South Europe Gas Connectivity (CESEC) High-Level Group and South-West Regional Group

In order to improve the understanding of the barriers that have so far prohibited cross-border and trans-European gas projects, Central (South) Eastern Europe and South-Western Europe High-Level Groups were formed to exchange information and draft action plans to address existing bottlenecks. CESEC was established in February 2015, and in July reported that countries in the region had signed a Memorandum of Understanding in which they agreed that they would work together to 'accelerate the building of missing gas infrastructure links and to tackle the remaining technical and regulatory issues which hamper security of supply and the development of a fully integrated and competitive energy market in the region'.<sup>31</sup> The Memorandum states that in principle market participants are expected to pay for infrastructure projects, but that the involvement of the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) may be considered. It remains to be seen whether expectations in terms of private sector investments are too high. Several of the aforementioned projects have been debated for many years, e.g. an LNG regasification terminal in Croatia. If there was a market pull, the terminal would probably have been built by now. In a comparable effort to that of CESEC, on 4 March 2015 representatives of France, Portugal and Spain agreed to assess the viability of long-

<sup>28</sup> <http://www.naturalgaseurope.com/lithuanian-lng-terminal-and-baltic-lng-competition>

<sup>29</sup> For the communication on the Energy Union package, see [http://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC\\_1&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF)

<sup>30</sup> <http://www.ft.com/intl/cms/s/0/91508464-c661-11e3-ba0e-00144feabdc0.html#axzz3fohlB5w6>

<sup>31</sup> <https://ec.europa.eu/energy/en/news/central-eastern-and-south-eastern-european-countries-join-forces-create-integrated-gas-market>

awaited additional gas interconnection capacity between Spain and France, to allow bi-directional natural gas flows.<sup>32</sup>

For both of these working groups, and others that may follow, the proof is of course in the pudding. In essence the investments required are a public good, yet the EC counts mostly on private financial means to make them happen. The underlying causes of the lack of investment in these cases, albeit vested interests or a lack of market relevance in terms of consumed gas volumes, have not changed. Talking alone will therefore not bring solutions. New incentives to attract investments are required.

- European Fund for Strategic Investments (EFSI)

In late November 2014, the then new European Commission led by President Juncker together with the European Investment Bank launched an investment plan to stimulate growth and job creation in the EU. It intends to attract €315 billion up to 2017. The plans were proposed in January 2015, and eventually adopted by the European Council on 25 June.<sup>33</sup> In essence the fund will provide 16 billion euros-worth of guarantees from the EU budget and €5 billion from the European Investment Bank. The EFSI is expected to stimulate private sector investment. In other words, the European Commission and EIB expect a multiplier effect of 1:15 in real investment.

Over the last couple of months there has been scepticism whether that multiplier is realistic.<sup>34</sup> How does one for instance select the projects that would not have happened without the EFSI guarantee? It is also worth noting that the €8 billion of EU public money is not new, but consists of funds shifted from other budgets, such as the aforementioned Connecting Europe Facility. Finally, it is worth considering that EFSI targets a broad range of projects, including transport, energy, broadband infrastructure, health care, education, research, and risk finance. Thus, even if the 1:15 multiplier is realistic, and all the right projects are chosen (catering for the relevant public interest and not political and/or private interests), it still remains to be seen how many of these investments will effectively help to address energy infrastructure (and more specifically gas infrastructure) bottlenecks.

Not all of these issues have been ironed out in detail, and in the coming years it will become apparent whether Juncker's growth plan is realistic or not.

- Projects of common interest (PCIs)

Even though legislation has been adopted that provides the European Commission with a structural mandate to co-invest in energy infrastructure projects in case of market failure, flaws remain. First, the total available budget under CEF is €5.85 billion up to 2020, which is rather mediocre if one considers that in total an estimated €70 billion is required to address all infrastructural bottlenecks in the gas market (if one adds required investments in the electricity markets the estimated, though ill-defined, costs reach €200 billion). Second, identifying projects of common interest continues to be a struggle, with an initial list of 248 projects throughout the EU, which in early 2014 was watered down to 33 projects (27 natural gas and 6 electricity). In November 2014, after several years of debate and negotiation, the first batch of €647 million was allocated, and in 2015 another €650 million will be made available. Though that may sound like a substantial chunk of money, and of course it is, the first allocation round gives an impression of what these amounts can do: of the 34 projects that received support, the vast majority are study projects, with admittedly one important physical bottleneck being addressed, i.e. the interconnector and supporting infrastructure between Poland and Lithuania.<sup>35</sup> Moreover, it should be noted that additional financial means probably do not solve a lack of investment. Certainty about the return on investment and attractive rates of return are important criteria to keep in mind. Throwing money at energy infrastructure in itself is unlikely to do the trick. Last but not least in the context of this policy brief, it is worth noting that PCIs in fact are not new policy. As described, they are part of the Energy Infrastructure Directive, and not part of new ideas under the umbrella of the Energy Union.

## 6 Conclusions

This brief analysis shows that even though the Energy Union has been presented as a major effort to complete the internal energy market, the novelties in this policy package in terms of stimulating investments in gas infrastructure are at this

<sup>32</sup> <https://ec.europa.eu/energy/sites/ener/files/documents/Madrid%20declaration.pdf>

<sup>33</sup> <http://www.consilium.europa.eu/en/press/press-releases/2015/06/25-council-adopts-efsi-regulation/>

<sup>34</sup> <http://www.bruegel.org/nc/blog/detail/article/1498-the-achilles-heel-of-junckers-investment-plan/>

<sup>35</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/2014\\_cef\\_energy\\_lists.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2014_cef_energy_lists.pdf)



point not that impressive. Identifying existing bottlenecks has certainly been placed high on the agenda, but one could argue that they have been documented extensively in previous years. Significant uncertainties remain as to whether EFSI will be able to live up to the created expectations of mobilizing an additional €294 billion of private capital to reach its objective. In addition, parts of the public financial means that go into EFSI are existing funds that are shifted from other budgets, like the CEF. Finally, support through PCIs is a continuation of policies which existed before the Energy Union was born. Admittedly, it is not all about

financial means, and ironing out regulatory hurdles in specific cases may help further projects of common interest. The main critique however should probably not be about the amount of available finance. What is lacking are ideas for creating new incentives to stimulate investments in gas infrastructure, such as better defining and expanding a role for the EIB, special rates of return for projects with a cross-border component, or raising a (marginal) EU-wide fee to help fund PCIs. These ideas are not new, but it is time that some of them were put to the test in order to make the last mile somewhat shorter.

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