

Iran and the European Energy Union: Prospects, Developments, and Challenges for a New  
Natural Gas Partner in the European Energy Market

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## **ABSTRACT**

Lily Sharzad Emamian: Iran and the European Energy Union: Prospects, Developments, and Challenges for a New Natural Gas Partner in the European Energy Market  
(Under the direction of Robert Jenkins)

This thesis explores European energy policy with respect to Iran in the context of the European Energy Union and the European Commission's mission to diversify and secure the EU's supply of natural gas. The potential for Iran, a gas-rich nation and former EU fuel supplier, to accelerate the EU's coordination of its institutions, Member States, and private stakeholders offers a litmus test for the Commission's progress on the European Energy Union. The Commission's ability to drive energy policy management and coordination remains a challenge, as the near-term interests of Member States and private stakeholders often diverge from the European Commission's strategic energy objectives. Furthermore, the difficulties with coordination of a European energy strategy across Member States and need for increased investments in infrastructure are predicted to result in Iranian natural gas remaining a small part of the EU's energy mix in the short to medium-term.

**To my mother, father, and sister, who inspire me with their stories and steadfastness.**

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## INTRODUCTION

The European Commission's efforts to establish a Europe-wide energy strategy for long-term climatic, geopolitical and economic stability may lead to an opening of new energy trade with new partners as it seeks to diversify its sources supply. Potential partners such as Iran, which has vast reserves of both petroleum and natural gas, present both an opportunity to achieve such diversity, yet also present challenges. Iran's re-entry on the global energy stage is marked by the the nuclear agreement known as the Joint Comprehensive Plan of Action (JCPOA) by six world powers and the European Union (EU). The July 20, 2015 agreement relieves economic sanctions on Iran that severely restricted trade, and has ignited extensive global trade discussions and deal-making as governments and corporations consider how best to engage with and invest in Iran going forward. Europe has a long history of trade relations with Iran, particularly of energy resources, and as the EU considers numerous approaches to energy security, its institutions, Member States and European corporations are actively weighing what Iran has to offer as home to the world's second-largest natural gas reserves.<sup>1</sup>

The European Commission's focus on natural gas is rooted in historically recent energy developments: Over the past decade, the world's proven natural gas reserves have increased from

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<sup>1</sup> "Iran," *U.S. Energy Information Administration*, last modified June 19, 2015, <https://www.eia.gov/beta/international/analysis.cfm?iso=IRN>.

119.1 trillion cubic meters (tcm) in 1994 to 186.5 tcm in 2013.<sup>2</sup> Additionally, global natural gas production has increased by an average of 2.4 percent between 1994 and 2013.<sup>3</sup> As Europe continues to assertively develop renewable energy sources as part of its 2020 Climate Energy Package, it is also assessing how to continue to leverage this abundant, relatively clean source of energy as a transition fuel to enable its ambitious ‘20-20-20’ commitment to reduce greenhouse gas emissions.<sup>4</sup>

Implementation of a comprehensive EU energy policy has made forward strides since the 2007 Lisbon Treaty that enabled the European Council to define an ambitious “New Energy Policy for Europe.”<sup>5</sup> The Energy Policy explicitly sought sustainability, competition and security of energy supply.

In 2009, the first legal basis for EU Energy policy was added as Energy Article 194 in the EU Treaty, and in October 2014, previous “20-20-20” goals for emissions reduction, increased use of renewable energy sources (RES) and improved energy efficiency were endorsed in the European Council’s Energy and Climate Package of 2030.<sup>6</sup> This package also endorsed the concept of a European Energy Union as an organization chartered to implement the Policy, and

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<sup>2</sup> “BP Statistical Review of World Energy 2015,” *BP*, June 2015, <http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>.; Note that while the data standard for natural gas is cubic meters (measured at 150C and 1013 mbar), this thesis will cite sources verbatim and indicate a calculated conversion immediately following in parentheses, based upon conversion of 1 cubic foot = 0.0283 cubic meters.

<sup>3</sup> *Ibid.*

<sup>4</sup> “20-20-20” refers to the EU objectives for year 2020: to achieve a 20 percent cut in greenhouse gas emissions from 1990 levels, 20 percent of EU energy sourced from renewables and 20 percent improvement in energy efficiency from 1990 levels. “2020 climate & energy package,” *European Commission*, April 15, 2016, [http://ec.europa.eu/clima/policies/strategies/2020/index\\_en.htm](http://ec.europa.eu/clima/policies/strategies/2020/index_en.htm).

<sup>5</sup> European Commission, “Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community,” *Official Journal of the European Union*, December 13, 2007. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012M/TXT>.

<sup>6</sup> Sami Andoura and Jean-Arnold Vinois, “From the European Energy Community to the Energy Union: A Policy Proposal for the Short and the Long Term,” *Notre Europe*, January 2015, pages 29 and 44, <http://www.institutdelors.eu/media/energyunion-andouravinois-jdi-jan15.pdf?pdf=ok>.

enable energy coordination among EU institutions and Member States.<sup>7</sup> However, as opportunities to diversify energy sources leveraging new markets such as Iranian natural gas become apparent, a significant obstacle will pose challenges to ongoing progress: the problem of energy governance in an environment where bilateralism continues to be resilient.

Aalto and Temel describe the “great power” problem as the phenomenon in which private companies and ‘large’ or influential EU Member States act as the real shapers of the European natural gas market in practice despite EU institutions’ efforts to expand their reach. In the field of policymaking, “the resilience of bilateralism [in Member State behavior] seriously constrains EU-level external energy relations.”<sup>8</sup>

#### **i. Thesis statement**

While post-sanctions Iran presents a potential opportunity for Europe to embrace a new source of natural gas supplies, one that that could help meet the diversification goals of the European Commission, there are various problems inhibiting both actors from fully engaging with one another in natural gas commerce. These problems include a lack of existing infrastructure and the presence of cheaper and more convenient alternatives of natural gas trading partners for both actors.

Perhaps most critically, existing EU Member State interests, specifically the strength of private producers and distributors and bilateral relationships with foreign suppliers, reinforce the existing status quo in the gas market and are a limit on the capacity of the European Commission to develop EU-wide policy as well as open its markets to new suppliers. As a result of the 2009

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<sup>7</sup> Ibid, page 121.

<sup>8</sup> Pami Aalto and Dicle Korkmaz Temel, “European Energy Security: Natural gas and the Integration Process,” *JCMS: Journal of Common Market Studies* 52, no. 4 (2013), 758-774, doi: 10.1111/jcms.12108.



Treaty of Lisbon, EU Member States and EU institutions have shared competences in energy policymaking which, in the current environment, have often led to national and private interests challenging federalist ones.<sup>9</sup>

By citing examples of these conflicts, this thesis argues that if Member State cooperation with the Commission remains limited, Europe will miss a unique and timely opportunity to engage with Iran in natural gas trade. Instead, key Member States will continue to rely upon Russia as a primary supplier for the foreseeable future. It also argues that the EU's Energy Union, an entity articulated in the Lisbon Treaty, is crucial to the Commission's energy diversification goals.<sup>10</sup> The pages that follow provide a picture of how the EU is working to implement the Energy Union, and address whether Member States will be able to operate within its framework to embrace Iran as a new natural gas partner.

## **ii. Methodology**

This analysis will focus on exploring the European Commission's key energy policy priorities and considerations as Iran re-enters the international market and whether European and Iranian natural gas interests are compatible following adoption of the JCPOA. Empirical research informs this analysis and provides perspective on the geopolitics affecting the European Union's strategy toward the Iranian natural gas market.

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<sup>9</sup> European Commission, "Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community," *Official Journal of the European Union*.

<sup>10</sup> *Ibid.*

### iii. Research Sources

Existing academic literature discussing European energy strategy toward Iran is fairly limited, and therefore, the analysis and conclusions drawn in this thesis are also informed by a series of interviews with experts on EU policy and Iranian commercial policy. They are Bernd Weber, expert of European energy and neighborhood policy; Thomas Pellerin-Carlin of Notre Europe's energy department; Thierry Coville of the Institut pour la recherche et stratégie internationale (IRIS) and Novancia Business School in Paris; Rodrigo Pinto-Sholtbach at the International Energy Agency, and Sohbet Karbuz of Mediterranean Observatory for Energy in Paris.

The scarcity of academic literature can be partially attributed to the fact that Iran has been isolated from the global economy to varying degrees since the 1979 Islamic Revolution. Another element contributing to the limited literature on EU energy strategy is the fact that Member States possess a national competence to develop their own domestic energy policies.<sup>11</sup> Indeed, the existing pan-European discourse on natural gas production and consumption is a rather recent phenomenon, coincident with increased EU efforts regarding climate change and energy independence.

Empirical references include publications by non-governmental organizations and think tanks focused on broad issues such as the history of EU Energy Policy, the EU's evolving energy strategy, and the future of natural gas as a major global resource.<sup>12</sup> Few resources discussed

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<sup>11</sup> Ibid.

<sup>12</sup> Langsdorf, Susanne. "EU Energy Policy: From the ECSC to the Energy Roadmap 2050," *Green European Foundation*, 2011; Sami Andoura and Jean-Arnold Vinois, "De la communauté européenne de l'énergie à l'Union de l'énergie : Une proposition politique pour le court et le long terme," *Notre Europe*, January 2015, <http://www.institutdelors.eu/media/unionenergie-andouravinois-ijd-jan15.pdf?pdf=ok>.; Multiple Authors, "The Future of Natural Gas : An Interdisciplinary MIT Study," 2011.

issues directly related to the focus of this thesis. One example is a report from the European Council on Foreign Relations describing Europe's plan for engaging with Iran following the nuclear deal.<sup>13</sup> Another such article, published by the Center for a New American Security (CNAS), discusses the anticipated effects of Iran's re-entry into the global economy.<sup>14</sup>

Despite the limited availability of empirical analyses discussing European energy strategy towards Iran, there is relatively abundant, technical literature on global energy consumption, production, and future projections. While reviewing empirical literature on the topic of global energy supply, demand, and production, reports published by private companies such as British Petroleum (BP) proved to be particularly useful. Reports from government agencies and institutions, specifically the European Commission's Directorate General for Energy (DG Energy), the U.S. Energy Information Administration (EIA), and the OECD's International Energy Agency provided substantive information on energy projections for Europe and the United States, as well as each respective country's diplomatic relations and developments with Iran.

The question analyzed in this thesis, "Will Iranian natural gas enter the European market in the short or medium-term?" is addressed from a European perspective and necessitated an initially broad understanding of the background and history of EU's energy market in order to establish appropriate analytical context. However, for the sake of feasibility, this thesis then narrows the scope to focus on drawing conclusions from EU policy information that was readily

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<sup>13</sup> Geranmayeh, Ellie. "Engaging with Iran : A European Agenda". *European Council on Foreign Relations*. July 2015.

<sup>14</sup> Rosenberg, Elizabeth and Dr. Sarah Vakhshouri. "Iran's Economic Reintegration : Sanctions Relief, Energy, and Economic Growth Under a Nuclear Agreement with Iran". *Center for a New American Security*. June 2015.

available and easily accessible from Paris, France, where most of the research for this project was conducted.

Upon further analysis of the research question, it became clear that the future of EU-Iran natural gas trade will depend upon several determinants: Private sector investment in both European and Iranian gas infrastructure, European Member State energy policy, and the ability for a nascent European Energy Union to organize, define and enforce regulatory measures that support the European Commission's recently reaffirmed European Energy Strategy.<sup>15</sup>

The findings indicate that in the short to medium term the high costs of infrastructure, the current precedence of Member State and private interests, and the current status of the Energy Union as a strategic initiative with limited legal mechanisms for exerting policy authority over the influential "great powers" described by Aalto and Temel will combine to limit rapid expansion of Iranian natural gas into the European energy market.<sup>16</sup>

The sections that follow will begin by evaluating the opportunity Iran offers for the European natural gas market in light of the 2014 European Energy Strategy, evaluate the European gas market and move on to reviewing contemporary developments and foundations in European energy policy. It will then place the European Commission's Three Energy Packages in context, assess key EU energy actors, and review the interests of both Iran and these actors prior to concluding.

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<sup>15</sup> Sami Andoura and Jean-Arnold Vinois, "From the European Energy Community to the Energy Union: A Policy Proposal for the Short and the Long Term," *Notre Europe*.

<sup>16</sup> Pami Aalto and Dicle Korkmaz Temel, "European Energy Security: Natural gas and the Integration Process," *JCMS: Journal of Common Market Studies* 52, no. 4 (2013), 758-774, doi: 10.1111/jcms.12108.

## CHAPTER 1

### **Iranian Natural Gas in the European Market: What can Iran offer?**

#### **i. Iran's Re-entry on the Global Energy Stage**

After years of negotiation between the United Nations Security Council's five permanent members (China, France, Russia, the United Kingdom and the United States) plus Germany and the European Union, the diplomatic milestone represented by the JCPOA is testing the EU's ability to achieve a strategic goal and to diversify its sources of natural gas. Iran's reopening energy market, presents an opportune time for an examination of the existing literature on the future of both Europe's and Iran's gas markets and an assessment of the factors that may affect how the EU engages Iran as a potential new source of supply.

As the European Union works to ensure geopolitical security for its Member States, it is faced with the major challenge of reforming its approach to energy. However, the external factors that complicate such a task are many. A key factor is the dependence of Europe on Russia for over half the energy consumed in Europe while the continuing Ukraine conflict and the international fight against ISIS in Syria and Iraq have raised European-Russian tension to the highest levels of the past two decades.<sup>17</sup>

Another factor is that the strident climate-oriented goals undertaken by the EU are driving a focus to increase renewables in its energy mix. While these goals serve as an example

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<sup>17</sup> "Energy production and imports," *EuroStat*, last updated April 7, 2016, [http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy\\_production\\_and\\_imports](http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports).

for other major emitting regions, they also affect how EU Member States transition from other energy supply sources. Indeed, in order to demonstrate progress against the goals, it is widely anticipated that natural gas will serve as a transitory energy source, given it is cleaner than other fossil fuels.<sup>18</sup>

## **ii. Iran's Impressive Natural Gas Reserves**

The world's largest natural gas field, is shared between Iran and neighboring Qatar.<sup>19</sup> The South Pars field contains almost 40 percent of Iran's total natural gas reserves and has provided Iran an opportunity to expand its natural gas sector.<sup>20</sup> Despite economic sanctions related to its nuclear and ballistic missile capabilities, Iran's Pars Oil and Gas Company (POGC) has managed to complete a majority of the 24-stage development plan to bring the field on-line.<sup>21</sup> Constrained foreign investment and limited access to technology have impeded Iran from keeping up with projections for gas production growth in the South Pars field, which is located in the Persian Gulf off its southeastern coast.<sup>22</sup> However, the removal of sanctions is enabling development of the energy sector, such as the National Iranian Oil Company's (NIOC) recent announcement of a plan to deliver condensate to South Korea, signaling the Iranian government's plans to accelerate South Pars production.<sup>23</sup>

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<sup>18</sup> "How much carbon dioxide is produced when different fuels are burned?", *Energy Information Administration*, <https://www.eia.gov/tools/faqs/faq.cfm?id=73&t=11>.

<sup>19</sup> International Energy Agency, *World Energy Outlook 2008*, IEA/OECD, 2008, [https://en.wikipedia.org/wiki/International\\_Energy\\_Agency](https://en.wikipedia.org/wiki/International_Energy_Agency).

<sup>20</sup> Ibid.

<sup>21</sup> "Iran," *U.S. Energy Information Administration*, June 19, 2015, <https://www.eia.gov/beta/international/analysis.cfm?iso=IRN>.

<sup>22</sup> International Energy Agency, *World Energy Outlook 2008*.

<sup>23</sup> Rebecca Jang, "South Korea plans to boost Iran oil imports, especially condensate," *Reuters*, March 2, 2016, <http://www.reuters.com/article/us-southkorea-iran-oil-idUSKCN0W40P8>.

Iran's natural gas reserves are impressive: according to the U.S. Energy Information Administration, it holds the world's second-largest proven natural gas reserves, and produced an estimated 5.7 trillion cubic feet (tcf, equivalent to 0.161 tcm) of dry natural gas in 2013.<sup>24</sup> The potential for Iran's market growth becomes clear when looking at other major natural gas-producing countries that export to the European market. The world's second-largest producer of natural gas behind the United States, Russia, produces 22.1 tcf (0.626 tcm) .<sup>25</sup> Norway, the world's third-largest exporter of natural gas behind Russia and home to Europe's largest gas reserves, experienced a steady average increase in production between 1993 and 2014, when it produced over 3.8 tcf (0.096 tcm) of dry natural gas.<sup>26</sup>

One of the primary goals of the EU's Energy Union is to diversify natural gas supplies.<sup>27</sup> Given this specific priority, observers might expect that major European energy companies would be positioning to expeditiously sign contracts to build pipelines and liquefied natural gas (LNG) terminals in Europe and Iran following the adoption of JCPOA. The following sections will explore whether this is the case so far, and if not, why?

### **iii. Projections & Competition**

U.S. EIA estimates from 2013 show that the projected growth of Iran's natural gas sector is strongest relative to other gas producers in the Middle East. The EIA predicts that Iran's gas production will increase by 35.4 trillion cubic feet (tcf) by 2040.<sup>28</sup> Iran's production growth is

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<sup>24</sup> "Iran," *U.S. Energy Information Administration*.

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

<sup>27</sup> "Communication from the Commission to the European Parliament and the Council : European Energy Security Strategy/COM/2014/0330 final," *European Commission*. May 28, 2014. <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52014DC0330>.

<sup>28</sup> "Iran," *U.S. Energy Information Administration*.

significant for several reasons, especially in comparison to that of neighboring Qatar, whose natural gas production is expected to grow by 4.9 tcf (0.139 tcm) by 2040. Iran's South Pars and Qatar's North Dome fields form a single joined reserve and place the nations in direct competition. Iran has gradually but steadily developed off-stream infrastructure for South Pars gas production, which places it at an advantage over Qatar.

Iran's natural gas development is also notably greater than that of any of its other neighbors in the Middle East, including of Saudi Arabia and Iraq, so the potential for Iran to profit from its historically friendly relationship with Europe is significant. In the 2000s, before the European Union imposed sweeping economic sanctions targeting energy resources and technology, Iran's economic and trade relations with European countries were extensive. For example, Iran worked with France's Total to explore and develop its reserves in South Pars, with UK financial institutions for support of foreign investments, and with Germany's E.On on a LNG supply contract in 2007.<sup>29</sup>

Iran's neighbor Qatar primarily exports its gas in the form of LNG to partners, rather than by pipeline, and LNG faces increased competition and a potential global supply glut. LNG requires 600 times less space than its dry gas alternative. This compactness is can be a benefit for many countries with large reserves, such as the United States and Australia, that are geographically isolated from international markets. Qatar only began exporting LNG in 1997, and has since increased exports to current levels of around 20 percent of global LNG trade. However, those numbers are falling steadily as more countries develop their own LNG

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<sup>29</sup> Carola Hoyos, Daniel Dombey, and Ivar Simensen, "Eon pursues gas deal with Iran," *Foreign Times*, 2007, [http://www.ft.com/intl/cms/s/0/6642f912-cc51-11db-a661-000b5df10621.html?ft\\_site=falcon&desktop=true#axzz460hzuC5W](http://www.ft.com/intl/cms/s/0/6642f912-cc51-11db-a661-000b5df10621.html?ft_site=falcon&desktop=true#axzz460hzuC5W).



technology. Qatar's global market share is expected to fall to near 12 percent by 2035 as North America and Australia are projected to flood the market with an abundance of LNG. Australia's supply of LNG will represent 24 percent of the world market and the United States' share will represent 12 percent.<sup>30</sup> Inevitably, Qatari LNG providers will face stiff competition and strong pricing pressure from these new exporters.

#### **iv. Distribution Routes and Methods for Iranian natural gas**

Unlike Qatar, Iran does not currently export LNG and consequently will likely avoid a major ramp of production and competition during the anticipated global LNG glut. Iran does, however, foresee a future for LNG as a way to engage in shorter-term contracts and to export to more geographically-distant partners, such as those in Europe and Asia. The first Iranian LNG terminal developed after sanctions relief is expected to be complete around 2018.

Iran's alternative to building an LNG infrastructure is the construction of more natural gas pipelines, or increased access to existing lines. According to Sohbət Karbuz, of the Mediterranean Energy Observatory, pipeline construction projects are capital and time-intensive and are becoming less appealing to major producers of gas as the market expands to represent a wider consumer base more fit for LNG. However, Iranian policymakers and pipeline representatives have indicated the possibility of linking Iranian gas to new or existing pipeline projects for the European market. Furthermore, a representative for the Trans Adriatic Pipeline (TAP), a project intended to carry gas from Azerbaijan to the EU and to connect with the Trans-Anatolian Pipeline (TANAP) running through Turkey, expressed openness to embrace new shareholders, including Iran, in April 2015. In addition, Rovnag Abdullayev, president of

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<sup>30</sup> "Maritime Transportation: Implications of Using U.S. Liquefied-Natural-Gas Carriers for Exports," *U.S. Government Accountability Office*, December 2015, <http://www.gao.gov/assets/680/673976.pdf>.

SOCAR, the Azeri state energy company, has been quoted saying, “If Iran has gas in the future, it won’t have [an]other option but to use TANAP pipeline to supply its gas to other markets.”<sup>31</sup>

#### **v. Iran’s Competition in the European Natural Gas Market**

Iranian natural gas entering the European market through a pipeline like TAP and TANAP would imply competition with Azerbaijan, a growing supplier to the European market. Iranian gas could also be transported through TAP and TANAP to be sold on the international market – either to be shipped as LNG or to be stored for future resale or use. Sohbet Karbuz offered a perspective that diverged from the statements of TAP representatives and the SOCAR president by explaining that Azerbaijan is unlikely to welcome competition for the European gas market with Iran.

Iran’s major competition will be Russia (39 percent of current consumption), Norway (33 percent), and North Africa (mostly Algeria and Libya, which provide 22 percent). Competitive prices, established pipeline infrastructure, and geographic proximity make these countries favorable sourcing options for many EU Member States. However, the European Commission’s agenda to diversify its sources of energy consumption, secure its supply of natural gas, and specifically reduce dependence upon Russian energy may facilitate Iran’s access to the EU’s gas market.

As described in the Introduction, the EU’s 20-20-20 Energy and Climate Package sets specific objectives for reducing greenhouse gas emissions, expanding use of RES, and improving energy efficiency. In 2014, the European Commission also reaffirmed support for an Energy Union that intended to drive specific priorities to diversifying sources of energy, and specifically,

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<sup>31</sup> EurActiv.com with Reuters, “TAP pipeline open to other shareholders, including Iran,” *Euractiv.com*, April 9, 2015, <https://www.euractiv.com/section/energy/news/tap-pipeline-open-to-other-shareholders-including-iran/>.

natural gas supply. The Commission's intent on building a successful Energy Union reinforces the potential for Iran as a feasible alternative natural gas supplier to satisfy Europe's future energy needs.

## CHAPTER 2

### A New European Strategy: Diversification

#### i. Natural Gas as a Transitional Energy Source

Natural gas is the subject of much discussion as the European Commission pushes forward its European Energy Union plans. A question often raised by academics, policy makers and environmental advocates observing the Energy Union is why natural gas has taken the front seat in many of the Commission's legislative proposals. For example, Europe is making significant progress in implementing RES. However, the Commission is looking to natural gas as a relatively clean, more immediately accessible fuel source as coal and heavy oils are gradually phased out to meet 20-20-20 goals. Though it is a fossil fuel, it pollutes much less than petroleum when burned and has a growing base of reliable consumers worldwide as the power industry moves away from electricity produced from coal. Furthermore, this positions natural gas as transitional fuel to greener energies such as solar and wind.

IEA projections estimate that European natural gas imports will grow by one third between 2014 and 2020, largely due to falling domestic production and an increased demand from the power sector as coal is phased out.<sup>32</sup>

Europe's import of natural gas via pipelines that connect producers to consumers in EU Member States has enabled countries such as Germany and Italy to meet their energy demands

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<sup>32</sup> Domestic production of natural gas in Europe will fall 25 percent between 2010 and 2020, according to the IEA's Gas Medium-Term Market Report 2015. The report analyses natural gas production, consumption, and market trends until 2020. International Energy Agency, "Gas Medium Term Report 2015: Executive Summary," *IEA/OECD*, 2015, <https://www.iea.org/Textbase/npsum/MTGMR2015SUM.pdf>.

with a (usually) secure and steady supply of gas. Distribution of Russian gas via pipeline throughout the EU has, at least temporarily, enabled Member States to make progress on their environmental goals . On the other hand, Europe’s continued heavy reliance upon natural gas imports from Russia complicates Europe’s leverage in cases of geopolitical tension with that nation. The Commission has therefore prioritized diversification as a key element of its energy policy for Europe.

## **ii. LNG: Presenting Opportunities for Europe to Diversify**

The European Commission’s Energy Security Strategy highlights the growing liquefied natural gas (LNG) market as the EU’s best chance at developing a diverse set of suppliers. New developments across the globe have entered EU-level discussions on energy policy and strategy planning. These include the phenomena of increased LNG production in Australia, Canada, the United States, and Qatar, as well as new gas discoveries in East Africa and Israel.

## **iii. Diversification as a Pillar of the European Energy Security Strategy**

As discussed earlier, European Energy Union received a renewed endorsement from the European Commission in 2014 that also refreshed earlier 20-20-20 commitments that immediately followed the Treaty of Lisbon in 2007. The Treaty of Lisbon also made significant contributions to the EU policymaking process by implementing shared energy competences between the EU and Member States. The Ukraine-Russian gas crises of 2006 and 2009 – two examples of Russia interrupting gas transit through Ukraine – reinforced the Commission’s interest in developing a common energy security strategy.

That strategy came to life as the European Commission’s Energy Security Strategy was published in May 2014 – in advance of a third Ukrainian-Russian gas crisis the following

winter.<sup>33</sup> The Strategy focuses on developing short and long-term solutions for securing European energy resources through diversification, coordination among Member States and with energy industry stakeholders, improving efficiency in energy use and distribution, and coordinating European markets, policies, and infrastructure.

The diversification clauses of the 2014 Energy Security Strategy emphasize a focus on natural gas with which the EU has addressed its international partners. For example, the European Commission's statement to G20 participants in 2014 emphasizes the EU's focus on the "development of flexible, transparent, and competitive energy markets, including gas markets" and explains that it will pursue "a more integrated LNG market, including through new supplies, the development of transport infrastructures, storage capacities, and LNG terminals."<sup>34</sup> Finally, with particular relevance for Europe's relationship with potential energy partners like Iran, the Commission supports "the opening of new routes to supply energy, in particular the Southern Corridor, as a route for possible other sources of supply for Europe."<sup>35</sup>

The European Commission identifies Azerbaijan, Iraq, Turkmenistan, Georgia and Turkey as countries of this "Southern Corridor" who are engaged in natural gas supply, transit and pipeline projects as it considers how to alleviate the fact that "many countries in Central and South East Europe are dependent on a single supplier".<sup>36</sup>

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<sup>33</sup> "Communication from the Commission to the European Parliament and the Council : European Energy Security Strategy/COM/2014/0330 final," *European Commission*.

<sup>34</sup> "G7 Rome Energy Ministerial Meeting: Energy Initiative for Energy Security Joint Statement," *European Commission*, May 6, 2014, [http://europa.eu/rapid/press-release\\_IP-14-530\\_en.htm](http://europa.eu/rapid/press-release_IP-14-530_en.htm).

<sup>35</sup> "Press Release: Rome G7 Energy Initiative for Energy Security Joint Statement," *European Commission*, 6 May 2014, [europa.eu/rapid/press-release\\_IP-14-530\\_en.htm](http://europa.eu/rapid/press-release_IP-14-530_en.htm).

<sup>36</sup> "Gas and oil supply routes," *European Commission*, last updated April 25, 2016, <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/gas-and-oil-supply-routes>.

The importance that the EU has placed upon energy resource diversification, particularly in the Southern Corridor, and Europe's eagerness to build infrastructure to facilitate natural gas flows through the region, create an environment in which new avenues can be explored to ensure security of supply. The 2014 Energy Security Strategy also specifically proposes "other countries" as future partners: "Turkmenistan, Iraq, and Iran, if conditions are met to lift the sanctions regime, could...significantly contribute to the enlargement of the Southern Gas Corridor."<sup>37</sup>

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<sup>37</sup> "Communication from the Commission to the European Parliament and the Council : European Energy Security Strategy/COM/2014/0330 final," *European Commission*.

## CHAPTER 3

### **The Structure of the Natural Gas Market in the European Union**

The current EU internal market in gas and electricity is “characterized by an insufficient level of interconnections” which translates to significant price differences in natural gas, a waste of resources, and the persistence of energy islands within the EU such as the Iberian Peninsula, the Baltic states, the UK and Ireland.<sup>38</sup>

To place the structure of natural gas markets in perspective, a review of current production, consumption and pricing trends is useful.

#### **i. Natural Gas in the EU: Production & Consumption**

The European Commission’s Energy Strategy of 2014 frames its energy security goals by emphasizing a shift away from a supply focus toward a demand focus. This is crucial as it considers the security of a single resource or the security of all energy resources consumed. The European Union has developed a diverse energy mix, which both benefits and complicates its energy security strategy. The current mix includes coal, which has long been produced domestically in great quantities; oil, imported from across the globe; renewable energy, which EU countries have been able to produce and distribute with increasing success in recent years; and natural gas, produced domestically but decreasingly so, causing EU countries to import more to satisfy demand.

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<sup>38</sup> Sami Andoura and Jean-Arnold Vinois, “From the European Energy Community to the Energy Union: A Policy Proposal for the Short and the Long Term,” *Notre Europe*, January 2015. <http://www.institutdelors.eu/media/energyunion-andouravinois-jdi-jan15.pdf?pdf=ok>.



Natural gas accounts for one-quarter of the EU's energy mix, and sixty percent of that amount is imported.<sup>39</sup> This is a key element of the aforementioned European Energy Strategy. The Strategy seeks a future market structure supported by policies that help diversify European energy sources, reinforce regulatory measures, and facilitate resolution of energy interests shared by the EU as an institution and its Member States. European natural gas demand has recently experienced less upward pressure than anticipated by energy experts in long-term projections of a decade or so ago. Energy experts Rodrigo Pinto-Scholtbach of the Organization for Economic Cooperation and Development's (OECD) International Energy Agency (IEA) and Thomas Pellerin-Carlin of Notre Europe both point to warm winters as a major factor contributing to recent reductions in European natural gas consumption. According to a study published by the Oxford Energy Institute, natural gas demand in Europe will fall between 2010 and 2020 from 594 billion cubic meters (bcm) to 564 bcm.<sup>40</sup>

However, longer-term projections indicate increased demand: The same report predicts that gas demand will reach 618 bcm in 2030, or a 0.19 percent increase per year.<sup>41</sup> According to the IEA, the share of unconventional gas (e.g., LNG) in the EU's domestic production will optimistically reach 47 percent by 2035, representing less than 12 percent of demand and 30 bcm at best. Even if Europe is able to develop the appropriate infrastructure to easily convert and consume these reserves at will, the EU will maintain import dependence at around 60 percent -

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<sup>39</sup> "EU Energy in Figures: Statistical Pocketbook," *European Commission*, 2012.

<sup>40</sup> Anouk Honoré, "The Outlook for Natural Gas Demand in Europe," *The Oxford Institute for Energy Studies*, June 2014, <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/06/NG-87.pdf>.

<sup>41</sup> *Ibid.*

the status quo.<sup>42</sup> With these projections, the European Energy Strategy objective of diversification of natural gas supply faces risk.

The International Energy Agency (IEA) reports a 2.3 percent decrease in OECD Europe's overall natural gas production between 2014 and 2015.<sup>43</sup> Decreased production in The Netherlands, a primary producer and supplier to the EU market, was particularly marked in 2015, indicating a 27 percent drop (see Figure 1).<sup>44</sup> The initial European response to decreasing domestic production coupled with increasing demand is focused on identifying substitutes for gas, including coal and RES. However, while coal is considered an abundant, cheap, and easily transportable resource, replacing gas with coal would prevent EU Member States from achieving one of their primary targets for the year 2020 - to reduce greenhouse gas emissions. The increased use of RES would indeed contribute to the EU's realization of its goals, as it seeks to use RES for 20 percent of its energy consumption by 2020. However, the development of renewable technology and the distribution of renewable energy has not yet advanced to the point where future increases can fully replace gas demand.

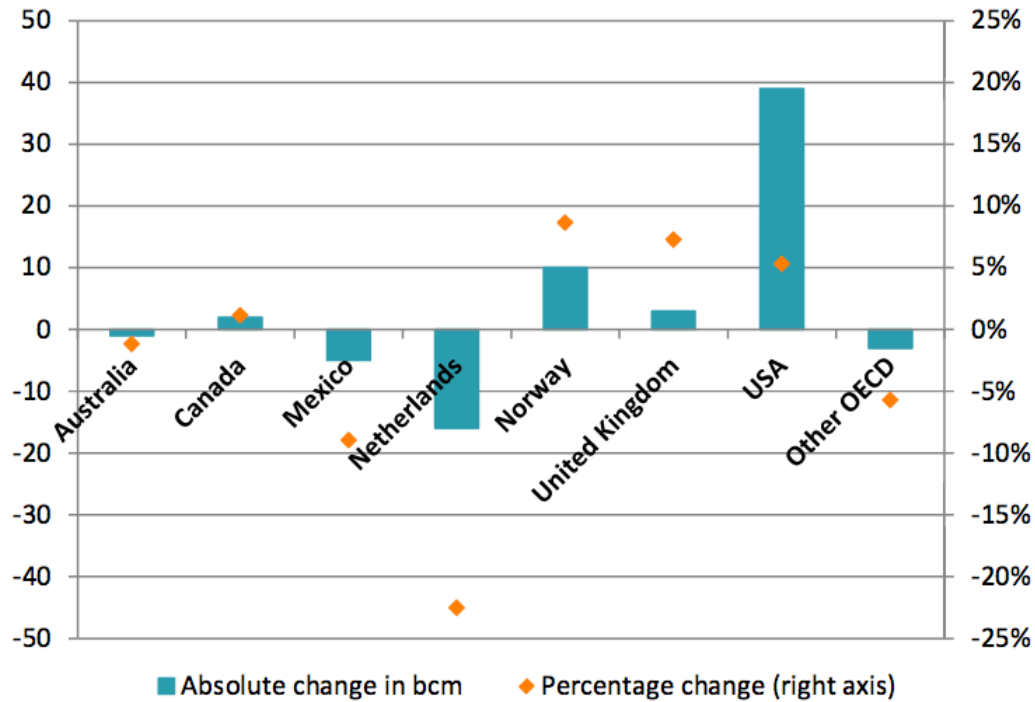
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<sup>42</sup> International Energy Agency, *World Energy Outlook 2012: Executive Summary*, 2012. <http://www.iea.org/publications/freepublications/publication/English.pdf>.

<sup>43</sup> International Energy Agency, "Key Gas Trends 2015-Based on Monthly Data", last updated April 2016, *OECD/IEA*. <http://www.iea.org/media/statistics/Keygastrends2015.pdf>.

<sup>44</sup> Ibid.

**Figure 1: Absolute change and percentage change in natural gas production in OECD, 2014-2015**



**ii. Prices and Trading**

Currently, gas trading and pricing in Europe takes place on a regional basis, as the production and distribution of natural gas is still a relatively centralized around a pipeline infrastructure and will continue to be until LNG, a much more mobile form of gas, becomes increasingly popular. Typically, this has meant that natural gas prices generally do not vary drastically from country to country. Between 2008 and 2014, the average household consumer price stayed between 8-9 Eurocent per kilowatt hour (Eurocent/kWh). The wholesale gas market, where producers, traders, and consumers buy and sell gas, is run and operated across the

European continent from various natural gas marketplaces or hubs. A hub is not necessarily at a pipeline junction where large amounts of gas are physically transported across borders, though those do exist (e.g., CEGH in Austria and Zeebrugge in Belgium). Virtual hubs, or standard sets of natural gas delivery points, are more common today. Examples include NBP, TTF, Gaspool, NCG, PSV, the PEG and TIGF.<sup>45</sup>

The European natural gas market is a part of the larger international market. In theory, private companies are able to operate freely across the globe allow prices to remain competitive and energy resources like natural gas to be distributed across wide expanses. In some ways, gas delivery via pipeline from Russia to Germany and via LNG shipping containers from Algeria to France and the UK are examples of this. However, when Member States, supplier states or private corporations geopolitical or economic interests result in pricing anomalies or supply disruption, the European market is adversely impacted.

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<sup>45</sup> European Commission, “Quarterly Report on European Gas Markets,” Q3, 2015, *Market Observatory for Energy, DG Energy*, [https://ec.europa.eu/energy/sites/ener/files/documents/quarterly-gas\\_q3\\_2014\\_final.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/quarterly-gas_q3_2014_final.pdf).

## CHAPTER 4

### European Union Energy Policy: Contemporary Developments

#### i. The Role of EU Institutions in the Energy Union

The European Commission's primary struggles for an effective Energy Union include leveraging its own competences while respecting those of Member States as well as proposing policies that continue to ensure competition among producer and utility companies as well as transmission system operators (TSOs). The Commission follows the logic that "competitive energy markets and prices are expected to benefit consumers and promote global competitiveness of the EU economy." The Commission and its fellow institutions have reiterated this logic on numerous occasions in recent energy policy proposals and directives, in alignment with the EU's objective to bring to implement a fully operating and successful internal market.

The role of the European Commission in proposing legislation and, once approved by the Parliament and Council, implementing and enforcing it has increased since the adoption of the 2009 Treaty of Lisbon by EU Member States and institutions. The Treaty of Lisbon was the instrument that called for establishing the internal market, for consolidating EU foreign policy responsibilities, and for giving the EU shared energy policymaking competences with Member States. It is explained in greater detail in a later section outlining a trajectory of EU energy policy. Despite increased influence of governmental institutions, the private sector, which is heavily represented by energy firms and their interest groups, is still the paramount actor in European gas trade. As this is likely to remain the case, the EU's concept for establishing an

energy security regime and internal energy market - the European Energy Union - has been focused on facilitating *cooperative* engagement on energy between Member States, the private sector, and European institutions.

Europe's combined need for a diversified collection of natural gas suppliers, for a better coordinated natural gas market among EU Member States and their partners, and for a common security agenda are a few of the major contributing factors to the Commission's push for a European Energy Union.

The idea came from one of the 'fathers of Europe', former President of the European Commission Jacques Delors, who advocated that the EU countries so wishing should begin without delay to embark on a common energy policy. He suggested they develop ambitious economic instruments to finance common research and development projects for alternative energy sources; deepen cooperation on Europe-wide energy networks, and set up oil and gas purchasing groups to facilitate procurement from foreign suppliers while fortifying European foreign policy efforts in this field.

On 25 February 2015, the European Commission took further action toward its energy community and climate goals by presenting its Energy Union proposal, "A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy." The document was more ambitious and thorough than preceding proposals in addressing how the EU - Member States and private stakeholders included - should move forward. In particular, it calls upon EU actors to achieve a "fundamental transformation" of the European energy system and to "move away from an economy driven by fossil fuels, an economy where energy is based on a centralised, supply-side approach and which relies on old technologies and outdated business

models.” The Framework Strategy proposal highlights a “fragmented system characterised by uncoordinated national policies, market barriers and energy-isolated areas” by empowering consumers “through providing them with information, choice and through creating flexibility to manage demand as well as supply.”<sup>46</sup>

While EU energy policy had progressed since the Lisbon Treaty, the Commission’s continues to face challenges implementing energy governance and coping with ongoing bilateralism.

## **ii. Energy Governance**

The Commission and its fellow EU institutions’ competences inhibit them from requiring Member State participation in proposed or ill-enforced energy efforts.

One example is the aftermath of the gas disruption of January 2009, which prompted the fortunate adoption of the EU regulation on security of gas supply and led to the implementation of EU Member State standards and a common EU framework for precautionary measures in case of disruption. Though the framework for the security of natural gas supply is under the purview of the European Union (the Commission in particular), there is much work to be done in the coordination of pipeline networks, implementation of unbundling requirements (the division of companies’ production and distribution sectors) and monitoring of supplies and consumption. There are a few institutions responsible for these activities, such as the Agency for Cooperation of Energy Regulators (ACER), the European Network of Transmission System Operators for gas

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<sup>46</sup> European Commission, “A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy/COM/2015/080 final,” *Official Journal of the European Union*, 2015. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2015%3A80%3AFIN>.

(ENTSO-G), and the Gas Coordination Group, but these organizations lack significant enforcement power.

A 2014 report by think tank Notre Europe found that “lack of compliance [with Commission Energy Union policies] is too frequent. Notre Europe attributed the problem to the EU energy proposals “leaving policy formulation and implementation to the individual EU Member States, who do so in divergent ways.”<sup>47</sup> As a result, the European Court of Justice pursued 567 of 1,300, or nearly 44 percent, of infringement procedures against Member States in the environment, internal market, and energy sectors in 2013.<sup>48</sup>

### **iii. Bilateralism**

In the Introduction, this paper cited the challenge posed by bilateralism and the concept of “great power”. This ‘bilateralism’ is an effect of EU Member States’ practice of their sovereign right to choose their own energy supplies and mix, and to distribute their own energy resources as they wish. As Aalto and Temel explain, it is a historically developed practice of realizing security of supplies for most EU Member States, and it explains what drives wealthy and politically powerful countries like Germany to foster its own natural gas partnerships.<sup>24</sup> A perfect example of “great power” in conflict with EU institutional interests is that of German-Russian energy diplomacy, which led to the development of the Nord Stream natural gas pipeline connecting the two countries directly for the first time. The Nord Stream project, initiated after the 2006 interruption of natural gas flows from Russia through Ukraine due to regional tensions, was gradually supported by France’s GDF Suez and Denmark’s Gasunie, making it a multilateral

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<sup>47</sup> Sami Andoura and Jean-Arnold Vinois, “De la communauté européenne de l’énergie à l’Union de l’énergie : Une proposition politique pour le court et le long terme,” *Notre Europe*.

<sup>48</sup> *Ibid.*



project of private companies seeking profit. It was not, however, supported by EU institutions because its mission to bypass Ukraine compromised EU principles of maintaining solidarity with neighboring energy partners.

As an extension of the “great power” issue, there is also the challenge of private European energy companies acting neither in the interest of the EU as a whole, nor of the EU Member State from which they operate. In this case, private companies follow their own interest of making profitable deals in the free market. According to IEA natural gas expert Rodrigo Pinto-Scholtbach, the instability of the European natural gas market has caused private companies to pursue alternative projects to those supported by the European Commission.<sup>49</sup> Nord Stream 2, an extension of the 2006 Nord Stream project, serves as an example: It is a plan between Russia’s Gazprom and a consortium of primarily German energy companies such as E.ON Ruhrgas and BASF Wintershall to expand the already politically sensitive pipeline supplying significant quantities of Russian gas to Germany.

The Treaty of Lisbon succeeded in combining energy competences between Member States and EU institutions, committing Member States to the “20-20-20” targets of a 20 percent share of renewables, 20 percent increase in energy efficiency and 20 percent lower greenhouse gas emissions by 2020, and to enabling better Member State and EU coordination on external energy relations. However, the EU has thus far been unable to overcome the dominant “Westphalian sovereignty” model driving Member State behavior on energy policy and practice. According to a report on the capability of the Commission’s Framework Strategy proposal to continue building an Energy Union by the Oxford Institute for Energy Studies, the weakness of

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<sup>49</sup> Rodrigo Pinto-Scholtbach (IEA natural gas specialist), interview by Lily S. Emamian, March 2016.

the EU in its ability to reign in the great powers' authority may make the Energy Union project "hard to deliver."<sup>50</sup>

#### **iv. Cooperation between Institutions, Member States, and Private Stakeholders**

Despite valid critiques of the EU's ability to carry out its policies and recommendations, EU institutions are confident in the Commission's progress on the Energy Union.<sup>51</sup> Certain Member States and EU citizens are also supportive and optimistic of the Energy Union's future. 72 percent of Europeans are reportedly in favor of a common energy policy.<sup>52</sup> Member States' adoption of the Treaty of Lisbon, which made energy a shared competency, meant that for the first time they "accepted to consider their own infrastructures in a regional context for the common interest" of other regions and countries in their neighborhood.<sup>53</sup> Jan Frederik Braun expresses belief in the EU's gradual development of a cohesive energy policymaking process and the development of a wider area of shared competences with Member States. He names three major trends that will contribute to the success of the Energy Union: A revised role of authorities and the division of those roles, the increasing importance of confidence building and personal relations between the institutions, and the differing of perceptions within institutions of the post-

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<sup>50</sup> Pami Aalto and Dicle Korkmaz Temel, "European Energy Security: Natural gas and the Integration Process," *JCMS: Journal of Common Market Studies*.

<sup>51</sup> "Fact Sheet: State of the Energy Union - questions and answers, MEMO/15/6106," *European Commission*, November 18, 2015, [http://europa.eu/rapid/press-release\\_MEMO-15-6106\\_en.htm](http://europa.eu/rapid/press-release_MEMO-15-6106_en.htm).

<sup>52</sup> European Commission, "Public Opinion in the European Union: First Results," *Standard Eurobarometer 83*, July 2015, [http://ec.europa.eu/public\\_opinion/archives/eb/eb83/eb83\\_first\\_en.pdf](http://ec.europa.eu/public_opinion/archives/eb/eb83/eb83_first_en.pdf).

<sup>53</sup> Sami Andoura and Jean-Arnold Vinois, "From the European Energy Community to the Energy Union: A Policy Proposal for the Short and the Long Term," *Notre Europe*.

Lisbon political landscape. In short, the EU's already-proven adaptability in the scope of energy policy will help the Commission in its pursuit of an Energy Union.<sup>54</sup>

The European Commission's future plans will determine the EU's ability to continue pushing for an Energy Union in 2016. The EU's mechanisms to implement its current policies in the natural gas market as we know it today, the EU's future plans for energy policy and natural gas projects, and Iran's potential contributions to European natural gas in the context of the Energy Union will be discussed at length in the pages that follow.

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<sup>54</sup> Jan Frederik Braun, "EU Energy Policy under the Treaty of Lisbon Rules: Between a new policy and business as usual," *European Policy Institutes Network*, Working Paper No. 31, February 2011, <https://www.ceps.eu/system/files/book/2011/02/EPIN%20WP31%20Braun%20on%20EU%20Energy%20Policy%20under%20Lisbon.pdf>.

## CHAPTER 5

### European Energy Policy: Foundations

#### i. EU Treaties and Competences: Institutions in place for a common natural gas strategy

By describing the foundational treaties of the European Union, this section seeks to provide necessary background on the mechanisms enabling current efforts to develop a common European strategy that regulates the European energy market through economically reasonable, democratically transparent, and strategically secure policies. The EU's overriding objective is to ensure its citizens' well-being through a strong and effective Union. Though regulation of natural gas became an EU institutional priority fairly recently, the Commission's focus on gas as a key resource in the successful implementation of a comprehensive European Energy Union has a compelling and successful precedent: The European Coal and Steel Community (ECSC).<sup>55</sup>

The components of a functioning pan-European economic alliance have evolved, and today they include new kinds of industry and alternative forms of energy. The European Community has also expanded to embrace new members, and the nature of foreign relations between European Member States and their neighbors has changed to reflect a much different world order than the one understood by European leaders in the post-World War II era.

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<sup>55</sup> European Commission, "Treaty establishing the European Coal and Steel Community," *Official Journal of the European Union*, 1951, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:xy0022>

## **ii. 1952: The European Coal and Steel Community**

At the foundation of the ever-evolving European Union is the Treaty establishing the ECSC, a document that united France, Germany, Italy, Belgium, the Netherlands, and Luxembourg during the reconstruction of Europe following World War II. Signed in Paris in 1951, it brought these countries together with the aim of organizing the free movement of coal and steel across borders and to enable participating countries to have easy access to sources of production. The intention of ECSC's creators, who are considered today to be the founding members of the European Community, was for the Treaty to also engender diplomatic, political, and economic unity among participating countries and to serve as an incentive for solidarity and cooperation on the European continent in the aftermath of yet another costly war. At the time, reconstructing the economies and infrastructure of Europe was a priority among leaders like France's Robert Schumann and Jean Monnet, and Germany's Chancellor Konrad Adenauer, who, as three of the EU's founding fathers, led the reconstruction of France and Germany. By establishing a common market for the exchange of these profitable raw materials, which represented the nexus of European industry and energy, they managed to enact a treaty in 1950, valid for 50 years until 2002, implementing a common market for coal, iron ore, scrap, and steel.

Though much has changed since, several factors that originally brought together European nations have remained the same: A focus on maintaining a common, and integrated, market of European goods and services; a shared interest in projecting unity in major foreign policy decisions, particularly those that address affairs with large and powerful nations; and finally a mutual commitment to democracy and a shared spirit of promoting transparency between Member States for policies that best serve the European people. To build a Europe that

maintains the integrity of each of these foundational goals, EU institutions have embraced the challenge of integrating their respective national energy strategies.

The Treaty establishing ECSC led not only to the economic union of two major industries; it also established institutions for pan-European governance, much like the European Commission, Council, Parliament, Council of Ministers, and Court of Justice as we know them today. They were: The High Authority, whose role it was to achieve the Treaty's objectives; an Assembly, to represent the national Parliaments of each Member State; a Council of Ministers, consisting of six representatives from the national governments of each Member State; and a Court of Justice, consisting of seven judges nominated to ensure implementation of the law and proper interpretation of the Treaty.<sup>56</sup> These institutions provided European nations with the context for cooperation on a host of issues concerning not only their economic recovery and development, but also their place in international affairs in the long-term.

The High Authority had legal oversight over the European institutions and the ability to enforce Treaty rules by imposing fines against, for example, companies who failed to report coal production numbers or Member States who tolerated unfair competitive or discriminatory practices. Led by the High Authority, institutions were able to enforce policies to monitor and support Member State activities in the coal and steel industries. These regulations covered information sharing, production forecasting, funding and investment, infrastructure, price fixing, competition, and wages and the movement of workers.

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<sup>56</sup> European Commission, "Treaty establishing the European Coal and Steel Community," *Official Journal of the European Union*.

### iii. The Lisbon Treaty of 2009

On 1 December 2009, the Treaty of Lisbon went into effect after approval by the European Parliament and Council and unanimous adoption by Member States.<sup>57</sup> The initial legislation proposed by the European Commission in the lead-up to Parliamentary approval and Member State ratification spoke of a constitution for Europe.<sup>58</sup> The concept of a constitution caused several national governments - most notably France, Luxembourg, the Netherlands, and Spain - hold referendums in 2005, clinging to their principles of state sovereignty.<sup>59</sup> Though France and Luxembourg's final rejection of the treaty led to its ultimate failure to become EU policy, the debate it caused enabled EU Member States to reflect upon alternatives that granted the EU a more resonant voice on the global stage. In search of a cohesive set of policy guidelines to enhance cooperation and communication between EU institutions and Member States, as well with its partners in the international community, European leaders went back to the drawing table to construct the Lisbon Treaty.

The Lisbon Treaty granted shared competences between institutions and Member States in more domains than before including the internal market, environment, and energy. The distinctions between these competences are outlined in the Treaty on the European Union (TEU)

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<sup>57</sup> European Commission, "Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community," *Official Journal of the European Union*.

<sup>58</sup> European Commission, "Treaty Establishing a Constitution for Europe," *Official Journal of the European Union*, October 29, 2004, [http://europa.eu/eu-law/decision-making/treaties/pdf/treaty\\_establishing\\_a\\_constitution\\_for\\_europe/treaty\\_establishing\\_a\\_constitution\\_for\\_europe\\_en.pdf](http://europa.eu/eu-law/decision-making/treaties/pdf/treaty_establishing_a_constitution_for_europe/treaty_establishing_a_constitution_for_europe_en.pdf).

<sup>59</sup> Finn Laursen, *Historical Dictionary of the European Union*, (Lanham: Rowman & Littlefield, 2016), 219.

and the Treaty on the Functioning of the European Union (TFEU), which replaced the 2002 Treaty establishing the European Community (TEC), also known as the Treaty of Nice.<sup>60</sup>

The changes agreed upon at Lisbon reformed internal EU policies, strengthened external policies and redefined rules concerning the composition of the Commission, the European Parliament, the Committee of the Regions, and the European Economic and Social Committee. They also reformed voting from a weighted system to one requiring a qualified majority vote (QMV) of the Parliament and Council to adopt a legislative act - a regulation, directive, or decision - in a process called the ordinary legislative procedure.<sup>61</sup> This change is a significant victory for EU institutional decision-making, which relied most frequently upon Member State unanimity for approval of legislative decisions. When unanimity is required, each Member State has the power to block an EU legislative action by voting against the matter at hand. When QMV applies, however, as is the case for energy policy decision-making in accordance with Article 194 of the Treaty on the Functioning of the European Union (described at length in the following subsection), EU action can be taken over the objection of a Member State.<sup>62</sup>

The Lisbon Treaty also established the basis for two new leadership positions. The first, High Representative for Foreign Affairs and Security Policy, acts simultaneously as Vice President of the Commission and presides over decision making for foreign and diplomatic

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<sup>60</sup> European Commission, "Treaty establishing the European Community (Consolidated version 2002)," *Official Journal of the European Union*, 2002, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12002E%2FTXT>.

<sup>61</sup> European Commission, "Articles 294 and 289, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community," *Official Journal of the European Union*.

<sup>62</sup> European Commission, "Article 194, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community," *Official Journal of the European Union*, 2008, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12008E194:EN:HTML>; Stephen C. Sieberson, "Inching Toward EU Supranationalism? Qualified Majority Voting and Unanimity Under the Treaty of Lisbon," *Virginia Journal of International Law*, 50, 4, 2010, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1664069](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1664069).



issues facing the EU. The second position, President of the European Council, is intended to set the EU's agenda and political direction, to promote cooperation among Member States and with the Commission, and to represent the EU externally on foreign and security issues in the same vein as the High Representative.

Each new element for which the Lisbon Treaty is responsible - particularly those dealing with foreign policy, security of supply, trans-European networks, and the internal market - set the stage for the European Commission to reign in enough authority and bargaining power with Member States to begin building toward the European Energy Union. Figure 2 below illustrates specific directives and communications implemented after the Lisbon Treaty entered into force that contribute to the growth of the EU energy policymaking and the gradual growth of the Energy Union.

**Figure 2: Post-Lisbon Energy Accomplishments of the European Commission<sup>63</sup>**

| <b>Field of Policy</b> | <b>Communication/<br/>Directive</b>  | <b>Objective</b>   | <b>Date of Adoption</b> |
|------------------------|--|--|-------------------------|
| <b>Foreign Policy</b>  | COM(2011) 539, i.e. On the security of energy supply and international cooperation - EU energy policy: Engaging with partners beyond our borders | Further crossborder cooperation on the part of the EU with neighboring countries; wider regulatory area; regular information | 7 September 2011        |

<sup>63</sup> Information collected primarily from the European Parliament. Balázs Mellár, "Energy policy: general principles," *European Parliament*, last updated March 2016, [http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU\\_5.7.1.html](http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU_5.7.1.html).

| <b>Field of Policy</b>         | <b>Communication/<br/>Directive</b>   | <b>Objective</b>  | <b>Date of Adoption</b> |
|--------------------------------|---|---|-------------------------|
| <b>Security of Supply</b>      | Regulation (EU) No 994/2010 concerning measures to safeguard the security of the gas supply             | Strengthening prevention and crisis response mechanisms; maintenance of oil stocks; development of emergency and preventive action plans  | 20 October 2010         |
| <b>Trans-European Networks</b> | Regulation (EU) No 347/2013, i.e. The Regulation on Guidelines for Trans-European Energy Infrastructure | Establishes projects of common interest to the European Commission and Member States and means of infrastructure for the most efficient functioning of the European energy market | 17 April 2013           |
| <b>Internal Market</b>         | Regulation (EU) No 1227/2011, i.e. Regulation on Wholesale Energy market Integrity and Transparency     | A main legislative instrument aiming to contribute to the better functioning of the internal energy market  | 4 February 2011         |

In fact, the Commission was prepared from the beginning of its negotiations for a Treaty amending the European Community to have included and retained an energy policymaking mechanism - Article 194 in TFEU. Upon closer examination of the Lisbon Treaty as a whole, its components indicate a calculated approach from the Commission for improving EU oversight over energy policy, and of the foreign and financial affairs that trail it.

#### **iv. Article 194 and its Consequences**

While unification of EU Member States' energy markets has long been in the works, a single phrase in Article 194 of the Treaty of Lisbon is an indicator of the influence that national governments still have in charting their own course in energy policy. That same phrase may, however, also have set the stage for a wave of institutional change to come, making it the most significant enabler for implementing a comprehensive EU energy policy thus far.

“In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to: (a) ensure the functioning of the energy market; (b) ensure security of energy supply in the Union; (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and (d) promote the interconnection of energy networks.”<sup>64</sup>

In short, Article 194 pairs the EU's prioritization of energy policy with the importance of a properly-functioning internal market, reiterates an institutional focus on pursuing environmentally-conscious approaches and solidarity among EU Member States, and grants the Commission exclusive competence on trade and investment negotiations for bilateral trade talks. With most of these initiatives in place long before 2009, the EU's effort to institutionalize energy policy at the EU level – vis-à-vis an Energy Union or not – has its roots in the last century.

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<sup>64</sup> European Commission, “Article 194, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community,” *Official Journal of the European Union*.

## CHAPTER 6

### Long-term Energy Market Liberalization and the EU's Implementation of the Three Energy Packages

#### i. Market Liberalization

Looking back at the 1952 Treaty establishing the European Coal and Steel Community (ECSC), it is clear that establishing a functioning internal market was then a priority among European leaders. At that time the European Community was composed of just six Member States and there were fewer industries dominated by fewer companies. However, integration and liberalization of the coal and steel markets was the High Authority's strategy to guide post-WWII economic recovery in Europe. Between 1952 and 1960, after less than ten years, the Community was responsible for a 75 percent increase in iron and steel production and a 58 percent rise in industrial production. Though coal was overshadowed by alternative fuel sources soon after implementation, the ECSC helped Member States gradually reduce coal production and to prepare miners for work in new industries.<sup>65</sup>

#### ii. The Legal Mechanisms of EU Energy Policy

##### *Common Rules for the Internal Market in 1998*

The 1952 Treaty establishing ECSC was given a fifty-year lifetime and granted the European Commission the opportunity to renew it. The Commission thus released in 1998 a

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<sup>65</sup> European Commission, "Expiry of the European Coal and Steel Community (ECSC) Treaty: an overview, MEMO/02/145" *Official Journal of the European Union*, June 19, 2002, [http://europa.eu/rapid/press-release\\_MEMO-02-145\\_en.htm](http://europa.eu/rapid/press-release_MEMO-02-145_en.htm).

directive - the first of three energy initiatives - to achieve market liberalization of the natural gas sector in advance of ECSC's 2002 expiration date.

The initiative set the stage for two additional energy packages, whose collective objective it was to ensure a smooth transition from outdated EU energy regulation to energy policy that delivered “real choice for all consumers of the European Union, be they citizens or business”, to provide “new business opportunities and more cross-border trade” to achieve gains in energy efficiency, to make prices more competitive, to enhance service standards, and to contribute to security of supply and sustainability.”<sup>66</sup> This first step in a marathon effort by the Commission to liberalize European gas in 2000, Directive 98/30/EC was preliminary measure that set expectations for future policy.<sup>67</sup> It was established with the objectives of resolving the inherent conflict of interests between producers, suppliers, and network operators, maintaining security of supply, ensuring equitable access to the network for new entrants and a choice of suppliers for consumers, and achieving market transparency.

### ***New Guidelines for Suppliers and Consumers in 2003***

The market liberalization directive was soon followed by the second energy package which, released in June 2003, consisted of a regulation and two directives on gas (2003/54/EC) and electricity (2003/55/EC).<sup>68</sup> Once entered into force in 2004 and 2007, respectively, these directives granted citizens of the EU “inter alia, the free movement of goods, the freedom of

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<sup>66</sup> European Parliament, Council of the European Union, “Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC,” *Official Journal of the European Union*, July 13, 2009, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009L0073>.

<sup>67</sup> European Parliament and the Council, “Directive 98/30/EC concerning common rules for the internal market in natural gas,” *Official Journal of The European Union*, July 21, 1998, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31998L0030:EN:HTML>.

<sup>68</sup> “The 3rd Energy Package,” *Observatoire du gaz*, <http://www.gasinfocus.com/en/focus/the-3rd-energy-package/>.

establishment, and the freedom to provide services.” According to this second legislative package, the opportunities it seeks to provide are only achievable in a fully open market that allows consumers to choose their suppliers and suppliers to serve customers, uninhibited by restrictions imposed by supplying countries or companies. Since this second round of natural gas market liberalization, EU Member States have been required to establish independent regulators to monitor aspects of their gas markets such as pricing and consumption levels. EU countries have also been required to grant nondiscriminatory, third-party access to their natural gas markets through legal unbundling of transport from trading. The two directives composing the second energy package also implemented a regulatory body, the the European Regulators’ Group for Electricity and Gas (ERGEG), in 2003. In short, the second energy package enabled natural gas consumers and suppliers more choice by opening the market and implementing the regulatory measures to ensure that consumers could choose confidently.

### ***Market Liberalization in 2009***

The implementation of the first two energy packages of 1998 and 2003 were a symbolic victory for the European Commission and its partner institutions, the Parliament and the Council, in the institutions’ long-term mission to build a strong policy securing the EU’s supply of natural gas and other energy resources. They also symbolized the Commission’s reinforcement of the internal market and its liberalization of that market. However, the EU institutions would not have a true victory if the legislative packages did not come with teeth. The effectiveness of liberalization legislation was at a loss without the regulatory measures to keep it running effectively and fairly.

To solve this issue, the Commission issued a Communication in 2007 titled “An Energy Policy for Europe.”<sup>69</sup> It emphasized the importance of establishing a level playing field for all natural gas affairs and declared that “there must be a clearer separation between the management of gas and electricity networks and production or sales activities.”<sup>70</sup> Without equal access to the natural gas market across Member States and the effective unbundling of production and supply, the Communication reported, there was still a risk of Member States engaging in discriminatory natural gas contracts, or even ones that violated the EU’s earlier legislation.

The Third Energy Package sought to resolve the issues associated with diversification and regulation that its precedents had not. To keep companies honest, it required natural gas producers and suppliers to split up. Referred to as “ownership unbundling,” the initiative was meant to allow companies only one undertaking - production or supply. According to the Third Energy Package, unbundling “should be effective in removing any conflict of interests between producers, suppliers and transmission system operators...and should not create an overly onerous regulatory regime for national regulatory authorities.”<sup>71</sup>

In its second major contribution to liberalization and market integration of European natural gas, the Third Package established a series of regulatory agencies. The ERGEG, the regulatory institution established in the second energy directive, already served as a kind of pan-European regulatory body responsible for ensuring cooperation between national regulators and Member States’ coherent application of the internal market directives. The third package added a

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<sup>69</sup> “An Energy Policy for Europe, COMM(2001) 1 final” *The European Commission*, January 10, 2007, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A127067>.

<sup>70</sup> Ibid

<sup>71</sup> Ibid.

supplementary regulatory body in order to give supplier and producer companies another choice of monitoring agency to which to report: The European Agency for the Cooperation of Energy Regulators (ACER). Similar to its older counterpart, ACER launched in March 2011 and serves as a supervisory and advisory body. It is primarily responsible for promoting cooperation between national regulatory authorities and EU-level regulators, keeping up with the 10-year network development plans and their progress, and monitoring the internal markets of natural gas and electricity. In the same vein, the third package established the European Network Transmission Systems Operator for natural gas which, in cooperation with ACER, is responsible for developing standard access rules and technical codes, to ensure cooperation among networks (whether for pipelines or LNG routes), and to set common safety and emergency standards and procedures.

Thanks to the partnership between the natural gas regulatory authority for ENTSO and ACER, the Commission adopted the first EU-wide network code on cross-border capacity allocation, which indicates progress toward an open and free natural gas market between European Member States and partners.

The third package established two final sets of measures, one for security of natural gas supply (as well as for electricity and oil), and a series of guidelines for trans-European energy networks that identifies a series of projects of common European interest. To ensure security of supply, Regulation (EU) No 994/2010 requires Member States to implement infrastructure standards to satisfy total gas demand.<sup>72</sup> In case of supply disruption, the regulation requires

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<sup>72</sup> European Parliament and European Council, Regulation (EU) No 994/2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC,” *Official Journal of the European*, October 20, 2010, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32010R0994>.



certain Member States to maintain reverse-flow capacity of their natural gas pipelines, and sets general supply standards in exceptional cases of possible interruption such as extreme weather conditions, exceptionally high demand, or disruption of a country's single largest gas infrastructure. The regulation also requires Member States to share market information, to develop risk assessments, and to set emergency plans and crisis levels. With the guidance of the Gas Coordination Group, an advisory resource for Member States as they develop security of supply strategies, the Commission expects gas consumers to be well protected in cases like the 2008-2009 disruption of natural gas flows through Ukraine by Russia's Gazprom.

The Third Energy Package is a significant milestone in the Commission's progress toward building the European Energy Union because it set guidelines for what were the missing pieces of a complete internal natural gas market: Regulation, security of natural gas supply, and trans-European gas networks. A discussion of its accomplishments warrants legitimization, however, and an answer to the question of whether Member States have been complicit or cooperative in the regulations it set forth.

## CHAPTER 7

### EU Strategy, Policy Plans and Projects for Natural Gas

The concept of developing and consolidating trans-European energy networks is not a new one, as pipelines are the traditional method of transporting natural gas. In order to encompass the Commission's interest in ensuring the inclusion of these networks, as well as of future networks, into European energy policy, it released Decision No 1364/2006/EC for Trans-European Energy Networks. Known better as the TEN Act, the Decision implemented new guidelines for trans-European networks, highlighted projects of common interest toward which the Commission could grant monetary support, and laid down a budget to finance feasibility studies for these endeavors.<sup>73</sup> Ultimately, the Parliament and Council also supported the Commission's projects of common interest and established a funding plan, "A Budget for Europe 2020", to funnel EUR 5.12 billion for the development of trans-European energy infrastructure projects.<sup>74</sup>

#### **i. Infrastructure projects**

The Third Energy Package's TEN Act served as the Commission's endorsement of 'projects of common interest', the natural gas and electricity-related endeavors it identified as

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<sup>73</sup> European Parliament and the Council (2006), Decision No 1364/2006/EC laying down guidelines for trans-European energy networks and repealing Decision 96/391/EC and Decision No 1229/2003/EC.

<sup>74</sup> "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Budget for Europe 2020", COM(2011) 500 final, *European Commission*, 29 June 2011. <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=URISERV:bu0001&from=EN>.

relevant to European energy goals. Today, those projects number over 190, and half of them concern natural gas infrastructure, according to European Commission Vice President and President of the European Energy Union Maroš Šefčovič.<sup>75</sup> In a more recent regulation from 2013, the Commission highlights the importance of ensuring pan-European support, explaining that “projects of common interest should be implemented as quickly as possible and should be closely monitored and evaluated, while keeping the administrative burden for project promoters to a minimum.”<sup>76</sup> The following discussion of notable pipeline projects supported by EU Member States provides an image of EU, national, and foreign interests and the influence they have in the success and failure of collective efforts to develop the natural gas sector.

## **ii. Nabucco**

The Nabucco project, or the Turkey-Austria natural gas pipeline, was first conceived in 2002. It was then named a project of common interest in the TEN Act.<sup>77</sup> In winter 2008-2009, Russia halted natural gas supplies to South-East Europe through Ukraine over a dispute between the two countries. As a result, the EU estimated EUR 1.65 billion in economic damages, and natural gas consumers in the region suffered a supply crisis that Europeans - particularly those at the EU institutional level - would refer to as a justification for the urgency to implement security

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<sup>75</sup> Maroš Šefčovič, “Energy Union: 2016 as a year of delivery” (presentation, Big Ideas Series, International Energy Agency, Paris, France, February 15, 2016). Available at <https://www.iea.org/newsroomandevents/events/bigideas/>.

<sup>76</sup> European Parliament and European Council, “Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure,” *Official Journal of the European Union*, April 17, 2013.

<sup>77</sup> EurActiv with Reuters. “EU-backed Nabucco project ‘over’ after rival pipeline wins Azeri gas bid,” [euractiv.com](http://www.euractiv.com/section/energy/news/eu-backed-nabucco-project-over-after-rival-pipeline-wins-azeri-gas-bid/), June 27, 2013, <http://www.euractiv.com/section/energy/news/eu-backed-nabucco-project-over-after-rival-pipeline-wins-azeri-gas-bid/>; European Parliament and the European Council, “Decision No 1364/2006/EC laying down guidelines for trans-European energy networks,” *Official Journal of the European Union*, September 6, 2006, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32006D1364>.

of natural gas supply legislation for years to come.<sup>78</sup> Though Gazprom suffered as well, citing losses of USD 1.5 billion, the incident positioned the European Commission on the natural gas defensive.<sup>79</sup> Without delay, a legal framework for the Nabucco Agreement was signed between EU countries and Turkey, symbolizing the EU's support for a deal to construct a natural gas pipeline running from Turkey's eastern border through Bulgaria, Romania, and Hungary to a gas hub in Austria. The agreement also attracted attention from Iraq, who pledged to supply the pipeline with half of its natural gas capacity.<sup>80</sup>

Nabucco was projected to have a supply capacity of 31 bcm, and the EU was prepared to invest EUR 200 million in the hopes that it would contribute to European economic recovery. Stretching across a five-year timeline, the Nabucco consortium was expected to have completed the engineering logistics and commissioned pipes and compressor stations by the end of 2009, to begin construction by 2011, to determine suppliers by 2012, and to become operational by 2014. The pipeline would source supplies first from Azerbaijan, and the expectation was for Middle Eastern countries to follow – Iran included. At least 50 percent of the gas Nabucco would have supplied was intended to reach the open market.<sup>81</sup> The contract between EU members and Turkey left certain details up for debate: To how much of the gas was Turkey entitled? Would Russia have access? Was Iran's involvement in the project - and supply of natural gas through the pipeline - a viable option?

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<sup>78</sup> Andreas Goldthau, "The Politics of Natural Gas Development in the European Union," *Harvard University's Belfer Center and Rice University's Baker Institute Center for Energy Studies*, October 2013, <http://belfercenter.ksg.harvard.edu/files/MO-CES-pub-GeoGasEU-102513.pdf>.

<sup>79</sup> Ibid.

<sup>80</sup> "EU countries sign geopolitical Nabucco agreement," *EurActiv.com*, July 14, 2009, <http://www.euractiv.com/section/energy/news/eu-countries-sign-geopolitical-nabucco-agreement/>.

<sup>81</sup> Ibid.

Despite the geopolitically sensitive questions that hovered over the project, several companies pledged a stake in the construction of Nabucco - OMV of Austria, BOTAS of Turkey, MOL Group of Hungary, Bulgargaz of Bulgaria, and Transgaz of Romania. Not long after, however, a wave of complications emerged. In 2007, Russian President Vladimir Putin agreed with Turkmenistan to build a pipeline north to Russia, depriving Nabucco of gas supplies. Russia struck again in 2009, when Putin secured an agreement with Turkey allowing Russia to conduct seismic tests needed to begin building a new pipeline - South Stream. Though natural gas prices were falling at the time due to increased LNG and shale gas production, support for Nabucco seemed to be faltering as Russia sought to source its own natural gas supplies to the EU. South Stream appeared to the Commission to be a clear affront to European diversification efforts. Nonetheless, the Russian-led South Stream project attracted support from major European companies such as EDF of France and Wintershall of Germany. With South Stream to compete with, the Nabucco project experienced a series of delays because the consortium of energy companies involved hadn't finalized firm supply contracts. As a result, it failed to reach any of its deadlines.

Ultimately, Nabucco is evidence that the Commission may throw its support behind a project, but without confidence from EU Member States and the private sector, it is no match to market forces and competition.

### **iii. South Stream**

The South Stream project is a USD 16 billion offshore pipeline planned to carry 63 bcm from Russia to Bulgaria through the Black Sea, and further to Serbia, Hungary, Slovenia, and possibly Italy. It was initially proposed and initiated to circumvent Ukraine, through which 80 percent of Russian gas exports to the EU flows, in light of Russian-Ukrainian tensions over the past decade – the same ones that inspired the EU to support Nabucco. South Stream was originally backed by a contract signed in 2014 by Gazprom and Italy's Eni subsidiary Saipem, who had originally planned it to be the first of four parallel pipelines connecting Europe and Russia. In 2015, however, Gazprom finally decided to officially terminate the contract because the two companies were unable to reach an agreement on new terms. The Russian gas giant's plans for another pipeline project to supply natural gas to Europe through Turkey, known as TurkStream, serves as a replacement for the cancellation.<sup>82</sup> Still in conception, TurkStream has yet to engender the level of debate that surrounded Nabucco and South Stream.

### **iv. Nord Stream**

Nord Stream is yet another project of common interest to the European Commission, though this one is heavily backed by Russia's Gazprom as well as Germany's E.ON and BASF, the UK's Shell, and Austria's OMV. Linking Russia and Germany across the Baltic Sea since 2012, Nord Stream's current production capacity is 110 billion cubic meters. Those numbers are soon to rise, however, as plans for a Nord Stream 2, an extension project of the original pipeline, are put into motion. Projections indicate the extension will double Nord Stream's production

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<sup>82</sup> "Gazprom terminates South Stream natural gas pipeline construction contract with Saipem," *Platts*, July 9, 2015, <http://www.platts.com/latest-news/natural-gas/istanbul/gazprom-terminates-south-stream-natural-gas-pipeline-26144302>.

capacity. The new project is not popular with advocates of the European Energy Union, however, as it's believed it will reinforce the EU's reliance upon Russia for natural gas supply and detract from the Commission's efforts to diversify energy sources.<sup>83</sup> In November 2015, a group of Baltic and Eastern European countries wrote publicly to President of the Energy Union Maroš Šefčovič expressing concerns for their energy security if Nord Stream 2 went online.<sup>84</sup> Concerns have since escalated to the Commission level, where as recently as April 2016, EU Energy Commissioner Miguel Arias Cañete expressed concern that Nord Stream 2 would threaten the EU's diversification strategy.<sup>85</sup>

The extension has also caught the attention of American policymakers, US deputy secretary for energy, Elizabeth Sherwood-Randall, in particular. "All of us share the sense that it is important to have multiple energy sources, to be dependent on no single source, to use a diversity of fuels," she said, reflecting the concern of Europe's American partners for the EU's energy future. "This doubling of one pipeline from one source, instead of creating multiple routes from multiple sources across that territory, does not appear to enhance Europe's energy security."<sup>86</sup>

Despite the Commission's most recent rhetoric regarding the Russian and German-backed pipeline, the Nord Stream story presents a striking example of 'great power' EU Member

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<sup>83</sup> "European Commission concerned of Nord Stream-2 impact on Ukraine's gas transit – official," *Tass Russian News Agency*, April 5, 2015, <http://tass.ru/en/economy/867472>.

<sup>84</sup> "EU's Sefcovic says working on reply to Nord Stream 2 opponents," *Reuters*, Paris. December 8, 2015, <http://www.reuters.com/article/climatechange-summit-nord-stream-idUSL8N13V08D20151208>.

<sup>85</sup> "European Commission concerned of Nord Stream-2 impact on Ukraine's gas transit – official," *Tass Russian News Agency*.

<sup>86</sup> James Crisp, "Senior Obama official: Nord Stream 2 and Brexit may weaken EU energy security," *EurActiv.com*, March 31, 2016, <http://www.euractiv.com/section/energy/interview/senior-obama-official-nord-stream-2-and-brexit-may-weaken-eu-energy-security/>.

States and private stakeholders' influence over Commission initiatives. Perhaps surprisingly, the Commission did not always oppose the Nord Stream concept – in fact, it *de facto* supported it in its conception. Because the EU named Nord Stream as a project of common interest, companies of the consortium committed to its construction were exempted from following the regulations to which other consortia were subjected, such as third-party access and unbundling. Gazprom, therefore, was allowed to keep its simultaneous ownership and supplier status while achieving major network access bypassing Ukraine. The example of Nord Stream serves as an example of a project of common interest that enabled the consortium of German companies and Gazprom a special degree of influence and great power status.

The survival of Nord Stream and death of South Stream are not a coincidence. Unlike Nord Stream, South Stream posed too much of a threat to Europe's Southern Corridor projects - Nabucco and TAP - to be backed by the Commission. While Nabucco and the Trans-Adriatic Pipeline (TAP), which will connect Azerbaijan to Italy through Greece and Albania, received exemption from TEN requirements, South Stream did not.<sup>87</sup>

It is true that the European Commission's Energy Union initiatives directly affected the fate of these two pipelines, proving to Russia and European institutions that EU policies are capable of countering Gazprom's reach.

The contested nature of European natural gas infrastructure elucidates the influence of 'great powers' as Member States and private companies alike. It also highlights the fact that the growth - or lack thereof - of pan-European energy policy to encompass the European Commission's ideas for an Energy Union is in the hands of the a trifecta of main actors. Those

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<sup>87</sup> "How the Game Is Played: The Life and Death of South Stream," *Stratfor*, September 17, 2015, <https://www.stratfor.com/analysis/how-game-played-life-and-death-south-stream>.



are European institutions, namely the Commission, Parliament, and Council; EU Member States; and private stakeholders, namely private energy companies.

## CHAPTER 8

### Key EU Energy Actors and Their Impact on Gas Market Regulation

The following section discusses how one kind of actor - private energy companies - express their influence at the EU level.

The many interests of the previously mentioned actors in Europe's natural gas market make it difficult for the Commission to achieve convergence of those interests and policies. However, the internal market is a large accomplishment of the Treaty of Lisbon and for the EU's concerted effort to reconcile the interests of businesses and citizen-consumers. It has succeeded in liberalizing the European gas market, continues to be a pillar of EU progress and has been promoted by the Commission as the "single most important factor pulling the current [energy] society towards convergence."<sup>88</sup> It is the internal market as a whole, and the internal market for natural gas in particular, that make the European Commission a primary influencer alongside Member States and private stakeholders in the domain of the natural gas market.

The EU's efforts to extend this mission across the European energy sector have been especially swift since the Treaty of Lisbon enabled the Commission a role in energy-related policy with the Third Energy Package and Article 194 of the Treaty on the Functioning of the European Union. The Third Energy Package is the most strident effort yet by the European

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<sup>88</sup> Pami Aalto and Dicle Korkmaz Temel, "European Energy Security: Natural gas and the Integration Process," *JCMS: Journal of Common Market Studies*.

Union to break up large, vertically-integrated energy companies in France, Germany, and in other EU countries.<sup>89</sup>

### **i. Efficacy of the Energy Union**

Though there are initiatives in place to build an Energy Union, whether or not they effective in shifting private firms' and Member States' behavior to adopt more favorable practices for a common market is a necessary consideration. If the Commission's successes are merely superficial skeletons of policy and guidelines for action, diversification of the European natural gas market to include new countries such as Iran is unlikely.

The Third Energy Package does mark a few major accomplishments by the Commission. It is responsible for establishing investment in gas pipelines and allocated EUR1.440 billion to 16 projects for the expansion of storage capacity, the construction of alternative pipelines, and the development of LNG terminals. It also established energy-specialized bodies and ensured their coordination with the Commission. They include the previously mentioned ENTSO-G, the Gas Coordination Group, and ACER, which regulate and monitor energy production, distribution, and consumption. These organizations are responsible for keeping gas companies accountable – and transparent – about their production, distribution, and information-sharing of profits and other activities.

### **ii. Energy Industry Lobbying at the EU Level**

However, multinational energy companies have a special place in the hallways and meeting rooms of the European Parliament and Council, which are frequented by their lobbyists.

Transparency International reports that “with 75 percent of the total, meetings with corporate

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<sup>89</sup> “Commission rebuffs Franco-German energy proposals,” *EurActiv.com*, February 15, 2008, <http://www.euractiv.com/section/energy/news/commission-rebuffs-franco-german-energy-proposals/>.

lobbyists dominate the Commission's agenda and tech, finance, and energy companies take the lead."<sup>90</sup> Gauging precisely how convincing energy companies are in their meetings with EU leaders is a difficult qualitative assessment to make. Most private lobbying activities "remain opaque" due to a lack of comprehensive monitoring tools at the EU level. One optional tool worth mentioning, however, is hosted by the European Commission and allows companies to report details of their meetings with EU-level representatives including expenditure, participants, and subjects of interest and action. Corporate Europe is an organization that tracks this 'transparency register'. The group reported impressive increased lobbying expenditure from major European energy companies including the multinational power company ENEL, whose spending reached over EUR2.2 million in 2014, compared to EUR500,000 in 2013, and from oil multinational BP, whose spending doubled to just under EUR3 million in 2014. The report marks decreased expenditure among a host of companies such as France's Engie, Sweden's Vattenfall, the UK's hydraulic fracturing company Cuadrilla, Norway's Statoil, and even Germany's Energie Baden-Württemberg AG.<sup>91</sup>

Companies haven't used the Commission's transparency tool to share why they've increased or decreased expenditure, but conjectures can be made. For example, ENEL, which has a large natural gas presence in Italy, might be lobbying for support from Parliament and the Council for TAP, the Greece-Italy interconnector to supply gas from Azerbaijan. BP's increased expenditure also coincides with the timing of its own projects. The company's business timeline

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<sup>90</sup> Transparency International EU Office, "Press release: banks, tech, and energy companies dominate EU lobbying," *Transparency International*. December 1, 2015. <http://www.transparencyinternational.eu/2015/12/press-release-banks-tech-and-energy-companies-dominate-eu-lobbying/>.

<sup>91</sup> "Black out: Energy companies leaving us in the dark about their EU lobbying," *Corporate Europe*, May 21, 2015, <http://corporateeurope.org/power-lobbies/2015/05/black-out-energy-companies-leaving-us-dark-about-their-eu-lobbying>.

in 2014 has a heavy focus on deadlines for its investments in the South Caucasus Pipeline Expansion project (SCPX), as well as in the Azerbaijan-based Shah Deniz pipeline Stage 2 (SD2), and further elucidates the company's interests.<sup>92</sup>

Lobbying is just one way in which private companies can influence policymakers' positions on both national and EU energy strategy. If the sheer scale of their monetary contributions to lobbying are not effective, their capacity to support projects of interest to the EU also act as a bargaining tool, which the Nord Stream project illustrates. As policy proposals for the European Energy Union continue to unfold, the Commission remains beholden to national representatives in the Parliament and Council responsible for qualified majority votes that either approve or reject new policies. In such a distribution of power, Member States are indeed influenced by private actors, making the job of the Commission to achieve an Energy Union and ensure the diversification of EU energy markets all the more challenging.

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<sup>92</sup> "Shah Deniz Project Timeline," *BP*, last updated 2016, [http://www.bp.com/en\\_az/caspian/operationsprojects/Shahdeniz/projecthistory.html](http://www.bp.com/en_az/caspian/operationsprojects/Shahdeniz/projecthistory.html).

## CHAPTER 9

### **Iran and the EU: Interests, Recent Developments, and Barriers to Trade**

As Iran reenters the global market following JCPOA and the gradual relief of international sanctions, key EU stakeholders including EU institutions, Member States, and private firms, have either courted or been courted by the Iranian natural gas sector. As Iran seeks to demonstrate its energy sector capabilities and worthiness of international investment, each actor has taken its own approach to engagement. It is worthwhile to explore how stakeholder interests and alternative business opportunities may well intercede to slow or halt possible progress in EU energy diversification through Iran's natural gas market.

#### **i. Iran's Interests in a Relationship with the EU & Recent Developments**

##### ***Interests***

With 1,201 trillion cubic feet of proven natural gas reserves, Iran has enormous potential as a major future supplier of the world market.<sup>93</sup> In fact, Iran comes in close second with Russia among countries with world's largest natural gas reserves. Estimates from the EIA indicate that Russia's reserves reach 1,688 trillion cubic feet.<sup>94</sup> Iranian and EU estimates indicate that Iran will be capable of exporting between 25-35 bcm to the EU by 2030, equaling EU imports from North African countries. These estimates include an important assumption - that LNG facilities are

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<sup>93</sup> "BP Statistical Review of World Energy," *BP*, June 2015, <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf>.

<sup>94</sup> "Russia," *Energy Information Administration*, last updated July 28, 2015, [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/Russia/russia.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf).

developed to liquefy gas for export from Iran and to de-liquefy those exports at EU delivery points.<sup>95</sup>

Iran's economy would benefit significantly from renewed energy trade with the EU, and it particularly stands to gain from infrastructure investments by European firms and through increased energy exports. Between the time that sanctions were implemented in 2012 and took full effect in 2013, Iranian exports to the EU dropped from €5.7 billion to €0.8 billion.<sup>96</sup> Many European energy companies had pre-sanctions business ties and projects with Iran. A number of energy projects described earlier were interrupted by the advent of sanctions, including a BP-National Iranian Oil Company joint venture in the Rhum gas field off the coast of Scotland, stalled plans for LNG infrastructure development, and slowed construction of Iran's South Pars Gas field projects.<sup>97</sup> Re-initiating these engagements could enable a wave of foreign investment in Iranian infrastructure projects and commerce.

### ***Recent Developments***

Diplomatic and economic re-engagement have been the focus of a flurry of activity between European stakeholders and Iran. In Iranian President Hassan Rouhani's January 2016 visit to Europe, he visited the home of companies like Peugeot in France and Ansaldo Energia in Italy, which had just struck deals for investment in the Iranian automobile and energy industries,

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<sup>95</sup> Norman, Laurence and Gabriele Steinhauser, "Iran Could Become Major Supplier of Natural Gas to EU," *The Wall Street Journal*, September 13, 2015. <http://www.wsj.com/articles/iran-could-become-major-supplier-of-natural-gas-to-eu-1442155324>.

<sup>96</sup> European Commission, "Main Indicators: EU trade with Iran, Directorate-General for Trade," *European Commission*, October 20, 2015, [http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc\\_111518.pdf](http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_111518.pdf).

<sup>97</sup> Kenneth Katzman, "Iran Sanctions," *Congressional Research Service*, March 23, 2014, <https://www.fas.org/sgp/crs/mideast/RS20871.pdf>.

respectively.<sup>98</sup> Iran has also recently participated in talks with European companies including Golnar LNG Ltd. to build floating LNG facilities. Other domestic developments in Iran, such as its renewed commitment in 2015 to build a sixth pipeline running from its South Pars gas field which could be capable of sending gas to Iraq and Central and Eastern Europe indicate that it is preparing to begin expanding its capabilities for both domestic and external distribution of natural gas.

## **ii. EU Interests in Iran**

The EU sees its past relations with Iran as a “model for much broader cooperation” in the areas of energy trade, economic development and geopolitical cooperation.<sup>99</sup> As the EU looks to Iran to potentially help it reduce an increasingly worrisome dependence upon Russian energy, it is preparing to send to Iran a delegation of EU Ministers at time of writing. These include High Representative for Foreign Affairs and Security Policy (HR) Federica Mogherini, European Climate Action and Energy Commissioner Miguel Arias Cañete, as well as the ministers representing the Commission’s directorates for Internal Market and Industry, Transport, Research, Education, Humanitarian Aid, and Environment. Together, they will explore different sectors of cooperation and seek to build “cooperative relations between the EU and Iran on the areas where there is mutual interest.”<sup>100</sup> In an effort to maintain a normative focus while

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<sup>98</sup> Stacey Meichtry and Robert Wall, “Iran President Visits Europe to Seal Post-Sanctions Deals Worth Billions,” *The Wall Street Journal*, January 25, 2016, <http://www.wsj.com/articles/irans-rouhani-starts-first-post-sanctions-european-trip-1453723466>.

<sup>99</sup> Norman, Laurence and Gabriele Steinhauser, “Iran Could Become Major Supplier of Natural Gas to EU,” *The Wall Street Journal*.

<sup>100</sup> Benoît Faucon, “Iran Seeks Rapid Reboot for Natural Gas Exports”, *The Wall Street Journal*, January 26, 2016, <http://www.wsj.com/articles/iran-seeks-rapid-reboot-for-natural-gas-exports-1453821547>; European Commission, “Press Release: EU high level delegation of HR/VP Federica Mogherini and EU Commissioners to visit Iran,” *Press Release Database*, April 13, 2016, [http://europa.eu/rapid/press-release\\_IP-16-1366\\_en.htm](http://europa.eu/rapid/press-release_IP-16-1366_en.htm).



rekindling economic relations, Mogherini and the delegation expressed in advance of their trip hopes for Iran's openness to European companies assisting in the development of promising new markets such as renewable energy, as well as a willingness to play a 'supportive role' with respect to Iran's intentions to join the World Trade Organization.<sup>101</sup>

### ***EU Member States' interests***

The leaders of EU Member States took the nuclear deal as an opportunity to welcome a friendlier dialogue with Iran and to visit the country in expressions of partnership and optimism. French Foreign Minister Laurent Fabius visited in July 2015 and the German Foreign Minister Frank-Walter Steinmeier visited twice in three months between late 2015 and early 2016.<sup>102</sup> Most recently, in April 2016, Italian Prime Minister Matteo Renzi made the first visit by an Italian official to Tehran since 2001, seeking to reinstate Italy in its prior role as "Iran's biggest trade partner in the European Union".<sup>103</sup> Though the discussion of natural gas was not explicitly on the agenda, these visits signaled to citizens and the private sector the renewal of an environment for commercial engagement.

### ***EU private stakeholders' interests***

While delegations of Commissioners, heads of state and foreign ministers make diplomatic overtures to engage with Iran on trade and foreign policy, engagement between Iran

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<sup>101</sup> Jorge Valero, "Commission embarks on business trip to Tehran, despite renewed sanctions," *EurActiv.com*. April 14, 2016, <http://www.euractiv.com/section/global-europe/news/commission-embarks-on-business-trip-to-tehran-despite-renewed-sanctions/>.

<sup>102</sup> Thomas Erdbrink, "Laurent Fabius, French Foreign Minister, Visits Iran," *The New York Times*, July 29, 2015, [http://www.nytimes.com/2015/07/30/world/middleeast/french-foreign-minister-laurent-fabius-tehran.html?\\_r=0](http://www.nytimes.com/2015/07/30/world/middleeast/french-foreign-minister-laurent-fabius-tehran.html?_r=0); "Iran: German Foreign Minister wraps up two-day visit," *Euronews*, last updated February 3, 2016, <http://www.euronews.com/2016/02/03/iran-german-foreign-minister-wraps-up-two-day-visit/>.

<sup>103</sup> "Iran, Italy seek to restore ties as Renzi visits Tehran," *PressTv.ir*; April 12, 2016, <http://www.presstv.ir/Detail/2016/04/12/460378/Iran-Italy-Rouhani-Renzi-trade-ties/>.

and European actors with respect to natural gas market development takes place at the level of private stakeholders. While the potential export of natural gas to Europe is a new phenomenon and Iran's natural gas resources have primarily served domestic demand, European energy firms such as Shell, Total, and Eni have already begun to explore the option of investing, and have been involved in talks with the Iranian energy sector.<sup>104</sup> Anticipating an international resolution to the Iran nuclear question, "European industries with a history of business in Iran wanted their companies to go there and invest big time...before the Americans and the Chinese".<sup>105</sup> Concerned businesses took early steps by establishing a European-Iranian Business Alliance to promote a quick and profitable turnaround of trade.

Following the nuclear agreement with Iran and ratification of the JCPOA, delegations of European energy companies including BP, Royal Dutch Shell, Repsol, Total, Engie, and Statoil also mobilized within Europe to meet with EU Climate and Energy Commissioner Miguel Arias Cañete and discuss possibilities and next steps in their affairs with Iran.<sup>106</sup> Energy companies are among the enterprises that retained contacts in Iran through years of trade embargoes. Sohbət Karbuz confirmed that some companies have conducted research, development, and risk assessments as they have sought to determine the profitability of investing in the Iranian natural gas sector.<sup>107</sup>

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<sup>104</sup> Dan Cancian, "The Iran Rush: European and Asian firms on starting line as sanctions are lifted," January 23, 2016, *Ibetimes.com*, <http://www.ibetimes.co.uk/european-asian-firms-set-enter-iranian-markets-after-sanctions-are-lifted-1539549>.

<sup>105</sup> Norman, Laurence and Gabriele Steinhauser, "Iran Could Become Major Supplier of Natural Gas to EU," *The Wall Street Journal*.

<sup>106</sup> Ibid.

<sup>107</sup> Sohbət Karbuz. Interview. (Mediterranean and European natural gas expert and consultant at the Mediterranean Energy Observatory), interview by Lily S. Emamian, March 3, 2016.

Despite diplomatic visits and rhetorical interest in natural gas trade abound, following the JCPOA, there have been no natural gas agreements between European countries to date, and few energy deals overall. It is a fact that warrants the question of why this is the case.

Thierry Coville of l'Institut pour la recherche internationale et stratégique (IRIS) believes that though Iran will, indeed, play a role in European energy commerce in the years to come, the environment is unfavorable for natural gas exports. Exports will depend, to a great degree, upon Iran's capacity to attract foreign investors to develop their reserves; another key question is the future of Iranian gas distribution routes. Coville believes that lingering trust issues between Europe and some elements of the Iranian regime will likely exclude the possibility of long-term partnerships with Iran on the import of gas, but that it's possible "the vision will change and a partnership could develop."<sup>108</sup>

There are several tangible obstacles for EU private stakeholders to overcome prior to investing in the Iranian market for natural gas. These include a lack of infrastructure in Europe and Iran as well as the presence of alternative natural gas partners for both actors. These obstacles are both discussed in the following section

### **iii. Infrastructure considerations for EU private stakeholders**

Under pressure to implement more reliable gas supplies and to satisfy projected increases in energy demand, the European Commission has turned to natural gas as an abundant, relatively clean fossil fuel. In its Energy Security Strategy, the Commission seeks to give energy companies and EU Member States the green light to pursue new energy relationships (with U.S. shale gas suppliers, for example), to foster deeper ties in existing partnerships (the INOGATE

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<sup>108</sup> Thierry Coville. Email interview. (Iran business and economics expert at *Institut pour la recherche internationale et stratégique* and Novancia Business School), interview by Lily S. Emamian, December 3, 2015.

countries of Azerbaijan, Kazakhstan, and Turkmenistan), and to pursue alternative routes for natural gas pipelines capable of pumping Russian fuel (South Stream, Nord Stream, TANAP, and TAP). The EU's Energy Security Strategy explains that "the key to improved energy security lies first...in a functioning internal market...and second, in a more coherent external action."<sup>109</sup>

Indeed, while there are alternatives to Russian gas, the failure of the Nabucco Pipeline project described previously serves as a reminder of the obstacles involved in implementing these alternatives. To successfully achieve a European Energy Union and progress toward a common strategy for facilitating the import of natural gas from new suppliers like Iran, Europe will need to expand pipeline and LNG infrastructure. As of 2014, the EU imported 197 bcm per year of LNG but only used a quarter of it. Furthermore, only five EU Member States are responsible for the import of most LNG consumed in Europe, largely because they possess the infrastructure needed to import, process, and distribute it.<sup>110</sup> With LNG imports projected to increase, more terminals are necessary to satisfy overall natural gas demand. The EU will also need to expand its internal network of gas pipelines and to integrate the existing pipeline infrastructure with expansion projects. Most of these are listed in TEN's projects of common interest, discussed previously, but require further investment.

#### **iv. Alternative partners for the EU and Iran**

Under pressure to diversify resources both to ensure security of natural gas supply and to meet future energy demands, the European Commission has turned to existing neighborhood partners for alternatives. to foster new infrastructure developments in Turkey, Central and

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<sup>109</sup> "Communication from the Commission to the European Parliament and the Council : European Energy Security Strategy/COM/2014/0330 final," *European Commission*.

<sup>110</sup> "Briefing: LNG in Europe," *European Parliament*, November 2015, [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571314/EPRS\\_BRI\(2015\)571314\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571314/EPRS_BRI(2015)571314_EN.pdf).

Eastern Europe, and the Caucasus. Taking advantage of its relationship with Azerbaijan through INOGATE, a regional energy cooperation program between the EU and 11 partner countries in Eastern Europe, Caucasus, and Central Asia, the EU has maintained its support for the TAP pipeline. The EU also used its relationship with Azerbaijan to pursue alternative routes for the Nabucco pipeline.

Iran's domestic focus on developing its LNG infrastructure could lead it to export to nations with rapidly rising natural gas demand. Markets in Asia and the Middle East present immediate opportunities for Iranian gas traders who expect capacity to increase enough to begin exporting in the next decade.<sup>111</sup> Iran began negotiations on developing a pipeline connector with India as early as the 1990s. According to the IEA, India will see a dramatic increase of natural gas demand in coming years, and is expected to meet that demand primarily with LNG after 2030.<sup>112</sup> Pakistan, with which Iran already has developed its share of a pipeline running from the South Pars gas fields eastward to their shared border, is also likely to reinstate its share of the project soon.<sup>113</sup> China, whose gas imports increased between 2009-2011 from 8 bcm to 31 bcm, pledged to build a major part of the Iran-Pakistan pipeline, and has helped make the project a front-runner in Iran's long-term natural gas strategy.<sup>114</sup> Finally, Oman worked with Iran despite

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<sup>111</sup> Simone Tagliapietra and Georg Zachmann, "Iran: a new natural gas supplier for Europe?," *beyondbrics* (blog), October 5, 2015, (1:26 pm), <http://blogs.ft.com/beyond-brics/2015/10/05/iran-a-new-natural-gas-supplier-for-europe/>.

<sup>112</sup> IEA, "World Energy Outlook 2007: Fact Sheet India," *IEA/OECD*, 2007, [https://www.iea.org/publications/freepublications/publication/fs\\_india.pdf](https://www.iea.org/publications/freepublications/publication/fs_india.pdf).

<sup>113</sup> Anne-Sophie Corbeau, Dennis Volk, Jonathan Sinton, Julie Jiang, Jiang Ping, Tammy Teng, Li Boshu and Yue Fen, "Gas Pricing and Regulation: China's Challenges and IEA Experience," *OECD/IEA*, 2012, [http://www.iea.org/publications/freepublications/publication/chinagasreport\\_final\\_web.pdf](http://www.iea.org/publications/freepublications/publication/chinagasreport_final_web.pdf).

<sup>114</sup> *Ibid.*

sanctions in 2013 and agreed to build a subsea pipeline and to import \$60 billion over 25 years.<sup>115</sup>

With the incentive of profitable alternatives for export trade, and a high infrastructure price tag, Europe may not be an ideal market for Iran after all. As Rodrigo Pinto Scholtbach warned, warm winters, low prices, and an economic crisis have made Europe an unreliable natural gas market in the near-to-intermediate term.<sup>116</sup> Furthermore, according to Thomas Pellerin-Carlin, the prices Asian markets are willing to pay can be up to double those of EU countries.<sup>117</sup> At the moment, private EU stakeholders are deterred by up-front the investment required in European pipeline or LNG infrastructure, and probably will defer such investments until the European natural gas market becomes a more profitable and attractive option. Iran is in a similar spot with limited existing pipeline or LNG infrastructure, a quickly-growing domestic demand for natural gas, and a natural gas market in need of a major regulatory overhaul in its post-sanctions recovery. In this environment, European investors are unlikely to dive in for the foreseeable future.

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<sup>115</sup> Rania El Gamal, "Oman to speed up gas import plans from Iran post-sanctions," *Reuters*, January 21, 2016, <http://www.reuters.com/article/us-oman-iran-gas-idUSKCN0UZ1ER>.

<sup>116</sup> Rodrigo Pinto-Scholtbach (IEA natural gas specialist), interview by Lily S. Emamian, March 2016.

<sup>117</sup> Thomas Pellerin-Carlin (European energy expert at Notre Europe), interview by Lily S. Emamian, December 3, 2015.

## CHAPTER 10

### Conclusions

#### **i. Challenges for the EU in leveraging Iran as a new gas supplier**

##### ***Pricing***

The European Commission and its partner institutions have much work ahead before the quest to build a comprehensive Energy Union is complete. Notably, the Commission, Parliament, and Council must formally agree with its Member States to resolve a series of issues.

First, the EU's institutions must agree to set a common price among Member States for Russian gas. Doing so would set a precedent for pan-European determination of energy prices and set the stage for determining natural gas prices for future imports from, say, Iran. As Iran's expectations for pricing is significantly higher than what Europe pays for Russian gas, establishing solidarity on the issue is of particular importance. However, developing a pan-European price for gas is an effort that particularly concerns Germany and Hungary, who have objected to supporting the Commission's proposals in the past for fear of forfeiting their bilateral agreements with Russia's Gazprom for competitively-priced natural gas supplies.

##### ***The example of Germany as a 'great power' state***

To move the Energy Union forward, the European Commission will need to convince Germany to support its efforts. Currently, German energy policy is driven to a great degree by private interests, in comparison with some of its neighbors, such as France, whose major gas subsidiary is nationalized. German policy therefore allows companies such as RWE, E.ON,

Wintershall, and EnBW to wield great influence. This complicates not only Berlin's decision-making with respect to whether or not to support Energy Union proposals; it also puts the Commission's efforts at building a consensus among all Member States at risk. As previously mentioned, the Nord Stream pipeline from Russia to Germany has significant support from a team of German companies. E.ON, BASF, Shell, and OMV have a memorandum of understanding with Gazprom to build infrastructure capable of transporting 55 bcm to Germany, which would double Nord Stream's current capacity.

According to the EU's 'Framework Strategy' for a common energy policy, the EU will collectively be able to influence contracts with Gazprom by requiring "increased transparency of contracts and compatibility with EU energy security" and to require external suppliers to be fully complicit with EU regulations.<sup>118</sup> The Commission will also be able to use its oversight role to demand better terms from Gazprom and future natural gas suppliers. This might include engaging in shorter-term contracts or the elimination of Gazprom's restrictions on re-exporting gas among European countries. Overall, Europe will increase its leverage with Russia.

A successful Energy Union might enable the EU to seek alternative partners with whom it could establish new contracts on the EU's terms, rather than to negotiate the consolidation of existing contracts, infrastructure, economics, and policy. The EU might even overcome the Russian strategy of segregating the European market into separate national buyers dependent upon Gazprom.

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<sup>118</sup> Petr Polak, "Europe's Low Energy: The Promise and Perils of the Energy Union," *Foreign Affairs*, September 9, 2015, <https://www.foreignaffairs.com/articles/western-europe/2015-09-09/europes-low-energy>.



## ii. Final Conclusions

The Commission has succeeded in making major strides in policy and planning as it seeks to build a complete European Energy Union under the leadership of European Commission Vice President and President of the European Energy Union, Maroš Šefčovič. However, it will not succeed in building the comprehensive European Energy Union by the end of its targeted “year of delivery”, 2016. Two main obstacles remain:

- 1. Natural gas supply and the geopolitics of natural gas infrastructure will continue to be dominated by private companies, and these stakeholders will continue to influence decision-making in key Member States.** Energy firms in Europe are well-equipped to achieve their interests with financial resources, by advocating for energy industry-friendly policies with national representatives in the European Parliament and Council.
- 2. Barring major geopolitical shifts or major pricing or supply shocks in energy markets, Iran will not become a major supplier of natural gas to Europe in the short or medium term.** IEA Medium-Term gas projections forecast Russia’s continued supply of gas to the EU and limited production capacity from Iran. Though sanctions relief makes way for foreign investors, Iran is unequipped for LNG production and transport, does not currently have sufficient pipeline infrastructure to meet the demands of consumers outside its immediate neighborhood, and foreign investors will continue to be deterred by the legacy of sanctions. Iran will seek other avenues for natural gas export, however, once it accomplishes enough production and import capacity to satisfy domestic demand.

The Energy Union will face continued skepticism from Member States and private stakeholders whose interests are best served by maintaining the status quo in terms of energy

policy. The example of the Nord Stream 2 and Nabucco pipeline projects illustrate this point. Moving forward, the fate of the union will depend largely upon whether Member States remain averse to pursuing alternative natural gas options and whether they can resist sticking to the European natural gas model that emphasizes imports from Russia and diverts from new developments.

In short, there are too many obstacles between the Commission and its energy goals for it to include significant imports from new natural gas suppliers, including Iran, among its short- to medium-term goals.

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