

Global Energy Debates and the Eastern Mediterranean

Edited by:

Ayla Gürel Moran

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INTRODUCTION

Ayla Gürel Moran

On 16 November 2016 the PRIO Cyprus Centre (PCC), the Friedrich-Ebert-Stiftung Cyprus (FES) and the Atlantic Council (AC) co-hosted a one-day conference entitled 'Global Energy Debates and the East Mediterranean'. The conference, held in the UN Buffer Zone in Nicosia, was organised with a view to introducing the Cypriot public to the increasingly complex global energy terrain. Thus, the main focus of the deliberations was not the Eastern Mediterranean, but rather the broader energy picture surrounding the region. The international experts who attended the conference presented topics that concern some of the more salient broader debates, such as the link between energy and global warming as well as the energy relations of the European Union, which constitutes the largest potential market in the neighbourhood for the hydrocarbons of the Eastern Mediterranean. The latter included examination of three important cases to Europe's east: Russia, Iran, and Turkey. East Mediterranean energy developments and regional cooperation prospects were also discussed by a panel of experts from Cyprus, Egypt and Israel. This edited volume comprises contributions submitted by speakers based on their talks delivered at the conference.

Spurred by the natural gas discovered so far and the ongoing conjectures about a lot more recoverable hydrocarbons to be found in the island's offshore, since 2011 energy has become a topic of wide interest in Cyprus. This has been so because of the promise of wealth that would result in the future from exploitation of these resources. It is also due though to the way in which exploration for these resources has become an issue in the context of the Cyprus problem and hence of the protracted negotiations for its settlement. Moreover, there is now a prospect of Cyprus becoming – alongside Israel – an important component of the 'emerging East Mediterranean gas province' or – alongside Israel and Egypt – of a possible 'Mediterranean gas hub'. This idea, which involves regional cooperation and a potential energy export relationship with the EU, has certainly boosted the island's strategic weight, though actual progress in that direction depends on a number of factors, including the playing out of the regional geopolitical dynamics and, even more importantly, the price and market trends in the energy sector.

Until now PCC has partnered with FES in hosting two international conferences about Energy in the Eastern Mediterranean (in November 2011 and November 2013 – in the latter of which the Brookings Institution was also a co-organising partner). In November 2015 AC joined PCC and FES in hosting the third of what is now established as an annual conference series on

regional energy issues. The overarching objective continues to be providing a forum for discussion about the East Mediterranean region and the issue of its hydrocarbons from a balanced, critical but constructive, and of course realistic perspective. The hope is that this would encourage an informed and mature public debate on the subject, which is far lacking, particularly in Cyprus. In a region that is fragmented and characterised more by conflict than cooperation, persistent conscious effort is needed to resist the appeal of narrow-minded populism or politicisation of issues. Such attitudes are obviously least likely to help in realising the potential of East Mediterranean hydrocarbons through solutions that are optimal in commercial as well as public interest terms – a job that requires calm, serious planning by cognisant and responsible policy makers as well as the ability to cooperate with regional partners.

Aimed at aiding to enhance a better public understanding of the issues relevant to the energy sector, especially in the aforementioned context, this volume starts with a paper about the 2015 Paris Climate Change Conference. Rafael Jiménez-Aybar describes the backdrop to the Paris Conference and explains the importance of establishing an enduring framework within which governments can work together to keep the rise in global temperatures below 2°C. He also discusses how this is then set to shape the development of the real energy economy in the months and years after Paris.

The next paper by Gareth M. Winrow looks at Europe's present and future energy landscape in light of the 2014 European Energy Security Strategy and the 2015 Energy Union Package. He concludes that in spite of the strong drive to reduce fossil fuel use for environmental reasons, gas will remain an important component of the energy mix within the EU for the foreseeable future. Examining the prospects of a Mediterranean gas hub, Winrow warns about raising expectations too high regarding the East Mediterranean's potential importance for European gas imports, pointing out that 'energy projects are unlikely to proceed if they are not deemed to be commercially viable'.

The focus of Zuzanna Nowak's paper is Russia's energy policy vis-à-vis the EU. Nowak maintains that gas trade has been one of Russia's major foreign policy tools towards the EU for some time; though this might change, she says, with development of the Energy Union concept within the EU and due to challenges and opportunities in the world gas markets linked to geopolitical changes and technological advances. In the author's view, Russia-EU gas trade relationship will endure but in the longer term 'Russia will need Europe more than Europe will need Russia'.

In chapter 4, Ana Stanič looks at issues of EU energy law which have divided Russia and the EU with the aim of providing insight into the complex and troubled relationship between them. The issues she examines include the two sides' disagreements over EU competition law, the OPAL pipeline, the South Stream, the construction of Nord Stream 2 and Russia's case against the EU before the World Trade Organization. While agreeing with other authors in this volume that the energy interdependence between the EU and Russia will continue, she stresses that the way these matters are handled and resolved will have an important bearing on 'the nature of their relations for many decades to come'.

In the next chapter, David Ramin Jalilvand discusses 'the question of whether or not a return of Iranian energy from the cold is imminent' in the wake of the 'nuclear deal' of July 2015 or, more formally, the Joint Comprehensive Plan of Action (JCPOA). JCPOA is certainly opening the way for this and also, despite the current oversupply in the international markets, Iran's very low production costs means that it can compete in a low price environment. Nevertheless, things are not likely to pick up quickly, Jalilvand argues, because of high levels of uncertainty due to a number of other serious unresolved issues: These include the nature of the sanctions relief, Iran's new fiscal terms for co-operation with IOCs, its economic and energy policies, and domestic divisions over these policies.

In his overview of the East Mediterranean gas developments, Charles Ellinas explains the commercial challenges facing Cyprus and Israel regarding their gas export plans to Egypt in the current low gas price environment globally, and also after Egypt's discovery of Zohr and some other reserves. Yet, the Zohr discovery has brought back the Eastern Mediterranean into the limelight and heightened energy companies' enthusiasm for new exploration licenses and new projects. According to Ellinas, the best option for Cyprus and Israel is to cooperate in exporting their gas to Turkey and potentially to Europe through Turkey, by pipeline through Cyprus' exclusive economic zone.

Adel Abdel Ghafar's paper concerns the implications of the Zohr discovery for Egypt but also includes a criticism of the performance of the Sisi regime. Ghafar describes Zohr as 'a positive story amongst a sea of gloom for Egypt' while his advice to the Egyptian government is that it should make sure this asset is used to improve people's lives and the proceeds are not squandered but invested wisely in key areas, infrastructure, health and education. 'The expectations of everyday Egyptians continue to rise with each positive news story,' he says, 'so the government must now produce some tangible results or it will risk further upheaval down the line as ever-increasing expectations remain unmet.'

In the final chapter, Elai Rettig analyses the obstacles to Israeli natural gas development. He gives an account of the series of the heated public debates and controversies over fiscal, regulatory and export issues, because of which the Leviathan field, discovered in 2016, remains undeveloped and the export of Israeli gas is a still unrealized goal. In addition, Rettig discusses the impact of Egypt's Zohr discovery and the role of Russia, Iran and Turkey in the future outlook for Israel's gas developments.

CHAPTER 1:

ENERGY AND GLOBAL WARMING: 2015 PARIS CLIMATE CHANGE CONFERENCE

Rafael Jiménez-Aybar

GLOBE International is the largest cross-party parliamentary network devoted to legislative leadership on sustainable development and climate change. It was founded in 1989 by US legislators including John Kerry and Al Gore, members of the Russian Duma and of the Diet of Japan. Since then it has expanded its presence to over 60 countries in all regions of the world.

Climate change has been a central focus of GLOBE's work for a long time. For many years now GLOBE legislators have been following closely, and indeed trying to shape, the outcome of the annual Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC).¹ It would be fair to say that we await the twenty-first session of the COP in Paris (COP21) – Paris Climate Change Conference – with the certainty that there will be a before and an after.

Why does Paris matter?

COP21 comes at a critical time because the risks to governments of ambitious action to tackle the problem are lower than before. The costs of low carbon technologies are falling rapidly. The risks to governments of failing to act are, however, growing. Events and the work of climate scientists are combining to persuade large majorities of people throughout the world of the need to act.

A successful agreement in Paris will accelerate the transition to the low carbon economy necessary to keep the climate safe. It will establish an enduring framework within which governments can work together to keep the rise in global temperatures below 2°C. It will shape the development of the real energy economy in the months and years after Paris.

¹ The international political response to climate change began at the Rio Earth Summit in 1992, where the 'Rio Convention' included the adoption of the UNFCCC. This Convention set out a framework for action aimed at stabilising atmospheric concentrations of greenhouse gases to avoid 'dangerous anthropogenic interference with the climate system.' The UNFCCC, which entered into force on 21 March 1994, now has a near-universal membership of 195 parties. The COP is the supreme decision-making body of the UNFCCC. All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements.

What makes Paris different

In 2009 the world tried to secure a legally binding agreement on climate change in Copenhagen; it didn't succeed. This time around, we have learnt our lessons:

Paris is viewed as an enduring regime – the previous big agreements have attempted to capture climate action over a limited timeframe. Paris will help to provide certainty to a range of timescales, both short-term and long-term. This marks a significant shift in countries' sincerity and understanding about the scale of the challenge.

The US and China are now both engaged – before Copenhagen, these two major emitters were not collaborating constructively to reduce emissions, both viewing each other with suspicion rather than as peers. They have since made a series of very significant commitments which have been fundamental in building momentum and trust ahead of Paris:

We have pledges ahead of the COP – before Copenhagen the status of the pledges and expectations around what particular countries could offer (especially from China) were unclear, resulting in diplomatic frustration. Today we have all the major economies' pledges on the table. These pledges are locking in engagement and demonstrating the world is ready for an agreement in Paris.

More climate legislation is in place – only a handful of countries had climate legislation in place ahead of Copenhagen. Now, 75% of greenhouse gases (GHG) are covered by legislation.²

Climate action is good for growth – new analysis has demonstrated that climate action is good for growth and economy recovery.³ This is shifting the perceptions of political and economic decision-makers about the co-benefits from decarbonisation.

Renewables have become a credible alternative to power the global economy – in 2009, renewables were not considered a mainstream source of energy. The last 6 years' incredible investment in renewable suggests that a low carbon future seems more realistic and tangible.

More voices are calling for action – ahead of Copenhagen many NGOs mobilised their supporters to demonstrate and call for an ambitious deal. This time, the voices have broadened to include the Pope, progressive business, investors, campaigners, mayors and world leaders who are engaging and calling for a strong agreement. Climate change is no longer seen as only of concern to environmentalists, but is viewed as a concern for those concerned with prosperity and security.

² The Grantham Research Institute on Climate Change and the Environment, London School of Economics. (2015, May 31). *New study finds 75 per cent of annual global greenhouse gas emissions covered by national targets*. Retrieved from: <http://www.lse.ac.uk/GranthamInstitute/news/new-study-finds-75-of-global-greenhouse-gas-covered-by-national-targets/>

³ Mulyani Indrawati, S. (2015, July 14). Economic growth and climate action – a formula for a low carbon world. *The World Bank*. Retrieved from: <http://blogs.worldbank.org/voices/economic-growth-and-climate-action-formula-for-a-low-carbon-world>

Carbon emissions appear to be decoupling fuels from GDP growth – ahead of Copenhagen emissions were beginning to fall in many countries due to the economic crisis. In 2014, growth in carbon dioxide from the power sector stalled, whilst the global economy continued to grow.⁴

The political context

Political attention on climate change has dramatically increased over the past year. The political outcomes of the G7, driven by Germany,⁵ sent a confident political signal to the international community on the contours of the Paris agreement. Many new constituencies like cities and progressive business are now active in demanding more from governments, and the US in particular has used its diplomatic sway to shape the agenda for Paris. In addition, the slew of real-economy announcements including coal divestment, INDCs⁶ and investments in renewables are all contributing towards to the political momentum ahead of Paris. The economic and political tail winds are behind us for Paris.

The INDCs are a good start but not enough to get us firmly on track for a 2°C trajectory. Paris must therefore build an enduring regime to enable the world to avoid unmanageable climate change.

The French Presidency is undertaking an impressive task of driving consensus and maintaining procedural clarity. Whilst consensus is a pre-condition for success, the dominant dynamic is that of the US and China, currently driving the level of ambition in Paris. Both countries want a universal deal to assuage their domestic constituencies, but the strength of ambition is not necessarily a priority for both. The absence of an alternative force to temper the US-China dynamic is resulting in these two countries having their own way.

However, the vested interest in securing an agreement in Paris by the Chinese, US and the EU means that many traditional 'spoiler' countries such as Saudi, Russia and Venezuela are less likely to threaten the outcome, due to the consequences it would have upon their respective bilateral relationships.

How have we come to Paris?

South Africa hosted the 2011 COP (COP17) in Durban. Many countries were keen to set a new timeline for agreeing a comprehensive legal agreement to manage and reduce climate change. At the same time many large emerging economies were hesitant about being bound into a new legal agreement on a similar level to their developed country counter parts, wanting to

⁴ Werber, C. (2016, October 4). The decoupling of emissions and growth is underway. *World Economic Forum*. Retrieved from: <https://www.weforum.org/agenda/2016/10/the-decoupling-of-emissions-and-growth-is-underway-these-5-charts-show-how>

⁵ Livingstone, D. (2015, November 3). Germany, the United States, and Climate Leadership in a New Age of Oil. *Carnegie Endowment for International Peace*. Retrieved from: <http://carnegieendowment.org/2015/11/03/germany-united-states-and-climate-leadership-in-new-age-of-oil-pub-61749>

⁶ Intended Nationally Determined Contributions. In anticipation of the adoption of the new international agreement at COP21 (http://unfccc.int/paris_agreement/items/9485.php), countries across the globe publicly outlined what post-2020 climate actions they intended to take under that, known as their INDCs.

see the richer countries do more. The negotiations were tense. A tactical alliance was developed between the vulnerable countries in the Alliance of Small Island States (AOSIS), the Least Developed Countries (LDCs) and the European Union. The so called 'Durban Alliance' pulled together the majority of the world's countries to demand a legally binding treaty to be delivered by 2015, whilst setting up a work programme to look at immediate actions to increase ambition. The rationale for settling on 2015 as the deadline was to allow for political cycles in the US, China, India and Brazil to take place; as well as allowing the low carbon economy to flourish and become a credible alternative to a fossil fuelled future. The outcome of Durban was a success. Careful language was crafted to agree that the outcome of 2015 would have 'legal force'.

In return for securing a legal agreement in 2015, many developed countries already taking emissions reductions from Kyoto agreed to consider a second commitment period, which would cover their emissions out to 2020. The 2015 agreement would kick in by 2020 thereby putting all nations under one umbrella agreement. In 2012, Europe agreed to take part in the second commitment period of Kyoto, as did Australia, but other countries such as Japan and Canada refused to join.

Since 2012, climate negotiations have continued under two main tracks agreed in Durban. One is delivering the post-2020 deal; the deadline for this has been the Paris COP of 2015. The second track is looking at ways to increase ambition before 2020.

Why do we need the international action on climate change?

No country can control the climate alone. Climate change is more challenging than many other global issues because it is a race against the clock; delaying action makes lower climate risk levels unattainable. It also requires profound choices that impact broad national interest debates such as growth, development, national security and energy.

Tackling climate change requires synergies between national and international action. All countries stepping forward together to tackle the issue provides political cover for leaders that others are doing their share. This opens up more domestic political space, raising the probability of a country doing more than it would unilaterally.

Copenhagen forced climate onto domestic political agendas, meaning governments had to take a position. European renewable energy targets would not have been agreed in 2007 without the prospect of global climate negotiations at Copenhagen.

Chinese renewable energy targets mirror Europe's own targets, with China's growing solar industry initially dependent on Europe for the majority of its demand. Paris is now pressuring countries to put forward their next set of emission reduction offers (INDCs).

Whilst these INDCs are not enough to put the world onto an outright 2°C trajectory, the progress made on the international climate front has had more tangible economic impact than that any other global diplomatic process has achieved in the last decade. Recent announcements from the US and China demonstrate how international agreements inform and catalyse domestic levels of ambition.

Global agreements drive domestic ambition, but also rest upon it. Therefore, a global agreement should deliver a collective, simultaneously reinforcing signal to those who will create and implement future climate action. Expectations and certainty are central to the effectiveness of a global agreement. Weak and inconsistent policies send mixed signals about governments' own intentions, creating 'policy risks' and raising the cost of capital. An international agreement has the potential to act as a powerful macroeconomic policy instrument to shift investment away from fossil fuels and into clean energy. Only strong and simultaneous action can keep open the goal of limiting warming to no more than 2°C.

Paris' legacy

The interpretation of the Paris Climate Change Conference outcomes should not focus on the deal in the room, but the impacts on the world. Paris will look ambiguous to the untrained eye. A sufficient but imperfect outcome in Paris shouldn't be classed as a failure. It is important to think of the road through Paris, because even with a strong agreement, the job will not be complete. Paris will likely give birth to a new agreement that will accelerate the pace and scale of decarbonisation. Some details will likely need further negotiation, and the rest will need to be implemented in time for 2020 when the deal kicks in.

Importance of the 2°C limit

The extreme weather and economic impacts we've experienced to date resulting from less than 1°C of warming will pale in comparison with the impact on human welfare, prosperity and security from twice as much warming. One degree may sound like a small amount, but it's unusual in our planet's recent history, and small changes in temperature lead to enormous changes in the environment. To put it in context, just 5°C of warming ended the last ice age, and 6°C of warming would return the planet to the conditions when Canadian Arctic was as warm as Florida.

The international community has agreed that 2°C is the threshold of unmanageable climate change. The United Nations General Assembly (UNGA) and United Nations Security Council (UNSC) have both stated that uncontrolled climate change poses a threat to international peace and security. In 2009, and on several subsequent occasions since, leaders have agreed to limit global temperature rises to below 2°C in order to prevent dangerous climate change. In addition, a range of analyses shows that global poverty reduction and development goals will be increasingly unattainable – and current gains unsustainable – in an above 2°C world.

Analysis suggests that limiting climate change to 2°C would avoid the most catastrophic and irreversible changes to the climate system. However, it would still result in significant economic and social costs in all parts of the world, and pose existential threats to a few countries. Hence, under the UNFCCC, parties have also agreed to review the adequacy of the 2°C target.

Warming beyond 4°C is recognised to be 'incompatible with organised global community'. This means civil order, productive capacity and growth are not possible. Unmanageable climate change would go beyond our ability to adapt.

This growing momentum towards a commitment for all countries to take action to limit warming to 2°C signals a tipping point in which the wisdom of investing in fossil fuels development is being re-assessed by the investment community, since it is clear that at some point, perhaps sooner than many realise, investment portfolios will turn out to be laden with worthless shares of companies whose value is predicated on their ability to continue putting fossil fuels in the market indefinitely. Mark Carney, governor of the Bank of England, has been the first prominent financial regulator to note his concern that coal, oil, and gas reserves could become financially troubled stranded assets, an admission labelled ‘momentous’.⁷

So, if it appears that some fossil fuels must remain in the ground to limit global warming to 2°C, which ones should those be? A study led by Dr Christophe McGlade of University College London has provided a first-answer to this tough question.⁸

Extended Data Table 1

Regional distribution of resources unburnable before 2050 in absolute terms and as a percentage of current resources under the 2 °C scenario that allows CCS

Country or region	Conven oil		Unconven oil		Conven Gas		Unconven Gas		Hard Coal		Lignite	
	Gb	%	Gb	%	Tcm	%	Tcm	%	Gt	%	Gt	%
Africa	141	50%	70	100%	28	61%	35	100%	42	94%	2.8	56%
Canada	43	72%	633	99%	3.6	73%	18	71%	34	98%	39	97%
China and India	54	60%	110	100%	8.0	80%	35	88%	1,003	93%	106	88%
FSU	201	54%	360	100%	63	67%	27	89%	576	99%	480	98%
CSA	198	55%	447	99%	23	76%	51	92%	21	85%	6.3	63%
Europe	64	58%	30	100%	18	72%	16	78%	69	99%	142	89%
Middle East	554	53%	10	100%	72	68%	20	100%	10	100%	5.0	99%
OECD Pacific	23	77%	130	100%	9.0	90%	15	74%	116	97%	198	99%
ODA	38	51%	5.0	100%	14	55%	12	78%	34	84%	142	92%
United States	99	52%	650	100%	19	75%	20	50%	556	99%	317	95%
Global	1,417	54%	2,445	100%	257	69%	247	82%	2,462	96%	1,438	95%

Source: *Nature* (see footnote 8)

⁷ Clark, P. (2015, September 29). Mark Carney warns investors face ‘huge’ climate change losses. *Financial Times*. Retrieved from: <https://www.ft.com/content/622de3da-66e6-11e5-97d0-1456a776a4f5>

⁸ McGlade, C. & Ekins, P. (2015, January 8). The geographical distribution of fossil fuels unused when limiting global warming to 2°C. *Nature*. Retrieved from: http://www.nature.com/articles/nature14016.epdf?referrer_access_token=yCPWpi99S9editi44_h6t9NRgN0jAjWel9jnR3ZoTv0MEzzy4wDRQte5fViQxiPJlJlfgcxiQpfQtqwAkMQY0DkjoT7_E0MfkeLVGaj1XMMsDzXmRoXz5NBXveE8iDBc

The study revealed that a third of oil reserves, half of gas reserves and over 80% of current coal reserves globally should remain in the ground and not be used before 2050 if global warming is to stay below the 2°C target. This study, which has had worldwide resonance and has been published in *Nature*, also identifies the geographic location of existing reserves that should remain unused and so sets out the regions that stand to lose most from achieving the 2°C goal. The authors show that the overwhelming majority of the huge coal reserves in China, Russia and the United States should remain unused along with over 260 thousand million barrels of oil reserves in the Middle East, equivalent to all of the oil reserves held by Saudi Arabia. According to the study, the Middle East should also leave over 60% of its gas reserves in the ground.

One cannot help recall the words of Ahmed Zaki Yamani, the Saudi Arabian Minister of Oil and Mineral Resources from 1962 to 1986, and a minister in OPEC for 25 years, when in 1973 he famously noted: 'The Stone Age didn't end because we ran out of stones.' He was right, although he would have been surprised to see that not even the current oil prices are now enough to stifle the accelerating transition towards a post-fossil fuels age.

In the aforementioned study, development of resources in the Arctic and any increase in unconventional oil – oil of a poor quality which is hard to extract – were also found to be inconsistent with efforts to limit climate change.

The authors of the study first developed an innovative method for estimating the quantities, locations and nature of the world's oil, gas and coal reserves and resources. They then used an integrated assessment model to explore which of these, along with low-carbon energy sources, should be used up to 2050 to meet the world's energy needs. The model, which uses an internationally-recognised modelling framework, has multiple improvements on previous models, allowing it to provide a world-leading representation of the long-term production dynamics and resource potential of fossil fuels.

As stated by Dr McGlade, the lead author of the study:

We have now got tangible figures for the quantities and locations of fossil fuels that should remain unused in trying to keep within the 2°C temperature limit ... Policy makers must realise that their instincts to completely use the fossil fuels within their countries are wholly incompatible with their commitments to the 2°C goal. If they go ahead with developing their own resources, they must be asked which reserves elsewhere should remain unburnt in order for the carbon budget not to be exceeded.

There is already a precedent of a developing country which has decided not to develop its rich oil reserves on environmental grounds: Costa Rica.⁹

⁹ Globe International. (n.d.). *Costa Rica*. Retrieved from: <http://www.globeinternational.org/country-chapters/costa-rica>

Companies spent over \$670 billion last year searching for and developing new fossil fuel resources. They will need to rethink such substantial budgets if policies are implemented to support the 2°C limit, especially as new discoveries cannot lead to increased aggregate production. Investors in these companies should also question spending such budgets. The greater global attention to climate policy also means that fossil fuel companies are becoming increasingly risky for investors in terms of the delivery of long-term returns. One would expect prudent investors in energy to shift increasingly towards low-carbon energy sources.

Tomorrow's winners are becoming today's winners far more rapidly than anyone had forecast. Deutsche Bank recently published a report on solar energy production, pointing out that it is now at grid parity in more than 50% of countries. Citi Bank has announced the establishment of a \$100 billion fund to invest in renewables. The fossil fuel consultancy, Wood McKenzie has pointed out that solar farms are already displacing gas-fired generation in the US. Renewables compete already directly with gas, putting the oil companies' balance sheets under further stress.

Recent trends in fossil fuel demand: Case of Europe

The challenge of cutting fossil fuel use enough to meet the 2°C target needs to be seen in light of the recent trends in fossil fuel demand. I now focus on gas demand in Europe in the context of the general debate about energy in Paris.

Although European gas demand is falling, over the past years gas infrastructure has become a major focus for the EU. In response to energy security concerns, the European Commission is promoting new gas pipelines and liquefied natural gas terminals, including through EU funds such as the Connecting Europe Facility and the European Fund for Strategic Investment. Behind these supply-side efforts, however, the realities of gas consumption in the EU are changing. In contrast to official projections, EU gas demand is falling and by 2014 was 23% below its peak in 2010.¹⁰ This raises important questions about the economic viability of new gas import infrastructure and the risk of stranded assets.

European demand for gas is indeed falling. It peaked in 2010 and last year it was the lowest since 1995. This is due to structural shifts to the European economy, changing consumption patterns and significant progress on energy efficiency. Gas demand is not evenly spread across the EU. 80% comes from seven western European countries: Germany, UK, Italy, France, Netherlands, Spain and Belgium. Just 12% of the gas demand comes from seven Central and

¹⁰ Jones, D., Dufour, M. & Gaventa, J. (2015, June). Europe's Declining Gas Demand Trends and Facts on European Gas Consumption. *E3G Report*. Retrieved from: https://www.e3g.org/docs/E3G_Trends_EU_Gas_Demand_June2015_Final_110615.pdf. See also Eurostat. (n.d.). *Consumption of energy*. Retrieved from: http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy

Eastern European countries (Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia). This means that the majority of Europe's gas demand occurs in countries with strong energy efficiency and renewables deployment programmes, which are likely to further decrease demand in future.

In Europe gas demand is falling in all three major sectors: power, industry and residential. In the power sector, EU gas demand has fallen by roughly a third since 2010. This is in the context of a reduction of total fossil generation (i.e. both coal and gas) of 20% since 2010. The main drivers have included falling electricity consumption due to increased energy efficiency and changing consumption patterns, in addition to a significant increase in renewable generation. In the residential sector, energy efficiency programmes are leading to a fall in gas demand, particularly in Germany and the UK, which account for 45% of Europe's residential gas demand between them. UK residential gas demand fell by 27% from 2005 to 2012 (on a weather-corrected basis).

Europe has a history of overestimating gas demand. The European Commission has had to lower its gas demand projections every single time it produced a new reference scenario since 2003. Projections of what gas demand will be in 2015 have decreased by 23% over the past 10 years – and the Commission is still forecasting 2015 gas demand to be more than 20% higher than the actual 2014 levels. Similarly, the upper end of the projected range produced by industry body Eurogas in 2013 is actually significantly lower than the lower end of their projections from 2010 – and their lowest projection from 2013 is still above current actual demand levels. ENTSO-G, the body tasked with planning the EU gas pipeline network, has also overestimated gas demand. In its 2009 *Ten Year Network Development Plan*, it foresaw an 8% increase in gas demand from 2010 to 2013. In reality, demand fell by 14% in that period.

Despite these recent trends, most current projections still show an expectation of increasing gas demand. The upper-bound projection from Eurogas is for an increase in consumption of over 50% by 2035 compared to current levels, and even their lowest estimate represents a 15% increase on 2014. ENTSO-G's latest projections, used to plan gas pipeline investments, range from a 13% increase in EU gas demand to 2030 in its lowest scenario, to a 35% increase by 2030 in its high scenario. The potential for EU gas demand to continue to fall is not assessed. The European Commission's PRIMES reference scenario does show a slight decrease in gas demand to 2030, but still shows 2015 demand to be 22% higher than demand levels in 2014. By contrast, assessments for the European Commission show that if the 2030 energy efficiency target of 27% is met, gas consumption will fall by 16% compared to the reference.

The risk of misevaluating future gas demand in the EU has significant implications. The wrong diagnosis on EU energy security will lead to the wrong cure. An expectation of rising demand has led the EU's energy security strategy to focus on accessing new sources of gas, rather than on alternative approaches such as demand reduction or strengthening internal connections. Inflated gas consumption projections can skew the economic evaluation of new projects.

Gas infrastructure investments made in expectation of rising demand are at risk of becoming stranded assets if the increase in gas demand does not materialise. Public money (including the

Connecting Europe Facility and European Fund for Strategic Investment) is at risk of being diverted to uneconomic projects as a result of unrealistic demand projections, leading to higher value projects in other sectors losing out. Overinvestment in gas infrastructure can also create 'lock in' to levels of gas consumption that are in conflict with EU decarbonisation goals. A reality check is needed on EU gas demand and gas infrastructure investment plans, these changes need to be fully incorporated into the EU's approach to energy security and to infrastructure investment.

Further source:

Burke, T., Mabey, N. & Gallagher, L. (2015, September). Navigating the Road through Paris: COP21 Guide for Media. *E3G Report*. Retrieved from: <https://www.e3g.org/showcase/paris-2015/>

CHAPTER 2:

THE EUROPEAN ENERGY LANDSCAPE

Gareth M. Winrow

This paper examines the current and future energy landscape of Europe with particular reference to two recent key documents of the EU – the European Energy Security Strategy of May 2014 and the Energy Union Package of February 2015.¹ It will be seen that in spite of the heightened concerns over environmental issues and the need to make more use of renewables, gas will remain an important component of the energy mix of EU member states for the foreseeable future. Attention will focus on supply security with declining gas production in Europe and serious questions over the future of shale gas extraction. Given the theme and location of the conference in Cyprus where this paper was originally read, the possibility of the eastern Mediterranean becoming an important gas hub is also discussed.

The Importance of Gas

According to BP, in 2014 gas accounted for 22% of the EU's primary consumption by fuel. Only oil was more important, largely because of its use in the transportation sector, accounting for 37% of energy consumption.² Unlike oil, it is not so easy to switch from one supplier to another in the case of gas. In spite of the increased use of liquefied natural gas (LNG), most gas is still traded in regional markets and is carried by pipeline. The EU has set itself the targets by 2030 of reducing greenhouse gas emissions by 40% (compared to 1990 levels), improving energy efficiency by at least 27%, and ensuring that renewables account for 27% of energy consumption.³ Gas, though, will remain an important 'bridging fuel';⁴ as efforts will increase to cut back on the use of heavily polluting coal.

¹ European Commission, Brussels. (2014, May 28). *European Energy Security Strategy, COM (2014) 330 final*. Retrieved from: <http://eur-lex.europa.eu/legal-content/EU/TXT/PDF/?uri=CELEX:52014DC0330&from=EN>; European Commission, Brussels. (2015, February 25). *Energy Union Package, COM (2015) 80 final*. Retrieved from: http://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF

² BP Statistical Review of World Energy. (2015, June). Retrieved from: <https://www.bp.com/content/dam/bp/pdf/energy-economies/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf>

³ European Council, Brussels. (2014, October 24). *Conclusions, 23 and 24 October 2014, EUCO 169/14*. Retrieved from: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf

⁴ This refers to replacing mainly coal power with gas, thus using gas as a 'bridge' to a cleaner, low carbon energy system.

The European Energy Security Strategy has focused on the significance of gas, stressing the need to diversify the sources of gas deliveries, increase LNG imports, and develop local shale gas production. Of the 33 projects identified as critical for the future of the EU's energy security, 27 were in the gas sector.⁵ Fully aware of the overlap between energy and foreign policy, and seeking to build on the European Energy Security Strategy and the Energy Union Package, in July 2015 the European Commission launched a 'diplomatic energy action plan' to enhance ties with key neighbouring gas producers and transit states to ensure the diversification of future gas supplies to Europe.⁶

Europe and Energy Security

Energy security involves a range of issues. As well as environmental concerns, energy efficiency and the need for a more integrated market with better storage capacity should be considered. Supply security is another major concern. Imports of energy should be diversified to avoid over-dependence on one supplier. The security of pipelines and energy infrastructure from sabotage or attack from parties in a war zone must also be taken into account.

Dependent on imports for over 60% of its gas needs, the EU will likely have to procure 66% of its gas consumption from outside suppliers in 2020.⁷ In 2013, Russia accounted for 39% of the EU's gas imports and provided for 27% of the EU's gas consumption.⁸ In the foreseeable future, although gas demand may only marginally increase, European gas imports will continue to rise steadily as net production in the EU falls. BP predicts that there could be as much as a 45% drop in domestic gas production in the EU by 2035.⁹ The EU's largest gas field at Groningen in the Netherlands has had its production capped at 27 billion cubic metres per annum (bcm/y) – from an original ceiling of 42.5 bcm – because of the risk of earthquakes associated with gas extraction.¹⁰

High expectations raised over the prospects for shale gas exploration in Europe have been dashed because of potential environmental problems, questions over the feasibility of proposed projects with disappointing test results, unclear local legislation, and the lack of drilling and other equipment. The French authorities have banned fracking even though France has the second largest unproven technically recoverable reserves of shale gas in Europe. In theory, Europe could import shale gas from Algeria in the form of LNG given that the North African country has the third largest technically recoverable shale gas reserves in

⁵ "European Energy Security Strategy," *op.cit.* p. 10.

⁶ Council of the European Union, Brussels. (2015, July 20). *Council Conclusions on Energy Diplomacy, 10995/15*, Retrieved from: <http://data.consilium.europa.eu/doc/document/ST-10995-2015-INIT/en/pdf>

⁷ "European Energy Security Strategy," *op.cit.* p. 15.

⁸ "European Energy Security Strategy," *op.cit.* p. 2.

⁹ BP Energy Outlook 2035. (2014, January). Retrieved from: http://www.slideshare.net/BP_plc/bp-energy-outlook-2035-eu-region-insights-2014

¹⁰ Dutch court orders Groningen gas field output be capped at 27 bcm/yr. (2015, November 18). *Reuters*.

the world. However, because of security concerns, the lack of water available for fracking, local protests at drilling sites, and the need to tap the expertise of international energy companies who will need to be given considerable incentives to invest, the prospects for shale gas production in Algeria are not promising.¹¹

Moves are going ahead, though, to improve energy security with regard to gas by making Europe a more integrated market through building interconnectors, modifying current pipelines and laying new pipes to allow the bi-directional flow of gas. The European Commission has agreed to construct the Gas Interconnector Poland-Lithuania (GIPL) to end the isolation of the Baltic region from the rest of Europe.¹² A High-Level Group was established in June 2015 to promote the building of gas and electricity infrastructure to connect the Iberian Peninsula with France.¹³ An Action Plan was agreed upon in Dubrovnik in July 2015 to accelerate the building of new gas interconnectors and reverse the flows in existing pipelines to improve gas connections between central and south-eastern Europe.¹⁴ However, substantial sums will need to be raised to make Europe a more integrated energy market. The European Commission has estimated that 200 billion Euros must be found by 2020 to build major interconnectors.¹⁵ Funding mechanisms have been established such as the Connecting Europe Facility and the European Fund for Strategic Investors, but these will need to mobilise huge sums from the private sector to add to finance provided by the EU.

Gas Corridors

Currently, three corridors are used to transport gas to EU member states. Brussels has been encouraging the development of the Southern Gas Corridor as a fourth route to help diversify the sources of gas imports and reduce dependence on Russia. In the face of a more aggressive Russian policy in Ukraine and in Syria, European governments are conscious that Moscow may attempt to exploit energy as a political tool to heighten its influence. However, major European energy companies are still prepared to negotiate deals with Gazprom. In September 2015 a consortium of firms concluded a controversial binding agreement to proceed with Nord Stream 2. This would entail the delivery of an additional 55 bcm/y of Russian gas to markets in Europe through a network running across the Baltic Sea to Germany. Gazprom could then further scale back or terminate its delivery of gas to Europe via Ukraine. Several

¹¹ Boersma, T., Vandendriessche, M., & Leber, A. (2015, November). Shale Gas in Algeria: No Quick Fix. *Brookings Policy Brief* 15-01. Washington DC.

¹² European Commission – Fact Sheet, Brussels. (2015, October 15). *End of Energy Isolation in the Baltics: How the Gas Interconnector Poland-Lithuania works*. Retrieved from: europa.eu/rapid/press-release_MEMO-15-5845_en.htm

¹³ European Commission, Press Release, Luxembourg. (2015, June 15). *Commission, France, Portugal and Spain set up High Level Group to break Energy Barriers*. Retrieved from: europa.eu/rapid/press-release_IP-15-5187_en.htm

¹⁴ European Commission, Press Release, Dubrovnik. (2015, July 10). *Energy: Central Eastern and South Eastern European Countries join Forces to create an Integrated Gas Market*. Retrieved from: europa.eu/rapid/press-release_IP-15-5343_en.htm

¹⁵ "European Energy Security Strategy," *op.cit.* p. 9.

EU member states in central and eastern Europe have denounced the deal claiming that it ran counter to the provisions of the Third Energy Package regarding the ownership and transmission of gas along pipelines.¹⁶ At the time of writing in January 2016 the European Commission was assessing the legality and the possible political and economic consequences of Nord Stream 2.¹⁷

A second corridor delivers gas from Norwegian fields. In 2013, 33% of the EU's gas imports came from Norway.¹⁸ However, production is expected to decline in the medium term. Untapped reserves in the far north in the Norwegian and Barents Sea will be more difficult and expensive to develop.

The prospects for the expansion of a third gas corridor from North Africa must also be seriously questioned. In 2013, 22% of the EU's gas imports came from North Africa, mainly from Algeria and Libya.¹⁹ The problems associated with the development of shale gas in Algeria have already been noted. In addition to security and political concerns, rising local demand for energy and an unfavourable investment climate will likely prevent a substantial increase in Algerian gas exports to Europe. Attempts to proceed with the 8 bcm/y capacity Galsi pipeline to connect Algeria and Italy via Sardinia have been repeatedly stalled. The continuing instability in Libya may also hamper gas exports to Europe. LNG exports have been suspended, although gas has continued to be delivered to Italy via the Greenstream network.

According to officials in Brussels, the Southern Gas Corridor could eventually meet as much as 20% of the EU's gas needs.²⁰ The aim is to deliver gas from the Caspian region, Central Asia, the Middle East, and the Eastern Mediterranean Basin to Europe along the corridor via Turkey.²¹ The first steps towards the realisation of this corridor are being taken with the start of construction of the Trans-Anatolian Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP), which will connect Turkey with Italy via Greece and Albania. The intention is to deliver gas from Azerbaijan's Shah Deniz field along the corridor from 2018-2019 onwards. However, it is not clear if further volumes of gas from Turkmenistan, Iran, northern Iraq and Israel will be delivered along the corridor given political problems and security concerns.

¹⁶ Tully, A. (2015, December 9). Russia's Nord-Stream pipeline causing unrest in Eastern Europe. *Oilprice.com*. Retrieved from: <http://oilprice.com/Latest-Energy-News/World-News/Russias-Nord-Stream-Pipeline-Causing-Unrest-In-Eastern-Europe.html>

¹⁷ Editor's note made after the submission of the original text: In June 2016 Jean-Claude Juncker, the EU Commission president, was reported not have ruled out the possibility of finding a 'legal framework' that would enable Nord Stream 2 to go ahead. See Rettman, A. (2016, June 17). Juncker outlines legal hurdles for Russia pipeline. *EUobserver*. Retrieved from: <https://euobserver.com/foreign/133887>

¹⁸ "European Energy Security Strategy," *op.cit.* p. 15.

¹⁹ "European Energy Security Strategy," *op.cit.* p. 15.

²⁰ Maros Sefcovic: Southern Gas Corridor has potential to meet up to 20% of EU's gas needs in future – interview. (2015, February 11). *en.apa.az*.

²¹ European Commission. (n.d.). *Gas and Oil Supply Routes*. Retrieved from: <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/gas-and-oil-supply-routes>

Energy Union

Stressing the need for Europe 'to speak with one voice', the Energy Union Package referred to a future European energy strategy which would address energy security concerns and would be based on solidarity and trust. In the Package, the need to develop a fully integrated energy market was emphasised. Improved energy efficiency, the decarbonising of economies, and the importance of research and innovation were underlined.²² Attention was given to the need to establish strategic energy partnerships with key producing countries and regions such as the Caspian region and North Africa and significant transit states such as Turkey.²³

Poland had originally promoted the idea of 'a single purchaser' of European gas. This would have apparently entailed the EU member states working together in price negotiations with Gazprom, thereby strengthening the bargaining power of the EU and ensuring that Europe would not become over-dependent on Russia for gas supplies.²⁴ This proposal had to be abandoned as it would have run counter to the notion of state sovereignty. Each EU member state has separate energy needs with their economies based on different energy mixes. Instead, smaller EU member states may in future choose to co-operate voluntarily in the negotiation of gas contracts with Moscow. However, the Energy Union Package did allow for the European Commission to check that future intergovernmental agreements on energy issues should be in compliance with EU law.²⁵ The activities of energy companies, though, would not be closely monitored by the European Commission, and so problems could still ensue as seen in the case of Nord Stream 2.

In practice, it seems that the Energy Union Package was principally a consolidation and reiteration of decisions and agreements that had been earlier concluded. It appeared to strengthen the energy provisions of the Lisbon Treaty signed in December 2007 which had referred to the need for a functioning energy market, supply security, energy efficiency and the development of renewables, and the promotion of an interconnecting energy network.²⁶

The Role of LNG

Increased imports of LNG could help bolster European energy security by further diversifying suppliers of gas. There has been much hype over the prospect of future deliveries of LNG from the US as a result of the shale gas revolution. Technological developments have reduced the costs of delivering LNG. Certainly, Europe has the facilities in place to receive increased

²² "Energy Union Package". *op.cit.* p. 4.

²³ "Energy Union Package". *op.cit.* p. 6.

²⁴ EU should work on becoming a single gas purchaser. (2014, November 17). *Reuters*.

²⁵ "Energy Union Package". *op.cit.* p. 7.

²⁶ For Article 194 of the Lisbon Treaty (signed 13 December 2007) referring to energy issues, see, <http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-the-functioning-of-the-european-union-and-comments/part-3-union-policies-and-internal-actions/title-xxi-energy/485-article-194.html>

volumes of LNG. Indeed, regasification units are currently under-utilised. In 2011 Europe had imported 65.6 million tonnes (mt) of LNG, but in 2014, with increasing competition from Asian markets, this figure was reduced to 33 mt.²⁷ This meant that in 2014 regasification units in Europe were only 22% utilised.²⁸ More LNG receiving facilities will be built in Europe in the near future; according to the Commission, 'Considering that most of the existing capacity is located in Western Europe and the existence of internal bottlenecks from the Atlantic coast to the East, the development of a few new regasification units in Eastern Europe would be justified. This is the case in the Baltics and in South-East Europe where LNG regasification units have been identified as Projects of Common Interest...'²⁹

A glut on the LNG market is expected as the US and also Australia will become serious players. Europe may become a clearing house for excess LNG as demand in Asia falls. More gas from Qatar, for example, may be channelled to customers in Europe. Increased competition will likely lower gas prices and this could squeeze out cheap coal imports, thereby having a positive knock-on effect on carbon emissions. The possible impact of lower gas prices in Europe on LNG imports from the US is uncertain. Russia would also have to reduce prices in future gas contracts with EU member states and rely more on the spot market. Arguably, given its ability to continue to export gas at reduced prices by making use of its pipeline network, Russia could continue to have a large stake in the European market even at a time when there is a glut of LNG. However, in these circumstances gas producers in the eastern Mediterranean may struggle with selling their gas to European customers.

Towards a Mediterranean Gas Hub?

In line with the aims of the European Energy Security Strategy and the package of measures of the Energy Union, the European Commission is planning to expand its energy ties with states in North Africa and the eastern Mediterranean. In May 2015 in Brussels a new Euro-Med platform on gas, electricity, renewables and energy efficiency was launched. As part of the process an active political dialogue will also be encouraged. The first steps have been taken to proceed with the gas platform component. The intention is to promote debate on regulatory, financing and infrastructure issues with the aim of building new pipelines and LNG units to facilitate the creation of a Mediterranean gas hub.³⁰

²⁷ International Gas Union. *World LNG Report*, 2015 edition. Retrieved from: http://www.igu.org/sites/default/files/node-page-field_file/IGU-World%20LNG%20Report-2015%20Edition.pdf. p.11.

²⁸ *Ibid.*, p. 50.

²⁹ European Commission. (n.d.). *Gas and Oil Supply Routes*. Retrieved from: <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/gas-and-oil-supply-routes>

³⁰ European Commission, Brussels. (2015, May 6). *EU and South and East Mediterranean Producers step-up Energy Relations*. Retrieved from: <https://ec.europa.eu/energy/en/news/eu-and-south-and-east-mediterranean-partners-step-energy-relations>

The plans of the European Commission appear to overlap with the increased activities in the eastern Mediterranean of the Italian energy company Eni. Attempting to build on their success in discovering the massive Zohr gas field in Egyptian waters, Eni is hoping to create an LNG hub in the eastern Mediterranean which would supply gas to Europe. Gas from Zohr could be used to feed Eni's dormant LNG plant at Damietta in northern Egypt. Eni officials have spoken of linking their assets in Libya and Cyprus with those in Egypt to develop a major LNG hub.³¹

Expectations have been raised, therefore, regarding the future importance of the eastern Mediterranean for European gas imports. However, the previously mentioned economic, political and security problems in Libya as well as in Algeria should not be dismissed. Egypt is also facing an escalating threat from extremists linked to the so-called Islamic State. Increasing competition on LNG markets may make the development of an LNG hub in the eastern Mediterranean less commercially viable. Moreover, initial production from the Zohr field will most probably be tapped to feed the expanding market in Egypt rather than supply gas to Europe. On the more positive side, political developments in December 2015 suddenly boosted the prospects for the possible delivery of Israeli gas to Turkey and Europe from the offshore Leviathan gas field. In mid-December Turkey's President Erdoğan had surprised many when he openly spoke of the beneficial impact for the region of improved relations between Turkey and Israel.³²

Conclusion

Although events are fast moving and difficult to predict, what is clear is that concerns over Europe's energy security will not disappear. Recent discussions in Paris over climate change have reinforced the argument that gas will remain a key bridging fuel for the foreseeable future. In spite of the increasing concerns over the possible vulnerability of European economies due to dependence on Russian gas imports, major European companies have not been discouraged from striking further deals with Gazprom as seen in the case of Nord Stream 2. The European Commission's attempts to encourage Europe 'to speak with one voice' on energy matters clearly has its limitations.

It is important to underline how energy issues cannot be separated from political and security concerns. This is particularly evident in the case of the expansion of the Southern Gas Corridor and in the prospects for the development of energy resources in the eastern Mediterranean and North Africa. Nevertheless, energy projects are unlikely to proceed if they are not deemed to be commercially viable.

³¹ Jewkes, S. & Vukmanovic, O. (2015, September 15). Eni plans to hold the keys for east Mediterranean gas exports. *Reuters*.

³² Keinon, H. (2015, December 14). Erdoğan talks of positive impact of improved Turkey-Israel ties. *The Jerusalem Post*.

CHAPTER 3:

RUSSIA'S ENERGY POLICY: THE EU CASE

Zuzanna Nowak

Russia's position on the world energy market is underpinned by its rich resource base. Abundant oil and gas reserves constitute an undeniable asset which Russia does not hesitate to use for economic, but also for political purposes. Until recently gas trade has formed one of the most influential Russian foreign policy tools towards the European Union. However, this situation could change with development of the Energy Union concept within the EU, as well as with external challenges and opportunities that both partners will have to face.

Strategic thinking

Regardless of whether Russia plays the game of geopolitics, geo-economics, multi-polarity or any kind of new imperialism, one of the most important strategic tools of its international influence remains energy policy. What is also true is that it is not hard to guess the aims of Russian energy policy. In fact, there is no need to guess, as Vladimir Putin has always set out Russia's policies openly and consistently since he got into power. Among the most recurrent topics of Russian discourse, Russia's international status, relations with CIS countries, East-West world balance, energy, and especially gas policy hold a distinct place.

As a consequence, energy strategy has to be considered as an important element of Russia's economic strategy, but also – and not least – as a tool of foreign policy, of security strategy and, by extension, of the so-called Russia's Grand Strategy. Therefore, as proposed by M.L. O'Sullivan,¹ Russia uses energy resources, with gas at the forefront, as both a tool and a means to achieve not only economic but also security and political goals.²

This is clearly reflected in Russia's strategic documents. For example, in the 2013 Concept of the Foreign Policy of the Russian Federation,³ Article 34(f) states: '[The Russian Federation]

¹ O'Sullivan, M. L. (2013). The Entanglement of Energy, Grand Strategy, and International Security. In Goldthau, A. (Ed.). *The Handbook of Global Energy Policy* (pp. 30–47). Wiley-Blackwell. London.

² Nowak, Z., Ćwiek-Karpowicz, J. & Godzimirski, J. (2015, March). The Power to Influence Europe? Russia's Grand Gas Strategy. In PISM Strategic File, No.6(69). March 2015. p. 2.

³ Concept of the Foreign Policy of the Russian Federation, Approved by President of the Russian Federation V. Putin on 12 February 2013, 303-18-02-2013, unofficial translation at the Ministry of Foreign Affairs of the Russian Federation official site.

strengthens its strategic partnership with major producers of energy resources while actively promoting dialogue with consumers and transit countries, based on the assumption that measures to ensure the security of energy supplies should be consistently complemented with reciprocal measures to ensure stable energy demand and reliable transit.' Article 57 the Concept stresses that: 'Russia is interested in enhancing cooperation with the European Union as its principal trade and economic counterpart and important foreign policy partner' and 'will contribute to successful ... promotion of mutually beneficial energy cooperation aimed at creating an integrated European energy system on the basis of strict adherence to existing bilateral and multilateral treaty obligations.' Moreover, in the Introduction of the Energy Strategy of Russia, it is said that '[t]he objective of the energy policy of Russia is to ... promote strengthening of foreign economic positions of the country'.⁴ Since energy trade forms one of the strongest direct links between Russia and the outside world, the Kremlin uses it for its own political purposes.

Incontestable assets

Russia is in a strong position as regards its ability to use its energy resources as policy tools. It holds a dominant position as the world's second most influential oil and gas producers and very is the sixth most significant supplier in the global market of coal and uranium. In Europe its rank is even higher, as it holds first place in supply of oil, gas and coal (Table 1). Besides energy resources, Russia contributes considerably to the world trade of raw materials indispensable in energy industry, being among the top ten suppliers of steel stabilizers (e.g. nickel, cobalt), non-ferrous metals (e.g. aluminium, zinc, copper), precious metals (e.g. platinum, gold) and industrial minerals (e.g. phosphates, graphite), etc.

Table 1. Russia's natural resources in the world and in Europe

	World production - position	World production - percentage	Supply Europe - position	Supply Europe - percentage
Oil	2	12,7%	1	29%
Gas	2	16,7%	1	42%
Coal	6	4,3%	1	29%
Uranium	6	5%	2	18%

Source: BP, WNA, EC – 2014

⁴ The Energy Strategy of Russia for the Period up to 2030, Approved by Decree N°1715-r of the Government of the Russian Federation dated 13 November 2009.

Specificities of the different energy resource markets enable Russia's energy game to be played for a variety of stakes. Through active participation on the global oil market Russia tries to counterbalance political influence of other major producers, as well as ensure its own revenues to the federal budget – since oil trade constitutes their biggest share. Russia's leverage on the EU oil market is limited despite its strong position, due to easy availability of alternative suppliers. Its experience in nuclear technology and fuel production allows Russia to gain new markets, mostly in developing countries that are going through a period of rapid increase in electricity consumption. Russia has a whole range of assets, ranging from attractive financing schemes, through availability of full nuclear cycle services, to the promise of broader enhanced industrial cooperation. All this makes Rosatom, Russian nuclear conglomerate, an attractive partner for these countries. The European nuclear market, legally well-framed, stable and with currently only limited development perspectives, is therefore relatively resistant to political influences of Russia. As regards coal, as about 75% of the production worldwide is traded locally and there are no problems with diversification of supplies, the geopolitical significance of Russian resources is limited to only some types of this fuel (mainly anthracite) and relevant to few locations (e.g. Ukraine). Undoubtedly, it is the Russian gas sector, due to its inherently geopolitical characteristics linked to the policy of pipelines, long term contracts and preferential tariffs, that serves Russia best as a leverage, especially when it comes to its dealings with the EU.

Valuable partnership

Supply and demand are two sides of the same coin, where money paid for supplied energy is invested in new fields and resources destined to be sold on the market and generate further cash flows. In the existing situation where Russia is a top player on the European energy market while the EU payments for Russian energy resources constitute a huge contribution to the Russian budget, theoretically the two sides could establish a win-win cooperation based on interdependence and complementarity (Table 2).

Table 2. Dependences on Russia-EU energy trade

	EU's dependence on Russian imports	Russia's dependence on non-CIS markets (% of exports)
Oil	29%	72%
Gas	42%	72%

Source: EC, EIA, Gazprom – 2014)

Russia is indeed largely dependent on the European market – it exports around three-quarters of its gas and oil production to Europe. That brings revenues amounting to over 25% of Russia's GDP, around 50% of the government budget revenues and tax income, as well as

almost 70% of export sales.⁵ However, instead of strengthening this economic partnership and aiming at stabilization of cooperation, Russia prefers, in the name of its grand strategy, the approach of using energy resources to manage political relations with the UE. In the gas sector in particular, the Russian advantage over the EU has long been stemming from the substantial inequality of the two actors, their diverging interests, modes of functioning, and political aims.

Russian government and its state-controlled energy company Gazprom act as one, united, and coherent actor, with the Kremlin as the decision-making centre. It is not only the system of 'guided democracy' in Russia that fosters potential manipulations, but also the gas sector structure, namely Gazprom's export monopoly, that allows for rapid, coherent, and thought-out activities. Consequently, the Russian gas strategy can be characterized as highly consistent, as the decision makers have the capacity to identify long-term and overall aims and interests, as well as means to achieve them. At the same time, the sector's adaptation to sudden changes (such as crises, but also for example oil pricing trends) comes at a fast pace since is supported by political forces within the country. This all together allows for the use of gas as a strong foreign policy tool.

What counts most for Russia is its security of demand, hence it does use diverse pressures on its customers in order to ensure proper and stable revenues to the budget. Russia can exercise its power through the existing long term gas supply contracts, but also, more and more, through participation in the European spot market (with potential possibility of abusive behaviour such as flooding or withholding gas supplies). Russia's attitude towards its most important client is the result of calculations that take into account internal policy aims of the Russian government together with perspectives of external development and strengthening leverage on Europe.

On the other side there is the European Union with a multiplicity of actors. There are 28 national governments (with their respective authorities, governments, ministries, parliaments, etc.), European Union decision-making bodies (the Parliament, the Commission, the Council), but also, especially in the gas sector, a number of agencies and regulatory bodies that participate in the establishment of common policies. As a result of this, identification of one common goal based on such a collection of interests is often tough and repeatedly turns into an effort to determine the lowest common denominator. Also, being in a position of the recipient of gas, the EU should care mainly about its security of supply, yet this goal has to be in line with the EU's additional aims of competitiveness and sustainability.

Known for its normative and regulatory power, the EU expects all its partners, whether it is Russia or Norway as main gas suppliers, to operate in accordance with the established rules of its own internal market such as liberalization, competition, transparency, etc. While these

⁵ Data from the US Energy Information Administration and Russia Federal Customs Service websites.

rules have functioned for some time already in the EU, liberalization scheduled to have been accomplished by 2014, is not yet complete. This undermines the EU's credibility in Russian eyes. Moreover, the EU's capacity to act on an equal footing with Russia has often been undermined by its lack of external energy policy dimension. The Ukrainian-Russian crisis has brought this problem to public attention, with former Polish prime minister Donald Tusk's proposal for the creation of an Energy Union. Over one year on, this project, which has given a new narrative to the EU and reinforced its internal market through measures aimed at mitigation of external shocks, seems to promise a new chapter in the EU-Russia relationship.

Challenging environment

What is more, it is important to look beyond the internal trends and changes in Russia and the EU and put the two parties' relationship in a much broader context of external interferences that weight heavily on the bilateral gas trade. Gas will continue to be a major part of the global energy mix and its demand increases, yet, amid increasing uncertainties over the impact of technological and geopolitical changes occurring worldwide, it is hard to foresee precise market trends. Undoubtedly, however, exports of low-cost gas from the United States or Canada, globalization of gas trade through LNG technology development, international negotiation outcomes and strong regulatory effects on regional markets, as well as turbulences on the oil market can disturb the Russia-EU interdependence. Apart from global gas prices, the matter that will have the main impact on the Russia-EU trade is the availability of alternative gas suppliers to the EU (e.g. the US, that could undermine Russia's status in the EU) and the availability of alternative outlets for Russian gas (e.g. China could lower Russia's interest in the EU). Hence, security of gas supply and demand considerations will not concentrate as much on the share of imports (for Europe) or exports (for Russia) as on the theoretical and physical availability of gas alternatives.

Nevertheless, as long as these remain mid- and long-term perspectives, Russia has to rely on the existing infrastructure for its gas trade with the EU, which is closely interlinked with the transit issue and, hence, Ukraine. Even if the impact of the current Russia-Ukraine crisis on the relationship between Russia and Europe is yet to be defined, current events are part of the trends that have been ongoing for several years already.

First of all, the Russia-EU relationship has a long – over 40 years – history and has not substantially suffered due to the biggest geopolitical challenge that was the collapse of the Soviet Union and consequent enlargements of the EU to the East. Gas pipelines have indeed always formed one of the strongest links between Russia and the EU. Second, the reliability of Russian transit through Ukraine has already been undermined in 2006 and in 2009, leading to the construction of Nord Stream – in addition to the already existing Yamal and Blue Stream pipelines. Therefore, the tendency to reduce Russia's reliance on the supply route through Ukraine cannot be perceived as a novelty, but rather a consequent realization of the strategic decisions of Vladimir Putin. Third, the current debate over Nord Stream 2 has certainly intensified after the recent dramatic deterioration of the Russia-Ukraine relations, and, accordingly,

also Russia-EU relations. Nonetheless, doubts that accompany this possible investment should not be a surprise. The clash of perceptions over gas supply routes – with the EU's market-based approach and solidarity issues recalled by the concept of the Energy Union on the one side, and Russia's traditional securitization and politicization of gas trade on the other side – is yet another event confirming the ideological collision course between Russia and the EU.

Since the inception of the 3rd Energy Package aiming *inter alia* at liberalization of the EU gas market, Russia has seen its gas interests challenged several times – consider, for example, issues of access to the Opal pipeline, the Gazprom antitrust case, the Youkos case, as well as the reluctance of the EU towards the South Stream and Turkish Stream projects. In this context, the Nord Stream 2 pipeline proposed by Russia and backed by some of the major European companies has to be perceived not as 'business as usual', but rather as a project of strategic importance for the Russians.

Conclusion

Energy is an important element of Russia's 'grand strategy'. Gas constitutes its inherent element of influence and driver of foreign policy, both for economic and geopolitical purposes. Russia uses its gas tools to exercise power on its closest neighbourhood and transit countries, but also on the EU member states and their markets. Russia anticipates that Europe's strong dependence on its gas resources will increase even further, it therefore proposes construction of new pipelines, as a means to cement this relationship.

Nevertheless, even if Currently Europe and Russia appear to be condemned to each other in gas terms. Europe's alternative supplies are limited. Similarly, Russia has little possibilities to find new outlets in the short term. However, due to challenges and opportunities in the world gas markets linked to geopolitical changes and technological advances, Russia's strong position in Europe cannot be taken for granted. Thus, there is no doubt that Russia will continue to use all possible tools in order to keep Europe in its gas sphere of influence. It will use all European weaknesses for this purpose. And it is likely to succeed in its policy of using energy for own political and security purposes as long as the EU remains fragmented; finds no consensus on energy and its relations towards Russia, Ukraine and other gas-related salient topics; does not establish a genuine internal market for energy; and is not able to translate internal energy policy into external energy policy. Simultaneously, it is currently unimaginable that the Russia-EU gas trade relationship could be stopped. In the longer term however, Russia will need Europe more than Europe will need Russia.

CHAPTER 4:

EU-RUSSIA RELATIONS THROUGH THE PRISM OF EU LAW

Ana Stanič

Relations between the European Union and Russia have been strained in recent years. The reasons for this are many and complex. This article examines the relations between the European Union and Russia from the prism of EU Energy Law only. It discusses in turn: (i) the European Commission's investigation of Gazprom's alleged breaches of competition law; (ii) its actions in respect of the South Stream gas pipeline project; (iii) the legal issues surrounding the OPAL gas pipeline; (iv) the legal proceedings commenced by Russia against the EU before the World Trade Organization (WTO) concerning provisions of EU energy law; and (v) the on-going debate regarding the construction of Nord Stream 2 gas pipeline.

European Commission's actions against Gazprom

There are two investigations of Gazprom underway at the EU level at present. The first one dates back to September 2011 and concerns alleged breaches of Article 101 of the Treaty on the Functioning of the European Union (TFEU). The second one dates back to September 2012 and concerns possible breaches of Article 102 TFEU.

(a) Alleged Breaches of Article 101

In September 2011 the European Commission (EC) raided the offices of Gazprom and of its major customers in ten EU Member States (MS), including RWE, E.ON and OMV.¹ At the time the EC said it suspected that these companies were taking part in the following activities: market partitioning, obstructing network access, obstructing supply diversification and excessive pricing. As at the date of the publication of this article, the EC continues its investigation of these alleged breaches of Article 101 TFEU.

¹ European Commission. (2011, September 27). *Press Release: Commission confirms unannounced inspections in the natural gas sector*. Retrieved from: http://europa.eu/rapid/press-release_MEMO-11-641_en.htm?locale=en

(b) Alleged Breaches of Article 102

Shortly after the raids in September 2011 Lithuania requested that the EC investigate Gazprom's alleged practice of unfairly pricing gas sold to Lithuania.² On 4 September 2012 the EC issued a formal letter of objection to Gazprom alleging that it is abusing its dominant position and is thus, in breach of Article 102 TFEU.³ In the letter the EC alleged that Gazprom was hindering the free flow of gas in MS by dividing markets, preventing diversification of supply of gas in MS and imposing unfair prices on its customers by linking the price of gas to the price of oil.

In April 2015 the EC issued a much more nuanced statement of objections alleging that Gazprom's overall practices amounted to an abuse of a dominant position.⁴ In particular, it claimed that the cumulative effect of the following activities amounted to an abuse of dominant position. First, the EC argued that the imposition of territorial restrictions (including export bans and destination clauses) on wholesalers and industrial customers in Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia, the EC argued, enabled Gazprom to pursue an unfair pricing policy in five MS (Bulgaria, Estonia, Latvia, Lithuania and Poland) by charging wholesalers prices that are significantly higher compared to Gazprom's costs or to benchmark prices.⁵ Second, the setting of prices using an oil-indexed formula partly, the EC argued, enabled Gazprom to charge unfair prices to its customers. Third, the EC argued Gazprom conditioned its supply of gas to Bulgaria and Poland on obtaining unrelated commitments from wholesalers in those countries regarding gas transport infrastructure.

It is not yet clear that an out-of-court settlement will be reached between the EC and Gazprom. The complete breakdown in relations between the EU and Russia after Russia's annexation of Crimea and the introduction of sanctions against Russia in 2014 have made discussions between them very difficult. If an out-of-court settlement is not reached it is likely that the EC will issue a decision prohibiting infringements it will identify therein pursuant to Article 7 of Regulation 1/2003.⁶ In such circumstances Gazprom could potentially face (i) having to pay a fine of up to 10 percent of its annual turnover; and (ii) numerous proceedings in the courts of MS by companies seeking damages for harm they have allegedly suffered as a result of its breaches of EU competition law.

² Lithuania steps forward as whistle-blower in Gazprom row. (2011, September 28). *Euractiv*. Retrieved from: <http://www.euractiv.com/energy/lithuania-steps-forward-gazprom-news-514650>

³ European Commission. (2012, September 4). *Press Release: Antitrust: Commission opens proceedings against Gazprom*. Retrieved from: http://europa.eu/rapid/press-release_IP-12-937_en.htm?locale=en

⁴ European Commission. (2015, April 22). *Press Release: Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets*. Retrieved from: http://http://europa.eu/rapid/press-release_IP-15-4828_en.htm

⁵ *Ibid*.

⁶ Official Journal L 001. (2003, January 4). *Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty*. Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32003R0001>

The most recent meeting between EU Commissioner for Competition Margrethe Vestager and Gazprom took place on 26 October 2016. The possibility of Gazprom making commitments to address EC's competition concerns in a forward looking manner were discussed. In her email statement Vestager said the EC's objectives are (i) to ensure restrictions on cross-border reselling of gas purchased from Gazprom 'are removed once and for all'; (ii) 'to facilitate the flow of gas to Central and Eastern European gas markets' and (iii) to ensure that Gazprom 'cannot act on any rights concerning gas infrastructure which it obtained from customers by having leveraged its market position in gas supply'.⁷ Based on these discussions Gazprom is expected to prepare its final proposal for out of court settlement in the next few weeks.⁸

EC actions regarding South Stream

In its original iteration South Stream was a project to construct a 2,380 km gas pipeline project to bring about 63 billion cubic meters (bcm) per annum of Russian gas to South East Europe (SEE). The project was announced on 23 June 2007 with the signing of a memorandum of understanding between Eni, an Italian state-owned company, and Gazprom.⁹

Over the following four years Russia signed Inter-Governmental Agreements (IGAs) with Italy, Bulgaria, Serbia, Slovenia, Croatia, Hungary and Austria regarding the construction and operation of the South Stream pipeline. Gazprom signed agreements with the gas incumbents from these countries to set up joint-venture companies to construct and own the sections of the South Stream pipeline crossing these countries. Under these agreements the joint-venture companies were equally owned between the respective national incumbent and Gazprom.

The project was for a while in 2012 ranked amongst the projects being considered to be nominated as projects of common interest (PCIs) pursuant to Regulation No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) 714/2009 and (EC) No 715/2009 (the 'TEN Regulation').¹⁰ PCIs are projects which are considered essential to completing the EU internal energy market and achieving the EU's energy policy objectives of affordable, secure and sustainable energy. A project which is declared a PCI benefits from accelerated permitting procedure and access to EU financial support *via* the Connection Europe Facility. Importantly, listing as a PCI amounts to political endorsement of the project by the EC and other EU institutions. When the official

⁷ Vestager confirms meeting with Gazprom in Brussels. (2016, October 27). Interfax. Retrieved from: <http://interfaxenergy.com/gasdaily/article/22559/vestager-confirms-meetings-with-gazprom-in-brussels>

⁸ Gazprom putting 'final touch' to EU antitrust deal. (2016, October 26). Reuters. Retrieved from: <http://www.reuters.com/article/us-russia-gazprom-eu-competition-idUSKCN12Q221>

⁹ Gazprom and ENI sign Memorandum of Understanding for South Stream Project. (2007, June 23). *Gazprom News*. Retrieved from: <http://www.gazprom.com/press/news/2007/june/article63839/>

¹⁰ Official Journal of the European Union. (2013, April 25). *OJ L115/39*. Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:115:0039:0075:en:PDF> ('TEN Regulation')

Map: South Stream



Source: Gazprom¹¹

PCI list was adopted on 21 December 2013 pursuant to TEN Regulation South Stream was not listed amongst the PCIs.¹²

In November 2012 the EC was expressly granted the power to review energy-related IGAs entered into by MS with non-EU countries pursuant to Decision 994/2012/EU establishing an information exchange mechanism with regard to inter-governmental agreements between Member States and third countries in the field of energy (the Decision).¹³ The Decision required MS to submit existing IGAs to the EC for a review of their compatibility with the EU *acquis* by 17 February 2013.

In compliance with their obligations under the Decision Italy, Bulgaria, Slovenia, Croatia, Hungary and Austria formally submitted the South Stream IGAs to the EC for review. In August 2013 the EC notified these states that their IGAs with Russia were incompatible with the EU *acquis*.¹⁴ In the months that ensued numerous high level meetings were held between the representatives of the MS with and without the EC regarding the alleged incompatibility

¹¹ Gazprom. Map [image]. Retrieved from: <http://www.gazprom.com/f/posts/83/786221/south-stream-map-en.jpg>

¹² Annex VII to TEN Regulation, *Ibid.*; European Commission Unveils Projects of Common Interest, South Stream Excluded. (2013, October 14). *Natural Gas Europe*. Retrieved from: <http://www.naturalgaseurope.com/european-commission-projects-common-interest-budget>

¹³ Decision No 994/2012/EU of the European Parliament and of the Council of 25 October 2012 establishing an information exchange mechanism with regard to intergovernmental agreements between Member States and third countries in the field of energy, (2012, October 27). *OJ L 299/13*. Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:299:0013:0017:EN:PDF>

¹⁴ South Stream bilateral deals breach EU law, Commission says. (2013, December 4). *Euractiv*. Retrieved from: <http://www.euractiv.com/section/competition/news/south-stream-bilateral-deals-breach-eu-law-commission-says/>

of the IGAs with the EU *acquis*.

Regulators from a number of countries have maintained that they had obtained the EC's informal clearance of their IGA prior to their conclusion and expressed concerns in private about the EC *volte-face*. For a while Bulgaria took the view that the IGAs and the joint-venture agreements with Gazprom did not breach the terms of Articles 10 and 11 of Directive 2009/73/EC concerning common rules for the internal market in natural gas (the Third Gas Directive)¹⁵ or any other provisions of the EU *acquis* concerning the internal market for natural gas (known as the Third Energy Package). In particular, Bulgartransgaz, the Bulgarian transmission system operator which had entered into a 50-50 joint venture agreement with Gazprom, argued that the requirements of Articles 10 and 11 are only triggered once a pipeline is constructed since a transmission system operator needs to be certified to operate, and not to construct, a pipeline. Since the Bulgarian section of the South Stream pipeline had not been constructed at the time, it therefore maintained that the IGA provisions giving Gazprom a 50% share in the pipeline did not breach the requirements of Articles 10 and 11.

However, the EC took a different view. In its decision granting an exemption from third party access to the Trans-Adriatic Pipeline (TAP) in 2013 the EC interpreted Article 10 as requiring the pipeline to be 'fully certified before the start of the construction of the pipeline'.¹⁶ Since the EC does not quote from the actual wording of the Article or any other provisions of the Third Energy Package in support of its interpretation of the scope of Article 10, it is not possible to comment on the strength of its argument.

In June 2014 the EC started infringement proceedings against Bulgaria pursuant to Article 258 TFEU.¹⁷ No proceedings were brought against the other MS who had similar IGAs with Russia. In its letter of formal notice to Bulgaria the EC alleged that (i) the South Stream IGA breached provisions of the Third Energy Package; and (ii) the tendering procedure for the construction of the Bulgarian section of the pipeline breached EU public procurement rules.¹⁸

The proceedings were dropped after President Putin announced the cancellation of the project in December 2014.¹⁹ The Bulgarian government alleges that by the time the project was cancelled over 250 million euros had been invested in Bulgaria alone in this project²⁰

¹⁵ Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC. (2008, August 14). *OJ L 211/94*. Retrieved from: <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32009L0073>

¹⁶ Commission Decision of 16.5.2013 on the exemption of the Trans Adriatic Pipeline from the requirements on third party access, tariff regulation and ownership unbundling laid down in Articles 9, 32, 41(6), 41(8) and 41(10) of Directive 2009/73/EC. (2013, May 16). Retrieved from: https://ec.europa.eu/energy/sites/ener/files/documents/2013_tap_decision_en.pdf

¹⁷ EU Commission Triggers Infringement Procedure Against Bulgaria over South Stream Energy Project. (2014, June 2). *Natural Gas Europe*. Retrieved from: <http://www.naturalgaseurope.com/eu-commission-bulgaria-south-stream-infringement>

¹⁸ Does the cancellation of South Stream signal a fundamental reorientation of Russian gas export policy? (2015, January). *The Oxford Institute for Energy Studies*. Retrieved from: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/01/Does-cancellation-of-South-Stream-signal-a-fundamental-reorientation-of-Russian-gas-export-policy-GPC-5.pdf>

¹⁹ Russia says South Stream Project is over. (2014, December 2). *Euractiv*. Retrieved from: <http://www.euractiv.com/section/global-europe/news/russia-says-south-stream-project-is-over/>

whilst Gazprom alleges that it had invested over Euro 4.3 billion for the development of this project as a whole.²¹

Until recently the South Stream project was considered all but dead. Turk Stream, a Russia-Turkish pipeline project, was announced as its replacement in December 2014. As planned, the offshore part of the pipeline is to cross 910 km of the Black Sea bed and was to surface in Turkey at Kiyıköy, with a gas delivery point at Lüleburgaz for Turkish customers and the border crossing between Turkey and Greece at İpsala serving as delivery point for European customers. The Turkish downing of the Russian military plane in Syria in November 2015 halted discussions on Turk Stream for a while.²²

Fears that transit of Russian gas *via* Ukraine to the SEE will stop in 2019 has led to a revival

Map: Turk Stream



Source: Gazprom²³

of discussions regarding South Stream.²⁴ Both Naftogaz and Russia have publicly discussed the possibility that the transit contract between Gazprom and Ukrtransgaz will not be extended after 31 December 2018, the date its current term expires.²⁵ With the possibility

²⁰ Life after South Stream: Accelerated Modernisation of Bulgaria's Gas Sector. (2015, May 12). *Energy World Magazine*. Retrieved from: <https://www.energyworldmag.com/12/05/2015/life-after-south-stream-accelerated-modernisation-of-bulgarias-gas-sector/>

²¹ See "Russia says South Stream Project is over," *op. cit.*

²² Russia shelves Turkish Stream pipeline project. (2015, December 3). *Euractiv*. Retrieved from: <http://www.euractiv.com/section/europe-s-east/news/russia-shelves-turkish-stream-pipeline-project>; Hille K. (2016, August 9). *Financial Times*. Retrieved from: <https://www.ft.com/content/416c57e6-5e4b-11e6-bb77-a121aa8abd95>.

²³ Gazprom. Map [image]. Retrieved from: <http://www.gazprom.com/f/posts/55/359415/map-turkish-stream-en.jpg>

²⁴ Autonomous Non-Profit Organisation (ANO). (2016, February 10). *TV-Novosti: Europe lays out conditions for Russia's South Stream return*. Retrieved from: <https://www.rt.com/business/331995-south-stream-renewal-conditions>

that the transit of Russian gas to SEE via Ukraine would be halted, the gas buyers in SEE are in urgent need to secure alternative routes for the delivery of Russian gas.

In February 2016 a memorandum of understanding was signed in Rome between Gazprom, Edison and Depa to 'organize the southern route for supplying Russian natural gas to Europe'.²⁶ This new version of South Stream is to involve the interconnector between Greece and Italy known as ITGI Poseidon, which is a PCI. Although it is not yet clear, it would seem that Bulgaria would be the point at which Russian gas would land on-shore in Europe as was the plan under the original iteration of the South Stream project.²⁷

The viability of the new version of South Stream has been put in question after Russia and Turkey signed the IGA to construct Turk Stream in October 2016.²⁸ The relations between the two countries thawed after the failed coup against President Erdoğan in July 2016 and the Turkish apology for the downing of the plane in August. The countries have announced that the offshore pipelines will be completed by 2019 – the year the current term of the Ukrainian transit agreement ends.

Legal issues surrounding the OPAL pipeline

Ostsee-Pipeline-Anbindungsleitung (OPAL) pipeline is a 470 km gas pipeline which runs along the German eastern border with the Czech Republic and connects Nord Stream 1 pipeline to the existing pipeline grid in Central and Western Europe. Nord Stream 1 is a 1225-kilometre twin pipeline system which brings Russian gas to Germany. It crosses the exclusive economic zones (EEZs) of Russia, Finland, Sweden, Denmark and Germany. The combined capacity of the two pipelines is 55 bcm of gas a year. The construction of the first pipeline was completed in June 2011 and the second line in April 2012.

In 2007 Wingas, a joint venture company owned by Gazprom and Wintershall, applied to BundesNetzAgentur (the BNA), the German regulator, for a one hundred percent exemption from third party access (TPA) for the OPAL pipeline pursuant to Article 22 of Directive 2003/55/EC concerning common rules for the internal market in natural gas (the Second Gas Directive).²⁹ It argued that the pipeline could only be built if all of the capacity on the pipeline was reserved for Gazprom gas.

Under Article 22 an exemption from TPA is granted to construct new pipelines and other

²⁵ Mazneva E. (2015, April 13). Russia Plans to End Ukraine Gas Transit for New Route After 2019. *Bloomberg*. Retrieved from: <http://www.bloomberg.com/news/articles/2015-04-13/russia-plans-to-end-ukraine-gas-transit-for-new-route-after-2019>

²⁶ Mustafayeva K. (2016, February 25). Edison, Depa Renew South Stream Vows. *Gazprom*. Retrieved from: <http://www.naturalgaseurope.com/gazprom-proposes-a-third-southern-gas-project-o-eu-28344>

²⁷ Russia Claims Bulgaria Actively Seeking New South Stream Talks. (2016, March 10). *Sofia News Agency*. Retrieved from: <http://www.novinite.com/articles/173473/Russia+Claims+Bulgaria+Actively+Seeking+New+South+Stream+Talks>

²⁸ Autonomous Non-Profit Organisation (ANO). (2016, October 10). TV-Novosti: Turkish Stream gas pipeline: Moscow and Ankara sign agreement in Istanbul. Retrieved from: <https://www.rt.com/business/362279-gazprom-turkish-stream-pipeline/>

²⁹ Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC. (2003, July 15). *OJ L 176*, Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32003L0055>

gas infrastructure when it can be shown that *inter alia* the investment will 'enhance competition in gas supply and enhance security of supply' and 'the level of risk attached to the investment is such that the investment would not take place unless an exemption was granted'. In other words, EU law recognises that large capital intensive projects must be underwritten by long-term supply contracts in order to ensure their bankability.

Before it can grant an exemption under Article 22 the national energy regulator must notify the EC of its draft decision. The EC is in turn able to request amendments to or withdrawal of the decision within two months of such notification.

In February 2009 the BNA granted OPAL a one hundred percent TPA exemption for 23 years from the date of commencement of commercial activity.³⁰ In June 2009 the EC required the BNA effectively to reduce the TPA exemption to fifty percent. Gazprom's ability to book more than fifty percent of the capacity on the pipeline was, as a co-owner of the pipeline and dominant supplier of gas in the Czech Republic, subject to a gas release programme pursuant to which Gazprom was required to auction of at least three bcm of gas to the market together with related capacity on the pipeline to its competitors.³¹

Since the OPAL pipeline became operational in November 2012 no third party supplier has sought to book capacity on the pipeline.³² Accordingly, the pipeline has been operating at fifty percent capacity for over 3 years. Eager to supply more gas Gazprom and OPAL Gastransport approached BNA to revise its decisions. At the end of 2013 the BNA proposed to revise its decision by allowing capacity over the 50 per cent to be put up for auction on the European pipeline capacity auctioning platform called PRISMA. Had this proposal been approved by the EC Gazprom would have been able, along with any other interested market player, to have bid for that capacity.³³

Although Article 22 requires the EC to provide its comments on an exemption within two months of notification by a national regulator of the same, the EC extended, with the consent of Gazprom and OPAL Gastransport, this deadline three times citing 'the need for further clarifications of some technical details' as the reason for the extension.³⁴ In October 2014 the EC invoked the situation in the Ukraine to seek extra time to issue a decision.³⁵ In December

³⁰ Bundesnetzagentur Beschluss Az. BK7-08-009. (2009, February 25). Retrieved from: http://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/1BK-Geschaeftszeichen-Datenbank/BK7-GZ/2008/2008_0001bis0999/2008_001bis099/BK7-08-009_BKV/BK7-08-009_Beschluss_vom_25022009_bf.pdf?__blob=publicationFile&v=6; and Bundesnetzagentur Beschluss Az. BK7-08-010. (2008, October 2). Retrieved from: http://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/1BK-Geschaeftszeichen-Datenbank/BK7-GZ/2008/2008_0001bis0999/2008_001bis099/BK7-08-010_BKV/Beiladung_Concord_PowerNordalGmbH_Id14684pdf_bf.pdf?__blob=publicationFile&v=5

³¹ European Commission, Decision no. K (2009)4694. (2009, June 12). Retrieved from: https://ec.europa.eu/energy/sites/ener/files/documents/2009_opal_decision_de.pdf

³² Russian Gas Transit Across Ukraine Post-2019: pipeline scenarios, gas flow consequences, and regulatory Constraints. (2016, February). *The Oxford Institute for Energy Studies*. p. 30. Retrieved from: <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2016/02/Russian-Gas-Transit-Across-Ukraine-Post-2019-NG-105.pdf>

³³ Gazprom cancels request for special access rules on OPAL. (2015, January 28). *Contexte*. Retrieved from: https://www.contexte.com/article/energie/gazprom-cancels-request-for-special-access-rules-on-opal_38649.html

³⁴ *Ibid.*

2014 the EC terminated the review procedure after Gazprom refused to agree to a further extension.³⁶

The actions of the EC have been criticised by many including leading think tanks as evidence of the increased politicisation of energy. In its recent study regarding transit via Ukraine the Oxford Institute of Energy Studies described the EC's refusal to endorse the BNA's revised decision as 'increasingly illogical, strongly suggesting that it may have been political rather than regulatory' in view of the fact that only 0.17 bcm of the 3.2 bcm of the gas offered and 1.2 bcm of the gas sold at the gas auction organised by Gazprom in September 2015 was sold with delivery via OPAL.³⁷

In April 2015 Gazprom filed a new request with the BNA to obtain the right to use one hundred percent of the capacity in the OPAL pipeline.³⁸ In May 2016 BNA notified the EC of its revised decision to amend the 2009 exemption decision. It proposed to replace the existing fifty per cent booking limitation, which was subject to a gas release programme, with a non-discriminatory access to half of the capacity. On 28 October 2016, two days after the meeting between Vestager and Gazprom regarding EC's competition case against Gazprom (see discussion above), the EC issued a decision revising its exemption decision of June 2009.³⁹ Pursuant to the decision Gazprom will be able to increase gas exports via the OPAL pipeline by at least 7-10 bcm per annum provided that at least 2.56 bcm of the transmission capacity are auctioned to third parties. Subject to the possibility of Polskie Górnictwo Naftowe i Gazownictwo (PGNiG), Polish energy incumbent, challenging the EC's decision before the Court of Justice of the EU, it would seem that the long-standing issue regarding the use of OPAL will be resolved.

Russia's claim against the EU

In April 2014 Russia commenced proceedings against the EU before the World Trade Organisation (WTO). In its Request for Consultation⁴⁰ Russia argued that the EU's certification, unbundling and TPA provisions of the Third Gas Directive, violate: (i) Article II (Most-Favoured-Nation Treatment), Article VI (Domestic Regulation), Article XVI (Market Access) and Article XVII (National Treatment) of the General Agreement on Trade in Services (GATS);⁴¹ (ii) Article I

³⁵ EU delays decision on Russian access to Opal gas pipeline. (2014, November 3). *Reuters*. Retrieved from: <http://www.reuters.com/article/us-ukraine-crisis-eu-opal-idUSKBN0IN12520141103>

³⁶ See "Russia says South Stream Project is over," *op.cit.*

³⁷ See "Russian Gas Transit Across Ukraine Post-2019" *op.cit.*

³⁸ Gazprom requests use of full OPAL capacity. (2015, April 15). *Interfax*. Retrieved from: <http://interfaxenergy.com/gasdaily/article/15835/gazprom-requests-use-of-full-opal-capacity>

³⁹ Gas markets: Commission reinforces market conditions in revised exemption decision on OPAL pipeline. (2016, October 28) http://europa.eu/rapid/press-release_IP-16-3562_en.htm

⁴⁰ Request for Consultations by the Russian Federation to the Delegations of the European Union and its Member States. (2014, April 30). Retrieved from: https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=124563&CurrentCatalogueIdIndex=0&FullTextHash=

(General Most-Favoured-Nation Treatment), Article III (National Treatment on Internal Taxation and Regulation), Article X (Publication and Administration of Trade Regulations) and Article XI (General Elimination of Quantitative Restrictions) of the 1994 General Agreement on Tariffs and Trade (GATT);⁴² (iii) Article 3 (Prohibition) of the Agreement on Subsidies and Countervailing Measures⁴³ and (iv) Article 2 (National Treatment and Quantitative Restrictions) of the Agreement on Trade Related Investment Measures.⁴⁴ Interestingly it has not claimed that these provisions breach Article V of GATT, which accords freedom of transit to oil and gas via pipelines.⁴⁵

Article 11 is the key provision of the Third Gas Directive challenged by Russia. This Article is known as the 'Gazprom clause' and is said to have been adopted for 'fear that ownership unbundling – the separation of integrated energy firms' production assets from their transmission assets – would lead to the indiscriminate acquisition of EU energy grids by third countries' and, more specifically by Russia.⁴⁶

In September 2007 José Manuel Barroso, the EC President at the time, claimed that Article 11 ensured that 'we all play by the same rules'. However, it is clear from the wording of Article 11 that it imposes different rules regarding the certification of a transmission system operator (TSO) when the TSO is controlled by a non-EU country or a non-EU national compared to those when it is controlled by an EU country or national.⁴⁷ In particular, it provides that a request by a TSO or a TSO controlled by a non-EU country or non-EU national must be refused if it has not been demonstrated that (i) the TSO complies with effective unbundling requirements as set out in Article 9; and (ii) the certification will not put at risk the security of energy supply of MS and the EU taking into account: (a) the rights and obligations of the EU arising under international law, including any agreement by the EU which addresses the issue of security of energy supply; (b) the rights and obligations of MS with third countries, in so far as they are in compliance with EU law; and (c) other specific facts and circumstances of the case and the third state in question.

The same rules are not imposed on TSOs owned by an EU national or country. In particular, such TSOs do not have to demonstrate that its certification will not put at risk the security of the energy supply of a MS and the EU as a whole. More importantly, such TSOs are deemed

⁴¹ WTO General Agreement on Trade in Services. Retrieved from: https://www.wto.org/english/docs_e/legal_e/26-gats.pdf

⁴² WTO General Agreement on Tariffs and Trade 1994. Retrieved from: https://www.wto.org/english/res_e/booksp_e/analytic_index_e/gatt1994_e.htm

⁴³ WTO Agreement on Subsidies and Countervailing Measures. Retrieved from: https://www.wto.org/english/docs_e/legal_e/24-scm.pdf

⁴⁴ WTO Agreement on Trade-related Investment Measures. Retrieved from: https://www.wto.org/english/docs_e/legal_e/18-trims.pdf

⁴⁵ Stanić, A. (2003). A Guide to International Rules for the Transportation of Oil and Gas: a Particular Look at the Caspian Region in Oil and Gas Law of Kazakhstan: National and International Perspectives, *Kluwer International*.

⁴⁶ 'Gazprom clause' issues Russia ultimatum for energy co-operation. (2007, September 20). *Euractiv*. Retrieved from: <http://www.euractiv.com/section/med-south/news/gazprom-clause-issues-russia-ultimatum-for-energy-co-operation/>

⁴⁷ *Ibid*.

to comply with Article 9 requirements regarding effective unbundling if it is owned by a different public body of a MS to that which owns the company which produces or supplies the gas or electricity. This is because Article 9(6) of the Third Gas Directive deems the requirements for unbundling to have been met even if a MS owns the TSO on the one hand and the gas supplier and/or producer provided two different ministries or public bodies hold the shares in these companies. Without this deeming provision a state's ownership of these companies would make such a company a vertically integrated company and thus would have to be effectively unbundled.

This deeming provision only applies in situations where the shares are owned by a MS and therefore does not apply when shares are owned by a non-EU country. In view of the above, Russia has alleged in its claim against the EU in the WTO that Articles 11 and 9 breach *inter alia* the EU's obligation to accord Russian companies national treatment under GATT and GATS, this being an obligation to accord Russian companies the treatment as favourable as that accorded to EU nationals.

At a meeting of the Dispute Settlement Body (DSB) on 19 June 2015, the EC rejected Russia's request for a panel to be established. It maintained that Russia's panel request manifestly expanded the scope of the dispute, thus changing the essence of the complaint.⁴⁸ At the meeting on 20 July 2015 the DSB established the panel in accordance with Article 6 of the Understanding on rules of procedures governing the settlement of disputes (DSU).⁴⁹ As no agreement was reached between the EU and Russia on who should be the members of the panel the Director-General of the DSB appointed the members of the panel on 7 March 2016. China, Colombia, India, Japan, the Republic of Korea, the Kingdom of Saudi Arabia, Ukraine and the United States have reserved their rights pursuant to Article 10 of the DSU to participate in the Panel proceedings as third parties.⁵⁰ As a general rule Article 12(8) of the DSU requires that the panel issue its final report within six months of the date it was appointed. Given the complexity of this case it is probably more likely that the report will be issued within a year of the panel's appointment. Since the report of the panel can be appealed, the outcome of Russia's challenge is likely not be known before June 2017.

On-going discussions regarding Nord Stream 2

As discussed above, the recent suggestion by both Naftogaz and Gazprom that the transit gas could stop flowing through Ukraine to Europe in early 2019 has re-opened the debate on whether alternative routes for the supply of Russian gas should be considered. Nord Stream 2 is one such project, alongside Turk Stream and the revived South Stream.

Nord Stream 2 is a project to lay a second set of pipelines along the existing Nord Stream

⁴⁸ WTO. (2016, April 12. last update). *European Union and its Member States — Certain Measures Relating to the Energy Sector, Dispute No. DS476*, Retrieved from: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds476_e.htm

⁴⁹ Annex 2 to the WTO Agreement. Retrieved from: https://www.wto.org/english/tratop_e/dispu_e/dsu_e.htm.

⁵⁰ *Ibid.*

1 pipelines and thereby provide an alternative route to supply Russian gas to Europe. A memorandum of understanding was signed between Gazprom, E.ON, Shell and OMV to build Nord Stream 2 on 18 June 2015.⁵¹ A shareholder agreement was signed between Gazprom, BASF, E.ON, Engie, OMV and Shell in September of the same year.⁵² The additional 55 bcm per year of gas which would be supplied through the pipeline would cover roughly 75% of the current Russian natural gas export to the EU.⁵³

In December 2015 Germany's national competition regulator, the Federal Cartel Office, approved the creation of the consortium (Gazprom, Wintershall, Shell, E.ON, ENGIE, OMV) to construct and operate the Nord Stream 2 pipeline in December 2015, triggering a storm of objections from Poland, the Baltic states and other countries.⁵⁴ In August 2016 the Polish competition authority issued a statement of objections arguing that the above mentioned consortium would restrict competition in Poland since 'Gazprom has a dominant position on the market when it comes to supplying gas to Poland, and the deal could strengthen further the company's negotiating position with regard to users in Poland'.⁵⁵ Rather than challenge the decision the consortium has withdrawn their application and is now considering other ways to structure their participation in the project.

Objections have been raised by the EU Parliament and by the EC. At the debate in the Parliament on 6 April this year Mr Buzek, a Polish MEP (and former Polish Prime Minister), said that 'Nord Stream 2 and Energy Union cannot co-exist' and stressed that 'the majority of the European Parliament opposes Nord Stream 2'.⁵⁶ The EC Vice President for the Energy Union Maroš Šefčovič has also expressed his doubt that Nord Stream 2 is a commercial project which complies with the EU *acquis*. In particular, he said: 'For me it's hard to see the Nord Stream 2 as a purely commercial project. The pipeline's possible construction will drastically change the European gas supply system, with the EU getting 80 percent of Russian gas via one route, in violation of the energy security requirements'.⁵⁷ Since there are no legally binding energy security requirements under EU law which would prohibit construction of

⁵¹ Press Release: Gazprom, E.ON, Shell, and OMV agree to develop gas transportation capacities for the deliveries of Russian natural gas to Europe. (2015, June 18). *Gazprom*. Retrieved from: <https://www.gazprom-germania.de/en/media/media-centre/press-release/gazprom-eon-shell-and-omv-agreed-to-develop-gas-transportation-capacities-for-the-deliveries-of-t.html>

⁵² Press Release: Gazprom, BASF, E.ON, ENGIE, OMV and Shell sign Shareholders Agreement on Nord Stream 2 project. (4 September 2015). *Gazprom*. Retrieved from: <http://www.gazprom.com/press/news/2015/september/article245837>

⁵³ *Ibid.*

⁵⁴ Nord Stream-2 Pipeline Consortium Approved by German Competition Regulator. (2015, December 22). *Sputnik News*. Retrieved from: <http://sputniknews.com/europe/20151222/1032148425/nord-stream-consortium-approved-german-competition-regulator.html#ixzz3zlAowbJB>

⁵⁵ Nord Stream 2 pipeline hits stumbling block in Poland. (2016, August 16). *Offshore Energy Today*. Retrieved from: <http://www.offshoreenergytoday.com/nord-stream-2-pipeline-hits-stumbling-block-in-poland/>

⁵⁶ Can Nord Stream 2 be stopped?. (2016, April 14). *Energy Post*. Retrieved from: <http://www.energypost.eu/can-nord-stream-2-stopped>

⁵⁷ Brussels Pipes Up: 'All Sides Should Rethink Nord Stream 2's Feasibility'. (2016, February 11). *Sputnik News*. Retrieved from: <http://sputniknews.com/europe/20160211/1034561652/european-commission-nord-stream.html#ixzz3zsF6f049>

Nord Stream 2 his objections seem to be political in nature.

Similarly, objections have been voiced by the European Council at its meeting in December 2015. In the conclusions of its meeting in December 2015 the European Council noted that '[a]ny new infrastructure should entirely comply with the Third Energy Package and other applicable EU legislation as well as the objectives of the Energy Union'.⁵⁸ The reference to compliance with 'the objectives of the Energy Union' as a requirement for an infrastructure project to go ahead implies that such objectives are legally binding. This is, however, not the case. The Oxford Institute of Energy Studies has noted in its recent report that reference to these objectives has 'introduced a degree of politicisation in the decision process, thus suggesting that in the EU 'political judgements can override regulation'. Clearly the EC understands that such judgements, if acted upon, risk discrediting the EU energy *acquis* among future investors in infrastructure bringing gas (energy) supplies to the EU, especially those from outside the EU (not necessarily from Russia).⁵⁹

There has also been much debate as to whether the unbundling provisions of the Third Gas Directive apply to Nord Stream 2. In 2009 when the construction of Nord Stream 1 was approved the decision was taken that the provisions of the Second Gas Directive (the Third Gas Directive was not in force at the time) did not apply since the pipeline was constructed in the EEZ of a MS. The EEZ is the marine area beyond the territorial sea of a state extending not more than 200 nm from the baseline. It is declared by a state pursuant to Part V of the 1982 Law of the Sea Convention (the Convention). A state does not have sovereignty over the EEZ as it does in respect of its territorial waters but instead has certain sovereign rights as specified in the Convention. Article 79 of the Convention accords states parties to the Convention to lay pipelines within the EEZ of another state. In view of these provisions, it was argued at the time Nord Stream was being approved that there was no basis for applying the provisions of the Second Gas Directive to Nord Stream 1.

The supporters of Nord Stream 2 have invoked the Nord Stream 1 precedent to say that it similarly does not need to comply with the EU *acquis*. From documents leaked to the press, it looks like the EC's legal department agrees with this analysis.⁶⁰ However, Professor Riley and other advisors to the European Parliament disagree. They argue that EU law applies to the territorial waters of the relevant member states and to the EEZ and that the Nord Stream 1 precedent cannot be invoked since Article 11 of the Third Gas Directive was not in force at the time Nord Stream 1 was approved.⁶¹ As at the time of the publication of this article the debate continues to rage.

⁵⁸ European Council. (2015, December 18). *17-18 December 2015 – Conclusions*. Retrieved from: http://www.consilium.europa.eu/en/meetings/european-council/2015/12/201512-EUCO-conclusions_pdf/

⁵⁹ See "Gazprom cancels request for special access rules on OPAL," *op.cit.*

⁶⁰ Legal opinion undermines EU's ability to block Nord Stream pipeline. Politico Pro. (2016, July 2). Retrived from: <http://www.politico.eu/pro/nord-stream-gazprom-russia-pipelines-gas/>

⁶¹ See "Can Nord Stream 2 be stopped?," *op.cit.*

Conclusion

Energy has been and will remain the key element of the interdependency between the EU and Russia. In the short and medium terms, the EU will remain dependent on Russia for its gas and oil supplies and the EU will remain Russia's main destination for such exports. This paper seeks to shed some light on the increasingly complex and fraught relations between Russia and the EU by looking at issues of EU energy law on which they disagree.

The EC's October decision on OPAL the possible settlement of EC's competition investigation against Gazprom may signal that the relations are improving. However, it is early days yet. The EC's OPAL decision may be challenged and the debate on Nord Stream 2 and other pipeline projects continues to rage. How these matters are approached and resolved will be crucial in defining the nature of their relations for many decades to come.

CHAPTER 5:

IRANIAN ENERGY AFTER THE NUCLEAR DEAL: A RETURN FROM THE COLD?

David Ramin Jalilvand

The Joint Comprehensive Plan of Action (JCPOA) of July 2015, commonly known as the 'nuclear deal', comes with the prospect of a higher Iranian profile in international energy. During the past years, Iran's ability to produce and export oil and natural gas was significantly reduced due to international sanctions, which were imposed as the dispute over the country's nuclear programme intensified. Several of these sanctions are now going to be lifted, according to the JCPOA. Therefore, as the implementation of the nuclear deal is under way, the question of Iranian oil and natural gas exports is back on the agenda. This brings to the forefront the question of whether or not a return of Iranian energy from the cold is imminent.

The statistics might suggest so. Iran is sitting on top of the world's fourth largest oil and largest natural gas reserves. As such, the country holds the world's largest combined reserves of oil and natural gas.

Particularly if compared with the world's major producers,¹ Iran's production is substantially below potential. In 2014, Iranian oil production stood at 3.6 million barrels per day (mbpd), down from 4.4 mbpd in 2011. With domestic consumption at 2.0 mbpd, exports amounted to 1.4 mbpd, down from 2.6 mbpd in 2011. In the case of natural gas, Iran produced 172.6 billion cubic metres (bcm) in 2014 with consumption at 170.2 bcm. Importing 6.9 bcm (mainly from Turkmenistan), Iran has exported 9.6 bcm (mainly to Turkey). As a result, Iran's net exports of 2.7 bcm were only marginal.²

Thus, as the full implementation of the JCPOA would lead to the lifting of a number of energy and financial sanctions, it seems Iran has substantial potential to increase its production and export of oil and natural gas.

¹ In the case of oil: the U.S., Saudi Arabia, and Russia. In the case of natural gas: the U.S. and Russia.

² BP. (2015). *Statistical Review 2015 Workbook*. London: BP.

Even the fact that international oil prices have drastically declined since mid-2014 and markets are currently oversupplied would not hinder an Iranian comeback. This is because production costs in Iran, both for oil and natural gas, are among the lowest worldwide. In early 2016, Iranian officials have stepped back from their previous stance to (re-)gain market shares at any cost, i.e. to disregard price considerations.³ Nevertheless, from a commercial point of view, Iran is in a position to compete in the current low-price market environment with prices in the range of around 30 US-Dollar per barrel.

However, as argued in the following, a rapid increase of Iranian oil and natural gas production is unlikely to happen in the near future. Rather, a number of issues continue to add a high level of uncertainty to the future of Iranian energy, arguably delaying Iran's return to international energy markets.

The nature of sanctions relief

The bottom line of the nuclear deal is a trade-off: in exchange for a limitation of Iran's nuclear programme, sanctions against the country are to be lifted. This, however, ought not to be confused with a complete termination of all sanctions against Iran. Two fundamental issues remain.

On the one hand, the JCPOA entails a so-called 'snapback' provision. Should any party of the deal believe that Iran is violating its commitments under the JCPOA, the matter can be brought before the UN Security Council. The Security Council, in turn, would then need to conclude that Iran is *not* violating the nuclear deal. Otherwise, sanctions would be re-imposed automatically. The United States could veto such a vote. Therefore, although this would come with a political price, Washington is de facto holding the keys to re-impose sanctions. In this case, the pre-JCPOA sanctions regime would be re-imposed, including energy and financial sanctions. There is no provision to protect businesses that were made possible by the JCPOA. In other words, investments are not protected in the event of a sanctions snapback.⁴

On the other hand, not all sanctions against Iran will be lifted as a result of the nuclear deal. The European Union and the United Nations have pledged to lift their energy and financial sanctions, which were adopted on the grounds of nuclear non-proliferation. The United States, however, are sanctioning Iran's energy and financial sectors also because of human rights violations and terrorism. These U.S. sanctions remain unaffected by the JCPOA. Thus, a number of U.S. sanctions against Iran's energy and financial sectors will continue to stay in place. In this context, the (potential) application of secondary U.S. sanctions against Europeans and others with business interests in Iran are of importance.⁵

³ Iran doesn't want oil price war, may limit output rise: official. (2016, 6 January). *Reuters*.

⁴ Samore, G. (2015). *The Iran Nuclear Deal: A Definitive Guide*. Cambridge, MA: Belfer Center for Science and International Affairs, Harvard University.

⁵ *Ibid.*

In sum, the nature of sanctions relief is confronting potential investors in Iran's energy sector with great uncertainty regarding the legal base for their investments in the mid- and long-term. This might translate into a more cautious stance by potential investors in Iran's energy sector.

The fiscal terms for co-operation with international energy companies

Up until very recently, IOCs were only allowed to enter Iran's energy sector under a very restrictive 'buyback' scheme. Bearing the full risk of exploration and production, the buyback scheme only entitled IOCs to a pre-defined fixed return. This has caused frequent complaints on behalf of IOCs and arguably retarded significant amounts of investment into Iran's energy sector.⁶

In November 2015, Iran has officially introduced new fiscal terms for co-operation with IOCs: the Iran Petroleum Contract. Under the Iran Petroleum Contract, IOCs are asked to form joint ventures with the National Iranian Oil Company and its subsidiaries. Linked to the level of production and the international price of oil, remuneration will be more flexible. Moreover, although not entitled to formal ownership, the Iran Petroleum Contract allows IOCs to book reserves. Finally, the Iran Petroleum Contract comes with a longer timeline for co-operation of between 20 to 30 years.⁷

The announcement of the Iran Petroleum Contract was generally welcomed by representatives from various IOCs. At the same time, however, scepticism remains as to how the actual contracts will eventually look like.⁸ Recently, the new contract-scheme has moreover become the subject of fierce criticism from Iranian parliamentarians.⁹

In any case, even if the Iran Petroleum Contract is attractive enough to bring investments to Iran on a large scale, it would still take several years before these would materialize. Hence, substantial increases in oil and natural gas production can only be expected in the middle and long terms. As long as the details of future co-operation with IOCs are unclear, uncertainty regarding the extent of IOC engagement in Iran will persist.

Iran's economic and energy policy

During the past decades, arguably the most important trend in Iranian energy was the dramatic increase in domestic demand. Between 1979 and 2014, domestic oil and natural gas consumption has increased by 6.4 times. This was accompanied by a re-orientation of the

⁶ Iran's latest export/import options. (2010, April). *Gas Matters*.

⁷ Iran offers flexible oil contracts to attract foreign investors. (2015, November 28). *Financial Times*.

⁸ Views expressed in discussions with the author.

⁹ Review of oil contracts should not be forgotten in the confusion over the parliamentary elections! [in Persian]. (2016, January 4). *Tansim News*.

country's energy sector. Before the 1979 revolution, in the 1970s, more than 90% of Iran's combined oil and natural gas production were exported and less than 10% consumed domestically. Today, the situation is fundamentally different. In 2014, more than three quarters of Iran's combined oil and natural gas production were consumed domestically with less than one quarter being exported.¹⁰ Hence, whether by design or chance, Iran has de facto prioritized domestic demand over exports.

Several drivers account for the rise in domestic energy consumption: economic and population growth as well as over-consumption. Since the end of the Iran-Iraq war in 1988, Iran's real GDP has almost tripled, reaching a level of 417 billion US\$ in 2014.¹¹ Iran's population has more than doubled after the 1979 revolution, amounting to 78 million in 2014.¹² As a result of massive subsidies, in order to produce the same unit of GDP, Iran's energy needs are more than 3.9 times greater than the world average.¹³

Apart from the question of subsidies and over-consumption, there are sound economic reasons for Iran to prioritize domestic consumption over exports. In essence, energy consumed domestically can stimulate economic growth. Not only does this help to create – much needed – jobs. It also reduces Iran's vulnerability vis-à-vis the volatility on the international energy markets. Especially in the case of natural gas, which – in contrast to oil – is more difficult and expensive to export, the domestic utilisation appears more rational.¹⁴

The domestic struggle over politics and the economy

Iranian politics is highly factionalised as a large number of actors and institutions compete for power. During the nuclear negotiations, apart from a small number of radicals at the margins of the political system, there was an elite consensus. Backed by the supreme leader, the various factions supported president Rouhani's effort to resolve the nuclear dispute through negotiations. Now, with the nuclear file being resolved, other issues are coming to the forefront.

A particularly contentious issue is the future course of Iran's economy. At the risk of simplification, two general camps can be identified. On one side, president Rouhani is trying to promote economic interdependence with the outside world. In essence, his government is convinced that co-operation with international partners will advance both Iran's economy as well as the country's strategic standing. On the other side, supreme leader Khamenei wishes

¹⁰ BP. (2015).

¹¹ IMF, Washington, DC: International Monetary Fund. (2015, October). *World Economic Outlook Database*.

¹² World Bank. Washington, DC: World Bank. (2015). *Population. World Development Indicators*.

¹³ IEA, Paris: International Energy Agency. (2015). *Key World Energy Statistics 2015*.

¹⁴ Jalilvand, D.R. (2016). Economics versus geopolitics: diverging strategy options for the utilization of Iranian natural gas. Manuscript submitted for publication.

to foster maximum autarky and independence. His camp argues that interdependence would provide foreign powers with leverage to be used against Iran, as seen in the case of the sanctions regime.¹⁵

As of January 2016, it is too early to assess which of the two positions will eventually prevail. Rather, it seems likely that the dispute will remain for the time being. This is because Iranian politics typically tends to embark on new policy directions only when there is a consensus among (most of) the factions.¹⁶ On the question of economic policy, such a consensus does not seem likely to emerge anytime soon. Thus, even if Iran's economy will open up for international co-operation, a significant level of domestic opposition – i.e. complication – can be expected.

Crucial in this regard is the question of who is going to benefit from sanctions relief and an opening of Iran's economy. The February 2016 elections for the Assembly of Experts and the Parliament are likely to have a decisive impact on the future of the country. At the same time, it seems unlikely that the elections will produce an elite consensus that is sufficient for resolving the autarky-versus-interdependence dispute.

Hence, uncertainty will remain regarding the future course of Iran's political economy. This will, of course, also affect the energy sector and the actual terms under which co-operation with IOCs will be possible. Overall, against the backdrop of these factors, it seems unrealistic that Iran will be able to substantially increase its production and export of oil and natural gas in the near future.

In the case of oil, Iran can be expected to bring into production currently idle capacity, perhaps within a year. This, however, does not exceed 1.0 mbpd. New projects will depend on how the various issues discussed above will eventually play out. At the minimum, it would take several years before new projects would materialise.

As for natural gas, a continuation of the gradual production increase can realistically be expected (during the past ten years, on average Iran was able to add 7.6 bcm each year to its production¹⁷). But very much as with oil, the materialization of new projects would likely take years, depending on the factors discussed above. Moreover, taking into account Iran's massively growing domestic consumption, it remains uncertain as to when Iran could substantially increase its natural gas export capacity.¹⁸

¹⁵ Brussels. International Crisis Group, Middle East Report N°166. (2015). *Iran After the Nuclear Deal*.

¹⁶ *Ibid.*

¹⁷ BP. 2015.

¹⁸ Jalilvand, D.R. (2013). Iran's gas exports: can past failure become future success? *Oxford: Oxford Institute for Energy Studies*.

Conclusion

The JCPOA is certainly opening the door for the return of Iranian energy from the cold. Despite the fact that international energy markets are currently oversupplied, due to extremely low production costs Iran could compete in a low price environment. Nevertheless, the short-term effects of the JCPOA are likely to be rather modest. This is because a number of serious issues still remain unresolved, including the nature of sanctions relief, the fiscal terms for co-operation with international energy companies, Iran's economic and energy policy as well as the domestic struggle over politics and the economy. These issues do not per se constitute barriers to the increase of Iranian oil and natural gas production and exports. However, they bring a high level of uncertainty. Until resolved, this will complicate the return of Iranian energy from the cold.

CHAPTER 6:

EASTERN MEDITERRANEAN GAS DEVELOPMENTS

Charles Ellinas

During the last 16 months the oil and gas sector has undergone dramatic change. The price downturn is quite serious but in the East Mediterranean we do not seem to worry about this. We carry on as if price is not an issue. However, sooner or later any East Med gas export plans will have to face up to this situation and respond to commercial realities if they are to move forward and reach and pass the point of final investment decision (FID). And it must be borne in mind that banks and the industry will only support projects with low risk and clear commercial returns.

At *The Economist's 11th Cyprus Summit* on 3rd November 2015, Noble Energy's representative said the company was still in the process of agreeing the Aphrodite development plan with Cyprus government and hoped to complete this during the next few months. There are export markets available in Egypt, partly for Egypt's domestic market and partly for export to Europe as LNG. Following Egypt's discovery of Zohr, many said that this has killed the market for others. But Noble Energy considers these reports to be greatly exaggerated. According to Noble there are still markets in Egypt for Cyprus gas and it is working with the government of Cyprus on these. The market in Cyprus is too small and hence not sufficient to support the development of Aphrodite. But gas will come to Cyprus once an export project has been identified.

One of the observations made at the aforementioned conference was that there is a glut of LNG and gas coming into the global markets. Wood Mackenzie forecast that gas prices in Europe might come down to \$5-6 per million British Thermal Units (mmBTU) by the year 2020 and rise slowly after that. They did not expect balance between LNG supply and demand to be reached before 2022. The question was: 'How can East Med gas projects be developed and exports to Europe be competitive within such prices?' Noble acknowledged that gas prices were challenging and deep-water project development costs high, but that Egypt was still talking about gas sales agreements with Cyprus.

It is clear that the currently preferred development option for Aphrodite, to export gas to Egypt is fraught with challenges, not the least being global and European gas prices. These have now settled within a \$6-7 per mmBTU range and may stay low during the rest of this decade. Such prices could make the Egyptian option commercially very difficult, whichever way the gas is transported from Aphrodite to Egypt and then exported to the European markets.

As for the domestic market, the Egyptian minister of energy announced that the country expected to become self-sufficient by 2020, and with gas production by British Petroleum (BP) planned to start in 2017 and by Eni at the Zohr field in 2018, and peak by 2020, Egypt is well on the way to achieve this. Between BP's North Alexandria and Atoll and Eni's Zohr, total gas production can reach 40 billion cubic metres (bcm) per year by 2020.¹ And this is on top of Egypt's proved gas reserves, which the IEA estimates to be over 2100 bcm.² McKinsey says that this can more than cover Egypt's future domestic needs and allow exports to re-start by 2020.³ And, of course, more production of these reserves will follow as exploration progresses, spurred by the new gas prices recently renegotiated between the gas companies and Egypt.

Any plan for gas exports to Egypt for domestic use will have to work within this window. Certainly developers of Tamar can achieve this, given that the gas framework deal has now been approved in Israel,⁴ provided an export pipeline is secured. Tamar is already producing gas and it will be relatively easy to start exporting to Egypt within a short length of time, following political approvals.

But gas exports, both from Israel and Cyprus, to the unused LNG plants at Damietta and Idku will face commercial challenges. If we take the case of Aphrodite gas, the Egyptian Energy Minister said in July 2015 that the feasibility study into this concluded that gas can be delivered from Aphrodite to Idku at around \$6 per mmBTU.⁵ If one adds the cost of liquefaction, transportation to Europe and regasification, the cost of gas delivered to Europe could well be in excess of \$10 per mmBTU. This is way above the gas prices in Europe of \$6-7 per mmBTU that are likely to remain until 2020. Similar arguments apply to Israeli gas.

1 Egypt's hydrocarbons are produced in the Western Desert, Eastern Desert, the Mediterranean Sea, Upper Egypt, Nile Delta, Gulf of Suez, and the Sinai Peninsula. Gas reserves are expected to grow mostly due to discoveries in the Mediterranean and the Western Desert. While Zohr has grabbed the headlines, most of Egypt's oil and gas is produced from relatively small fields that are tied into regional gathering systems.

2 U.S. Energy Information Administration. (2015, June 2). *Egypt*. Retrieved from: <http://www.eia.gov/beta/international/analysis.cfm?iso=EGY>

3 Norlen, A. & Maddock, K. (2015, September). Giant gas field discovery in Egypt likely to impact global gas markets. *McKinsey Energy Insights*. Retrieved from: <https://www.mckinseyenergyinsights.com/insights/discovery-of-gas-field-in-egypts-zohr/>

4 Zalel, Y. (2016, May 23). Israel Govt Approves New Gas Framework. *Natural Gas World*. Retrieved from: <http://www.naturalgasworld.com/israels-new-gas-framework-approved-but-challenges-still-persist-29728>

5 Egypt completes feasibility study into Cyprus gas imports. (2015, July 31). *Cyprus Mail*. Retrieved from: <http://cyprus-mail.com/2015/07/31/egypt-completes-feasibility-study-into-cyprus-gas-imports/>

Eni's CEO talked about a regional gas hub in Egypt linked to the development of Zhor. However, the price arguments and challenges are still the same. Any schemes based on export of East Med gas to Europe in the form of LNG will have to face the price barrier.

Now, the shifts in global energy production and consumption are having a profound and lasting effect on prices. Oil prices will remain low for the rest of this decade. IEA's recently released annual review projected these will rise slowly reaching \$80 per barrel by 2020,⁶ but there are factors that may well keep it in the £50-\$60 range. Others consider this optimistic. In the futures market Brent crude for delivery in December 2021 is trading at only \$65/b and oil majors, such as BP, are preparing to live with \$60 per barrel for the foreseeable future. 'Lower for longer' is the new mantra.

Gas prices are suffering similar problems and the glut of new LNG, expected to come to the market over the next 5 years, will keep these low. Wood Mackenzie said that the LNG glut is likely to be deeper and last longer than anticipated and will persist for some years.⁷ In Asia LNG prices may bottom out by 2019 at \$5 per mmBTU and in Europe at about the same level by 2020. And this assumes coal prices do not fall down further. Société Générale came up with similar projections.⁸

The Eastern Mediterranean, i.e. Israel and Cyprus, will have to compete with these low gas prices, of the order of \$6-\$7 per mmBTU, at least to the end of this decade, but very likely beyond 2020, if the various export projects currently being mulled are to become commercially viable.

When the vision of the future is uncertain, you're better off being flexible, keeping all your export options open. Export 'flexibility' will be the master word for the years to come! Israel and Cyprus must do the same, and include floating LNG (FLNG) and marine compressed natural gas (CNG) possibilities in re-developing their export plans. Sooner than later they will have to face and meet commercial realities if they are to succeed.

The good thing is that the discovery of Zohr has brought the Eastern Mediterranean back into the limelight of exploration and production. Egypt is well on the way with new exploration licenses and new projects, and Cyprus and Israel are considering going for new licensing rounds. In Cyprus, Total and Eni have both decided to stay and are re-evaluating their geological

⁶ International Energy Agency. (2015, November 10). *World Energy Outlook 2015*. Retrieved from: <https://www.iea.org/newsroom/news/2015/november/low-prices-should-give-no-cause-for-complacency-on-energy-security-iea-says.html>

⁷ Fisher, J. (2015, October 27). This LNG Glut Likely Deeper, Longer Than Last, Says Wood Mackenzie Analyst. *Natural Gas Intelligence*. Retrieved from: <http://www.naturalgasintel.com/articles/104154-this-lng-glut-likely-deeper-longer-than-last-says-wood-mackenzie-analyst>

⁸ Shiryayevskaya, A. (2015, November 2). SocGen Sees European Gas Sinking Through 2020 on Supply Glut. *Bloomberg*. Retrieved from: <http://www.bloomberg.com/news/articles/2015-11-02/socgen-sees-european-gas-sinking-through-2020-on-supply-glut>

models with renewed optimism in view of the Zohr discovery in a carbonate formation. Lebanon, another country in the region with offshore hydrocarbons potential, on the other hand, is still way behind, with no clear way forward yet.⁹

But what about regional cooperation? This can carry on at political level, as it does now. In terms of energy:

Egypt is well on the way to become self-sufficient by 2020 and possibly be in a position to start gas exports by 2022

In the interim, Israel and Egypt can enhance their cooperation by facilitating gas exports from Tamar to Egypt for about 5 years, to replace expensive LNG imports

Given political resistance to Israeli gas, Jordan may eventually get gas from Egypt and discussions between the two to that effect have already started. The idea of sending gas from Cyprus to Jordan is highly challenging, to say the least.

Cyprus and Israel can enhance cooperation first by sorting out the long lasting saga of the Unitization Agreement.¹⁰ The will appear to be there especially after the recent Anastasiades-Netanyahu meeting.¹¹

But the biggest prospect is for Cyprus and Israel to cooperate in exporting their gas to Turkey and potentially to Europe through Turkey, by pipeline through Cyprus' exclusive economic zone. This presupposes solution of the Cyprus problem and rapprochement between Israel and Turkey – negotiations for both are already well progressed and with a clear election result in Turkey hopes are rising.

What is clear is that the Eastern Mediterranean is a continuously evolving region both geo-strategically and in terms of energy and gas development and therefore regional energy cooperation options need to be re-evaluated.

⁹ Nash, M. (2016, May 27). What's in store for Lebanon's nascent oil, gas sector? *Al-Monitor*. Retrieved from: <http://www.al-monitor.com/pulse/originals/2016/05/lebanon-oil-gas-conference-sector.html>

¹⁰ Disputes between Israel and Cyprus over Aphrodite reservoir. (2015, November 23). *Sigmalive*. Retrieved from: <http://www.sigmalive.com/en/news/energy/137951/disputes-between-israel-and-cyprus-over-aphrodite-reservoir>

¹¹ Shalev, T. (2015, November 13). High energy stakes as Cypriot president visits Israel. *i24news*. Retrieved from: <http://www.i24news.tv/en/news/israel/politics/92365-151113-high-energy-stakes-as-cypriot-president-visits-israel>

CHAPTER 7:

EGYPT'S ZOHR GAS DISCOVERY: OPPORTUNITIES AND CHALLENGES¹

Adel Abdel Ghafar

In August 2015, the Egyptian government received some good news. Italy's Eni announced that it has discovered the largest ever offshore natural gas field in the Mediterranean off the Egyptian coast.² Dubbed a 'supergiant' field, Eni suggested that the Zohr project would be able to meet Egypt's own natural gas demands for decades to come. This was welcome news for the government of Abdel-Fattah el-Sisi as it was entering its third year and has resonated locally and regionally. Once the field comes online it will go a long way toward satisfying local demand, thus allowing Egypt to spend significantly less on importing energy. The continued turbulent transition in Egypt should encourage the government to be prudent and use the proceeds from the field to improve people's livelihoods and invest in infrastructure, health and education.

From Exporting to Importing: An Unpleasant Journey

In 2003, after the discovery of sizable reserves and the establishment of pipelines and liquefied natural gas (LNG) facilities, Egypt began exporting gas to Jordan, Israel, and Syria. In addition, the government had ambitious plans to export to Lebanon and Turkey. This coincided with an increased thirst for gas locally. According to a report by the German Marshal Fund, between 2000 and 2012 overall energy consumption in Egypt rose by 5.6 percent, but demand for gas grew by 8.7 percent.³ By 2012, gas was providing more than 50 percent of the total energy needs of the country compared with 35 percent in 2000. Even though production had

¹ This piece is based on my previously published article entitled Egypt's New Gas Discovery: Opportunities and Challenges. (2015, September 10). *Brookings Doha Center*.

² Italy's Eni Discovers Huge Gas Field off the Egyptian Coast. (2015, August 30). *BBC*. Retrieved from: <http://www.bbc.com/news/world-middle-east-34102656>

³ Tsafos, N. (2015, July). Egypt: A Market For Natural Gas from Cyprus and Israel?. *German Marshal Fund*. Retrieved from: <http://www.gmfus.org/publications/egypt-market-natural-gas-cyprus-and-israel>

risen, nonetheless it was inevitable that in the long run demand would outstrip supply as gas was being used for industrial, commercial, and residential purposes at subsidized prices, as well as being exported.

By 2015, the party was over. Due to this exponentially increasing local demand for energy, Egypt was no longer a net exporter of gas. After initial denials by the government, Egypt began importing gas from Israel via a US company early in the year, causing local controversy as Egypt had until then been exporting to Israel for more than a decade.⁴ Adding insult to injury, Egypt imported Israeli gas at global prices despite having exported theirs to Israel at much lower prices during the previous decade.

For Egyptian energy policy makers, importing from Israel made sense as some of the existing infrastructure used for gas exports could now be used to import, despite the damage inflicted by militant groups operating in the Sinai who blow up pipelines on a regular basis. In addition to imports from Israel, in 2015 Egypt signed a memorandum of understanding (MoU) with the Republic of Cyprus for a feasibility study to assess an underwater pipeline for exporting gas to Egypt.⁵ The initial findings of the report are being assessed by the government to determine whether to proceed. Overall, Egyptian policy makers had been preparing for the eventual decline of local supply of gas.

Enter the Zohr

While it will take years to produce gas from the field commercially, this is nonetheless an undeniably good story for the Egyptian government as it tries to shore up its economic credentials. In a country where acute energy shortages peak in the summer months, energy supply is high on the agenda. Before ex-President Morsi was overthrown in 2013, he was being blamed for a series of power outages that had swept the country, leaving the population increasingly frustrated. The Egyptian government understands the importance of providing cheap energy for stability. Even the army has gotten involved and is currently building a series of power stations to support the ever-strained electrical supply.⁶

The new discovery has alarmed Israeli policy makers. The Israeli energy minister Yuval Steinitz said that the Egyptian discovery is a painful reminder that while Israel sleepwalks and dallies with the final approval for the gas road map, and delays future prospecting, the world

⁴ Carlstrom, G. (2014, May 8). Egypt and Israel to Reach Another Gas Deal. *Al Jazeera English*. Retrieved from: <http://www.aljazeera.com/news/middleeast/2014/05/egypt-israel-reach-another-gas-deal-201458823585752.html>; Masr, M. (2015, March 18). Egypt to Import Gas from Israel via EMG Pipeline. Retrieved from: <http://www.madamasr.com/news/egypt-import-gas-israel-emg-pipeline>; and Noble Energy Team in Egypt for Talks on Importing Gas. (2015, February 1). *Reuters*. Retrieved from: <http://www.reuters.com/article/egypt-energy-israel-idUSL6N0VB0RF20150201>

⁵ Egypt Completes Feasibility Study into Cyprus Gas Imports. (2015, July 31). *Eastern Mediterranean Oil and Gas*. Retrieved from: <http://www.cypriusgasnews.com/archives/8654/egypt-completes-feasibility-study-into-cyprus-gas-imports/>

⁶ Egypt Army Clinches \$700 M Deal for Power Stations. (2014, December 24). *Star Africa*. Retrieved from: <http://en.starafrika.com/news/egypt-army-clinches-700m-deal-for-power-stations.html>

is changing in front of us, including ramifications for [Israeli] export options.⁷ Indeed, despite sizable fields discovered in Israeli waters, the deal between Noble Energy and the Delek group have been facing regulatory issues in Israel.⁸ The news of the discovery led to a heavy sell-off of gas producers on the Israeli stock exchange.⁹

It is likely that the new discovery in Egyptian waters will provide impetus for Israel to hasten its production, as once the Zohr field comes online, it will have direct ramifications for Israeli gas exports not only to Egypt, but regionally as well, including any potential gas deals with Cyprus and Turkey.

Now What?

The key issue now is how fast this field can become operational, and at what cost. The government has yet to publish a detailed costing of the project, including who will bear the investment cost, and more importantly, how exactly the revenues from the field will be distributed. It remains to be seen if it will become a game-changer as Eni CEO Claudio Descalzi suggested.¹⁰

In addition to these concerns, LNG prices have been dropping due to a variety of factors globally. First, Japan, which had become one of the world's largest LNG consumers after its Fukushima disaster, recently began restarting its nuclear reactors, thereby reducing demand.¹¹ Second, there is also increased supply capacity coming online around the world that is likely to put further pressure on prices.¹² As prices become lower, the prospective returns from the new discovery would already be under pressure.

Finally, with the Iranian nuclear deal being completed, Iran will be likely to increase investment in its LNG capabilities to become a larger regional gas producer. India has already signalled its interest in reviving a decade-old \$22 billion LNG deal with Iran that was on hold due to the sanctions.¹³ Descalzi was bullish and shrugged off these concerns, arguing that the field is another positive response to this kind of low price environment.¹⁴

⁷ Steinitz: Egypt Gas Find is a Wake Up Call For Israel. (2015, August 30). *Times of Israel*. Retrieved from: <http://www.timesofisrael.com/steinitz-egypt-gas-find-is-wake-up-call-for-israel/>

⁸ Supergiant Gas Field Discovered of the Coast of Egypt. (2015, August 30). *Aljazeera*. Retrieved from: <http://www.aljazeera.com/news/2015/08/gas-field-discovered-coast-egypt-150830172919161.html>

⁹ Solomon, S. and Coppola, G. (2015, September 1). Egypt Gas Find Leads to Israel Selloff. *Bloomberg Business Week*. Retrieved from: <http://www.businessweekme.com/Bloomberg/news/190/newsid/1023/Egypt-Gas-Find-Leads-to-Israel-Selloff>

¹⁰ Graeber, D. J. (2015, August 31). Eni expects to change Egyptian gas dynamics. *UPI*. Retrieved from: http://www.upi.com/Business_News/Energy-Industry/2015/08/31/Eni-expects-to-change-Egyptian-gas-dynamics/5821441013572/

¹¹ Stapczynski, S. (2015, August 14). Japan Nuclear Restarts Seen as Long Term Drag on LNG Prices. *Bloomberg*. Retrieved from: <http://www.bloomberg.com/news/articles/2015-08-14/japan-s-nuclear-restarts-seen-as-long-term-drag-on-lng-prices>

¹² Asian LNG Price Faces Steep Fall. (31 August 2015). *CNBC*. Retrieved from: <http://www.cnbc.com/2015/08/31/asian-lng-price-to-plunge-as-local-demand-wanes-supply-jumps.html>

¹³ Gail in Talks with Iran to Revive decade Old \$22 Billion LNG Deal. (2015, August 24). *India Times*. Retrieved from: http://articles.economictimes.indiatimes.com/2015-08-24/news/65808642_1_gail-india-ltd-lng-supply-iranian-gas-export-company

¹⁴ Kharpal, A. (2015, August 31). Eni Supergiant Gasfield a Gamchanger: CEO. *CNBC*. Retrieved from: <http://www.cnbc.com/2015/08/30/eni-makes-huge-natural-gas-deposit-find-off-egypts-coast.html>

Exporting aside, if this discovery is able to satisfy local demand for gas for some decades to come, then this is undeniably good news for Egypt as it will free up much needed funds for other sectors of the economy, such as health and education. Overall, August has been a good month for Egypt's energy prospects. In addition to the Zohr gas discovery, President Sisi during a visit to Moscow signed an MoU to build a Russian nuclear reactor as Cairo continues to deepen its relationship with Moscow.¹⁵

Neither the nuclear reactor nor the gas field will become operational anytime soon. Nonetheless they both provide a positive story for foreign investors who are wary of investing in Egypt after five years of domestic turmoil. Additionally, earlier in 2015 Moody's upgraded Egypt's credit rating to B3 with a stable outlook, which should also help entice existing and prospective investors.¹⁶

Domestic Challenges

Despite some positive news, five years after the so-called Arab Spring, Egypt continues to face a number of economic and security challenges. On the economic front, and despite mega projects such as the widening of the Suez Canal and the announcement of a new capital, growth continues to be sluggish. Foreign currency reserves continue to dwindle, and the Egyptian pound has fell to a historical low, reaching 10 EGP to the USD on the black market. This has forced the government to further devalue the pound as it attempts to eliminate the black-market for currency.¹⁷

Many of the promised FDI investments that occurred in the glitzy 2015 Sharm el Shiekh conference has failed to materialize. In addition, many factories have been closed since 2011, decreasing Egyptian exports who were a key source of foreign currency. Finally, the downing of the Russian jet over Sinai and the continued worsening of the security situation has affected tourism, another key source of foreign currency.

Tourism lies at the intersection of economic and security challenges. Before 2011, Egypt was receiving more than 15 million tourists per annum who were generating billions in foreign currency. Fast forward to 2016, many nations around the world have travel security warnings to Egypt, which further affected the number of tourist arrivals. The security clampdown was not only directed at militants, but also at civil society activists in a resurgent authoritarian push that is eerily reminiscent of the Mubarak era, if not worse.

¹⁵ Dubovikova, M. (2015, August 27). Russia-Egypt Ties on the Rise. *Al Arabiya*. Retrieved from: <http://english.alarabiya.net/en/views/news/middle-east/2015/08/27/From-Yemen-to-Syria-counter-terrorism-alone-not-the-answer.html>

¹⁶ Parasie, N. (2015, April 7). Egypt Reforms Bear Fruit as Moody's Upgrades Credit Rating. *Wall Street Journal*. Retrieved from: <http://blogs.wsj.com/frontiers/2015/04/07/egypts-reforms-bear-fruit-as-moodys-upgrades-credit-rating/>

¹⁷ Feteiha, A. (2016, March 14). Egypt Lets Pound Slide Most in 13 Years in Step Towards Flotation. *Bloomberg*. Retrieved from: <http://www.bloomberg.com/news/articles/2016-03-14/egypt-s-central-bank-said-to-devalue-pound-by-almost-13>.

This authoritarian push has not only affected domestic politics, but has also affected Egypt's external relations. On January 25th Giulio Regeni, an Italian researcher, disappeared in Cairo. Mr. Regeni, a Cambridge PhD student, was living in Egypt and conducting research on independent unions in Egypt. The following week, while a high-profile Italian trade delegation – including representatives from Fiat Chrysler, Saipem, Ferrovie Dello Stato – were visiting Cairo when Mr Regeni's body was found.¹⁸ Italian officials cut their trip short, threatening Egyptian Italian commercial ties. Since then, Mr. Regeni's family and their supporters have been putting increasing pressure on the Italian government to take a harder stance on the Egyptian government, whose security service is the main suspect. Italian companies operating in Egypt, including Eni, would like to continue their business dealings with Egypt, however the unanswered questions around Mr. Regeni's murder is likely to impact relations in the short term.

Moving Forward: The Demise of the Authoritarian Bargain?

The Zohr gas discovery is a positive story amongst a sea of gloom for Egypt. While the discovery shows great promise, it has yet to improve people's lives. The government should now spend less time talking up its prospects and performance, and focus instead on actually improving people's livelihoods. The proceeds from this new field need to be invested wisely in key areas, not squandered. The expectations of everyday Egyptians continue to rise with each positive news story, so the government must now produce some tangible results or it will risk further upheaval down the line as ever-increasing expectations remain unmet.

The essence of the authoritarian bargain is that the ruler provides security, stability and economic opportunity, in return for the acquiescence of the population.¹⁹ So far, Sisi has been able to provide neither security nor stability and economy opportunity, and thus in the coming years this Faustian bargain is likely to come under increasing strain.

¹⁸ Politi, J. (2016, February 8). Brutal Murder Threatens Relations Between Egypt and Italy. *Financial Times*. Retrieved from: <http://www.ft.com/cms/s/0/e5f5a4e4-ce7b-11e5-831d-09f7778e7377.html#axzz44kcrm6ei>

¹⁹ See Desai, R., Olofsgard, A. & Yousef. T. (2009). The Logic of Authoritarian Bargains. *Economics and Politics* 21, no. 1 (March):93-125.

CHAPTER 8:

OBSTACLES TO ISRAELI NATURAL GAS DEVELOPMENT

Elai Rettig

Introduction

In 2009 and 2010 two major offshore gas fields were discovered in Israel's exclusive economic zone (EEZ); the Tamar field, with estimated reserves of 282 billion cubic metres (bcm), and the Leviathan field, with estimated reserves of 500 bcm.¹ Both fields were discovered by a private Israeli-American partnership consisting mainly of two companies – the Israeli Delek Group and the Texas-based Noble Energy Inc. These discoveries were later supplemented by two smaller fields named Tanin (discovered in 2012) and Karish (discovered in 2013) which were together estimated to hold 30 bcm.² The discoveries initially sparked a sense of euphoria among Israeli decision-makers and the public. The gas fields were viewed not only as an economic blessing, but also a major security asset that could give the resource-poor State of Israel a much-sought-after level of energy independence it never had, and even the potential to reap political benefits by becoming an exporter of gas.

Despite the initial glee, the five years that followed were characterized by internal political feuds and growing public discord that has left the Leviathan field still undeveloped and the export of gas a still unrealized goal. This paper will give a brief overview of the three main points of contention that have so far delayed Israel's gas export potential: (1) disagreements over the amount of revenues to be taken from the fields, (2) the question of whether Israel should export its gas, and (3) the lack of competition in the Israeli gas market. The paper will then provide some insight into the public discourse in Israel to better explain how the third issue, the lack of competition, has so far proven to be the biggest hurdle to the development

¹ Assessments on the volume of gas vary from source to source. The data presented in this paper relies on official estimates by the Ministry of Energy in Israel, as published on their website: <http://energy.gov.il/subjects/oilsearch/documents/israeli%20gas%20opportunities.pdf>

² This does not include a small undeveloped gas field offshore the Gaza Strip named Gaza Marine which was discovered in 1999 by British Gas and is estimated to hold 30 bcm. The field was handed over de facto to the Palestinian Authority during peace negotiations between Ehud Barak and Yasser Arafat.

of Leviathan. Finally, the paper will discuss the impact of the Zohr field in Egypt and the role of additional players – Russia, Iran and Turkey – in the future outlook for Israel's gas developments.

Obstacles to Development

Shortly following the discovery of Tamar in January 2009, a number of conflicts arose that touched upon deep political and economic divides within the Israeli society. The first was the question of how much revenue should the Israeli government demand for the development of the fields. The existing 1952 law stated that 12.5% of the value of gas upon production will be taken as revenue, yet many considered this amount to be too low.³ In April 2010 a special committee was established to examine the fiscal policy on oil and gas resources in Israel, headed by Prof. Eytan Sheshinski (The Sheshinski Committee).⁴ The committee deliberated for eight months, during which a fierce public debate ensued between civil organizations and opposition members of parliament who supported an increase of the tax, on the one side, and supporters and lobbyists of the gas companies, including shareholders, who advocated against the move, on the other.⁵ The Sheshinski committee concluded on January 2011, instituting a progressive levy that would gradually amount to 50% of the gas companies' excess profits, in addition to the 12.5% in direct revenue. This was considered a fair compromise by some, and not enough by others.

The discovery of Leviathan in June 2010 sparked a second round of conflict as it now gave Israel the option to export some of its gas for profit. On October 2011 Prime Minister Netanyahu established a special inter-ministerial committee to examine the government's policy regarding natural gas in Israel, headed by the director general of the Ministry of Energy, Mr. Shaul Zemach (The Zemach Committee).⁶ The committee had to strike a delicate balance between Israel's desire to secure its energy independence for as long as possible while also encouraging further exploration and revenues by allowing for export. The committee submitted its recommendations eleven months later on September 2012 under much public scrutiny. After several revisions, the government decided that 60% of the discovered gas

³ The low tax was originally intended to provide foreign energy companies with enough incentives to explore for oil and gas in Israel despite the threat of an Arab boycott against them, if they do so.

⁴ A full report of the Sheshinski committee's conclusions is available in English here: <http://www.financeisrael.mof.gov.il/financeisrael/pages/en/publications/mof.aspx>

⁵ Perhaps the most vicious attacks were directed at the Minister of Finance, Prof. Yuval Steinitz, as lobby groups financed by the gas companies staged demonstrations and published negative campaign ads personally attacking his character. In 2015, Prof. Steinitz became the Minister of Energy and Infrastructure, directly in charge of negotiating the terms of development with the gas companies.

⁶ An executive summary of the Zemach committee's recommendations is available in English here: <http://energy.gov.il/English/Subjects/Natural%20Gas/Documents/pa3161ed-B-REV%20main%20recommendations%20Zemach%20report.pdf>

would be reserved for domestic consumption, thus securing Israel's market for approximately 30 years.⁷ Opponents saw this amount as insufficient for Israel's continued independence, and demanded the release of the committee's full protocols.⁸ Even without such protests, the imposition of direct export quotas is rare among gas-exporting OECD members. The ratio of 60-40 in favour of the domestic market seems to faithfully represent how energy independence is still viewed by Israeli decision-makers as more important than the prospect of becoming an energy exporter. The collective trauma of being subjected to decades of oil embargos by Arab states was only enhanced in early 2012 when Egypt unilaterally cut-off gas exports to Israel following a series of explosions in the pipeline between them, forcing the Israeli Electricity Company to quickly switch to more expensive and polluting fuels in order to avoid blackouts.⁹ This was a stark reminder for both the committee members and the public of the importance of securing local gas for the domestic market.

On paper, the Zemach and Sheshinski committees were meant to address the conflicts surrounding the gas fields and allow for their development. Tamar was quickly developed and gas started flowing to Israel's shore on March 2013, providing the domestic market with 7.5 bcm of gas in 2014.¹⁰ The gas companies also reached initial understandings with Jordan and Egypt to export gas from both Tamar and Leviathan, the highlight of which was a deal with BG International Ltd. to export gas to the Idku LNG terminal in Egypt and from there to Europe.¹¹ Despite this progress, a third issue suddenly rose that essentially froze the development of Leviathan.

On November 2012, the Israeli Antitrust Authority led by Prof. David Gilo announced that the private partnership that discovered Israel's gas fields constituted a monopoly, and therefore could not develop the fields together.¹² Though the antitrust previously allowed the companies to develop the fields, it was now concerned that with the demise of the Egyptian gas pipeline Israel has become wholly dependent on a single supplier that controls all of its gas and its price. The companies therefore had to sell some of their fields to an outside

⁷ The initial recommendation did not mention 40% as a goal, but instead gave an exact number to be earmarked for domestic consumption (450 bcm). Future revisions by the government changed these calculations after it became clearer how much gas is actually available in the fields.

⁸ The protocols were eventually released on June 2013, after censorship. They are available in Hebrew at the Ministry of Energy's website: <http://energy.gov.il/Subjects/NG/Pages/GxmsMniNGCommitteeTranscription.aspx>

⁹ See for example: Egypt Cancels Natural Gas Deal with Israel. (2012, April 22). *Haaretz*; and Israel Electric to Sell More Bonds as Cash Crisis Deepens. (2012, November 7). *Reuters*.

¹⁰ Delek Group. (2015, March 30). *Delek Group 2014 Annual Financial Statement* [Press release]. Retrieved from: <http://ir.delek-group.com/phoenix.zhtml?c=160695&p=irol-newsArticle&ID=2030573>

¹¹ Delek Group. (2014, June 29). *Engagement in a Non-Binding LOI between Leviathan Partners and BG International Ltd. for the Export of Natural Gas* [Press release]. Retrieved from: <http://ir.delek-group.com/phoenix.zhtml?c=160695&p=irol-newsArticle&ID=1943456>

¹² The Antitrust Authority. (2012, November 13). *The General Director of Restrictive Trade Practices Declares the Partners in the Natural Gas Reservoir 'Tamar' to have a Monopoly on Israel's Natural Gas Supply* [Press Release]. Retrieved from: <http://www.antitrust.gov.il/subject/182/item/32858.aspx>

competitor. While the authority's decision was hailed by civil groups as an important step to combat centralism in the Israeli market, it also presented substantial difficulties for the government. State officials now had to negotiate with the gas companies over a framework that would both break their monopoly over the gas fields and also give them enough economic incentives to continue their development of Leviathan. Since Israel is a relatively small market for gas, with 85% consumed by only one source – the Israel Electric Company – it was hard to see how competition can emerge over the remaining 15%, and by whom.

Providing a working framework proved to be a much more difficult task than initially assumed due to the public outcry that ensued. The monopoly status of the gas companies evoked strong emotions among the Israeli public, as it touched upon deep economic grievances voiced in previous years. The high cost of living in Israel, of which the price of houses and food products is most emblematic, had unprecedentedly brought hundreds of thousands of protestors to the streets of Tel-Aviv in the summer of 2011. It also gave rise to young politicians who used the rallying call for social justice and equality to be elected into parliament. For many of the protestors, the main culprit for the high prices in Israel was the deeply centralized market which was seen as dominated by a few monopolies and 'tycoons' that prevented competition from forming. Once the antitrust authority announced that the gas companies are creating a monopoly over the newly discovered gas, the idea of 'breaking the monopoly' immediately struck an emotional chord among many. The gas framework became a flag issue for young activists and civil NGOs in Israel as they were joined by leaders of the opposition parties in parliament, and with time became more and more uncompromising. The public's involvement also gave a strong sense of backing to the antitrust commissioner's resolve to block development until the conditions he set forth were met. This had made the government's task of reaching a workable framework extremely difficult, and one that became mired with bad blood and personal feuds, as well as strong party politics.

After a series of undisclosed deliberations headed by the chairman of the Israeli National Economic Council, Prof. Eugene Kandel, a framework was announced in July 2015. It stated that the gas companies will have to sell their two smaller gas fields (Karish and Tanin) to a new developer, and dilute their holdings of the Tamar field. In return, they will receive more favourable conditions that will allow them to develop Leviathan and export gas more quickly. Upon announcement, the new framework ran into strong opposition and was portrayed as being too favourable towards the gas companies. Karish and Tanin were argued to be too small to enable competition by a third party, and Delek and Noble still held an indirect dominant presence in both Tamar and Leviathan. In addition, a decision to allow the export of gas from Tamar and Leviathan before Leviathan is connected to the Israeli shore by pipeline was seen as an unnecessary risk to Israel's energy security. Opponents also viewed the price ceiling set for domestic gas sales as too high. The antitrust commissioner thus refused to sign-off on the framework, claiming it did not properly address the issue of competition or break the monopoly. The issue quickly became political, with opposition members rallying public support against the government through weekly demonstrations calling to stop the gas theft.

On May 2015 the antitrust commissioner announced his resignation in response to the government's refusal to revise the framework. This essentially meant that Prime Minister Netanyahu either had to reopen negotiations with the gas companies, or alternatively, evoke a special clause in the antitrust law (article 52) that allows him to circumvent the antitrust's directives for reasons of national security. In order to justify the unprecedented use of article 52, the government claimed that there is a security necessity to expedite the export of gas to Israel's neighbours, mainly to Egypt and Jordan. The government relied on official documents submitted by the Ministry of Foreign Affairs and the National Security Council arguing that a lack of sufficient gas supplies would soon cause severe electricity and water shortages in Egypt and Jordan, and that this would lead to instability and mass protests.¹³ Such instability might spill over to Israel's borders and jeopardize its security. A second argument was that if Israel would not soon provide Jordan and Egypt with the gas they needed, Iran would do so once sanctions are lifted. This would help Iran gain influence in those countries and threaten Israel's security. A third argument was that Israel would benefit politically if it expedited export of gas to Europe, and especially to Cyprus and Greece. This was argued not only to help strengthen economic ties with these states, but also prevent the EU from possibly passing anti-Israeli resolutions, as it would need the consensus of both Cyprus and Greece to do so.¹⁴ Israel thus had a keen interest in quickly cementing its relations with these countries through gas.¹⁵

Taking these considerations into account, Prime Minister Netanyahu invoked article 52 on December 2015. This was despite weekly protests, the public resignation of his Minister of Economics who refused to sign the article, and a special parliamentary commission advising against it. Though the framework was officially passed, it still did not guarantee a quick development of Leviathan. Shortly following the approval, a number of petitions were submitted to Israel's High Court of Justice demanding the overturn of article 52 and the return to the negotiating table.¹⁶ Regardless of the result of such legal deliberations, a number of regional developments that occurred during this time have further complicated the development of Leviathan and undermined the logic behind the framework. First among them is the discovery of the Zohr field in Egypt.

¹³ Documents available in Hebrew by the Ministry of Energy: The Ministry of Foreign Affairs. (2015, July 1). *National and Strategic aspects to the Development of the Gas Fields*. Retrieved from: <http://energy.gov.il/abouttheoffice/newsandupdates/documents/shimua/ngmfa.pdf>; The National Security Council (MALAL). (2015, July 1). *Natural Gas Sector in Israel – National Security Aspects and Repercussions from delays in the expansion and export of natural gas*. Retrieved from: <http://energy.gov.il/abouttheoffice/newsandupdates/documents/shimua/ngmalal.pdf>

¹⁴ This argument took special hold following the EU's decision on November 2015 to label products originating from Israeli settlements. See for instance a policy report by former Israeli ambassador to the EU: Oded, E. (2015, December 6). Active Israeli Policy in the Mediterranean Basin. *INSS Insight*. No. 775. Retrieved from: <http://www.inss.org.il/index.aspx?id=4538&articleid=11045>

¹⁵ A former senior member of the National Security Council, Dr. Eran Lerman, went even further to suggest that a friendly Cyprus may also act as an emergency airport for Israel in case the Ben-Gurion airport in Lod is shut down during war, as had briefly occurred in the 2014 operation in Gaza.

¹⁶ At the moment of writing this paper, the petitions were still being examined by the High Court.

The Effect of the Zohr field

On August 2015 Italian energy company Eni announced what seems to be the largest deep-sea gas discovery in the Mediterranean Sea, with estimates far surpassing those of Leviathan. The discovery caught the Israeli government by surprise, since the impending gas shortage in Egypt was repeatedly used as a central justification to circumvent the antitrust authority through article 52. With Egyptian gas reserves now estimated to double, the Israeli government could no longer claim that Egypt's stability depends on Israeli gas supply.¹⁷ The Zohr discovery thus gave wind to opposition groups in Israel attempting to stop the framework from being approved by petitioning the Supreme Court.

The Zohr field presents additional complications for Israeli gas development even assuming the framework is eventually approved. Depending on the actual size of the field and the prospect of additional gas discoveries in the near future, Egypt may be able not only to provide gas for its own market, but also resume the export of LNG through its underused terminals.¹⁸ Such a scenario would prove problematic to Leviathan developers, as the initial understanding to export gas to the Idku LNG terminal in Egypt was designed as an 'anchor deal' that will secure the necessary capital to develop Leviathan in the first place. If a competition ensues between Egyptian and Israeli gas over LNG capacity in the terminal, Egypt will most likely have the upper hand, leaving Israeli developers to look elsewhere for the initial investment needed. On the other hand, if Egypt decides to use the Zohr field for domestic consumption only, this frees up more Israeli gas to be exported by LNG once Leviathan is developed. It will also encourage further exploration in the region by foreign companies. As more fields are discovered in Egypt, however, the chances that Egypt's LNG facilities will still be available for Israeli gas exports lessens, and so Israel indeed has an economic motivation to hurry and lock-in its exports from Leviathan to Idku, but it no longer has the justification of national security to do so.¹⁹

Other players in the region: Russia, Iran, Turkey

The involvement of additional players in the regional gas market will also have an effect on the development of Israel's gas fields as the framework moves forward. Russia's Gazprom has repeatedly shown interest in the Israeli fields, and was reportedly close to buying a major stake in Leviathan in 2012.²⁰ Though the deal fell through, Russia continued to show interest

¹⁷ This new reality may also spread beyond Egypt if it decides to fully resume gas exports to Jordan, Lebanon and Syria through the Arab Gas Pipeline.

¹⁸ It should be noted that the discovery of Zohr comes in parallel to declining production from other gas wells in Egypt, and so Egypt may very well still need Israeli gas in the short term, depending on how quickly Leviathan and Zohr are developed.

¹⁹ Since the initial agreement made between Leviathan developers and Egypt was for the LNG facilities, and not for domestic Egyptian consumption, it could be argued that security considerations were only used as an excuse to justify the use of article 52, and that the economic incentive was always the goal for expediting the development of Leviathan.

²⁰ Barkat, A. (2012, October 16). Gazprom Bids Highest for Leviathan Partnership. *Globes*. Retrieved from: <http://www.globes.co.il/en/article-1000790600>.

in smaller fields, including some that were questionable in terms of economic viability (such as the small Gaza Marine field offshore Gaza). Its reasons for doing so are mainly political.²¹ Other than gaining influence in Israel's economy, Russia seeks additional access to the Mediterranean Sea for its naval forces, yet has so far failed to achieve this goal. The new framework approved by the Israeli government and the expected fall of global gas prices may allow Gazprom another opportunity to gain a foothold in the region. As Delek and Noble are now forced to sell the smaller Tanin and Karish fields to a new competitor, a question is raised as to who would purchase these small deep-sea fields (which are earmarked for Israeli consumption) only to compete over a small market share against much larger fields. Lower gas prices also make additional exploration in Israel's EEZ less lucrative to private companies. This will leave Gazprom (including closely affiliated companies, such as Edison) more leeway to enter the region. The potential entrance of Gazprom into the regional gas market could cause concern among European states, since one of the main justifications for purchasing expensive LNG from the Eastern-Mediterranean Sea is to diversify away from Russian gas. Israel should thus be wary of Russian involvement if it wishes to target the EU as a future consumer of its gas.

As opposed to Russia, the involvement of Iran is a surprisingly positive factor for Israeli gas development. The Israeli government has consistently viewed the possibility of Iranian gas exports reaching Jordan and Egypt as a direct threat to its security.²² The concern that Iran will gain influence in the region by flooding the market with gas has encouraged Israel to expedite development of its own fields and push for exports to counter Iran. This argument was repeatedly sounded by the Israeli government during deliberations over the use of article 52. In this regard, Iran ironically serves as a *de facto* catalyst for cooperation over gas fields in the region. In reality, however, Iran is years away from being able to export gas to Israel's neighbours, and will most likely offer gas that is considerably more expensive than that of Israel or Egypt.²³

Israeli-Turkish relations also play an important factor moving forward. Since the 1990s, good relations with Turkey have been, and will most likely remain, a top priority for Israeli foreign policy in the region. Turkey is not only a leading market for Israeli goods,²⁴ it is also seen as a significant regional military power and, more importantly, a Muslim ally in a region that is scarce with friends for Israel. If political conditions allow for it, Israel would likely prefer to strengthen its economic and security ties with Turkey over other regional players through

²¹ For more on Russia's gas interests in Israel and the region, see Idan, A. (2013, July). Russia as Possible Partner in Developing Israeli Gas Discoveries. In *Russia and Israel in the Changing Middle East: Conference Proceedings*, INSS Memorandum 129; as well as his interview: The Russian Gas Giant that Haunts Europe and Israel. (2012, August 1). *Haaretz*. Retrieved from: <http://www.haaretz.com/israel-news/business/the-russian-gas-giant-that-haunts-europe-and-israel-1.455117>.

²² Eli, A. B. (2015, July 6). Foreign Ministry: Iranian Threat a Key Reason to Clinch Israeli Gas Deal. *Haaretz*. Retrieved from: <http://www.haaretz.com/israel-news/business/.premium-1.664561>.

²³ For a thorough analysis of Iran's actual natural gas export potential, see: Hassanzadeh, E. (2014). *Iran's Natural Gas Industry in the Post-Revolutionary Period: Optimism, Skepticism, and Potential*. Oxford University Press Catalogue.

²⁴ In 2014, Israeli-Turkish trade reached an estimated record of \$5.2 billion, making Turkey Israel's 6th largest export destination according to the Israeli Ministry of Economy. Despite popular perceptions, trade between Turkey and Israel has significantly increased since the flotilla incident in 2010.

a gas deal. During parliamentary deliberations over the use of article 52, Prime Minister Netanyahu has been vocal about the use of gas trade with Turkey as a potential catalyst for rapprochement between the states.²⁵ However, gas pipeline agreements entail long-term commitments, and currently there is little trust that Turkish President Erdoğan will not use a future pipeline as leverage against Israel. Israel will thus be cautious about signing binding gas deals with Turkey in the near future.

Final words

Israeli gas developments hold many benefits for the region. They have the potential to strengthen economic and political ties, alleviate common security concerns, and address the problem of pollution in a region that still uses oil as the main fuel for its electricity generation.²⁶ Rather than seek faraway markets, the potential for local regional growth in gas consumption is substantial and should be the main focus of Israeli gas exports.

²⁵ Cohen, H. (2015, December 8). Netanyahu: Securing gas supply vital to Israel's existence. *Globes*. Retrieved from: <http://www.globes.co.il/en/article-netanyahu-securing-gas-supply-vital-to-israels-existence-1001086999>.

²⁶ For more on the regional potential of Israeli gas exports, see Shaffer, B. (2011). Israel - New natural gas producer in the Mediterranean. *Energy Policy*. 39.9: 5379-5387; Shaffer, B. (2014). Can New Energy Supplies Bring Peace? *German Marshall Fund of the United States*.

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On 16 November 2015 the PRIO Cyprus Centre, the Friedrich-Ebert-Stiftung Cyprus and the Atlantic Council co-hosted a conference entitled 'Global Energy Debates and the East Mediterranean'. The conference, held in the UN Buffer Zone in Nicosia, was organised with a view to introducing the Cypriot public to the increasingly complex global energy terrain. Thus, the main focus of the deliberations was not the Eastern Mediterranean but rather the broader energy picture surrounding the region. The international experts who attended the conference presented topics that concern some of the more salient broader debates, such as the link between energy and global warming, as well as the energy relations of the European Union, which constitutes the largest potential market in the neighbourhood for the hydrocarbons of the Eastern Mediterranean. The latter included examination of three important cases to Europe's east: Russia, Iran, and Turkey. East Mediterranean energy developments and regional cooperation prospects were also discussed by a panel of experts from Cyprus, Egypt and Israel. This edited volume comprises contributions submitted by speakers based on their talks delivered at the conference.

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