Where Does the EU Stand in Energy Dependence on Russia After the Ukrainian Crisis: Are there Any Alternatives at Hand?

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Abstract

Since the 1973 OPEC oil crisis the EU has been dependent on hydro-carbon imports from Russia. The latest Ukrainian crisis, resulting from the Russian annexation of Crimea, has naturally triggered therefore old European concerns associated with the 2006-2009 Russian gas stoppages. In the aftermath of the Crimean situation the EU Commission saw the urgent need to undertake an in-depth analysis of the Union's future energy security strategy. In June, Brussels issued the 2014 Energy Security Strategy, and it became clear which objectives member states should be following in the short and medium to long term, as far out as 2030. Following the release of the EU's strategy, this paper aims to analyse the most recent developments to trigger debate among IR scholars and energy experts on whether the EU can find and exploit alternative resources in order to transcend its longstanding energy dependence on Russia.

Key Words

Russia, Ukraine, EU, energy (inter)dependency, diversification, SGC, Shale Revolution.

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Introduction

The EU, since the 1973 OPEC oil crisis, has been dependent on natural gas imports from abroad. Unsurprisingly therefore, the latest Ukrainian crisis, which resulted from the Russian annexation of Crimea, has triggered old European concerns associated with the 2006-2009 Russian gas stoppage. Despite the interdependency between Brussels and Moscow, especially in the business of natural gas transactions, the 28 members of the Union, after overcoming a short period of hesitation, have decided to participate in a joint action with Washington Moscow and impose new rounds of sanctions. This new, rather coercive attitude in the EU has converged with Washington's radically changed post-Cold War perception about the Russian Federation and was in fact based on a belief that relations between the two sides will never be the same as they were before the aggression in the Ukraine. Today, even after the conclusion of the three-party agreement between the EU, Russia and the Ukraine, which

made Kiev responsible for meeting its US\$ 4.2 million gas bill to Moscow, government relations between the Euro-Atlantic world and the Russian Federation remain cold. The existence of the continuing EU and Washington based sanctions, as well as the end of previous cooperative relations between NATO and Moscow are clear evidence of the current chill. Moreover, the new 2014 Russian military doctrine that has identified NATO as the number one military threat to Russia is further proof of the degraded relations between the West and the Russians.¹

Despite the interdependency between Brussels and Moscow, especially in the business of natural gas transactions, the 28 members of the Union, after overcoming a short period of hesitation, have decided to participate in a joint action with Washington against Moscow and impose new rounds of sanctions.

Last year, Moscow, on the eve of the Ukrainian crisis did not hesitate to intimidate Ukraine with a threat to cut off the gas in order to punish Kiev for its failure to pay its debt. The eruption of hostile relations with Russia in the

aftermath of the Ukrainian crisis has coincided with the concerns of the NATO countries on the northern flank of Europe, and has forced EU leaders to re-think their current and future energy supply security policy. As the result of requests by EU leaders in this regard in March 2014, the EU Commission, following an in-depth analysis, issued the June 2014 Energy Security Strategy document² that has advised both short to medium and long term objectives to be tracked by the member states through 2030. The main aim underlying these objectives is overcoming the Union's overall energy dependence on Russian gas imports. Once the EU's 2014 European Energy Security document was made public it triggered a new debate among IR scholars and energy experts about whether the EU can create alternative resources and transcend its energy dependence on Russia. Since the EU Commission's European Security Strategy document has highlighted the general objectives that are directly associated with the current demand and supply side of the European energy security equation it is necessary to assess whether there are possible alternative diversification means available to the EU countries in overcoming the Union's imminent energy security problems that emanate from its gas dependency on Russia. So, with this main question in mind, the first and second sections of this paper

will pay close attention to what the EU countries in general are currently doing about the demand and supply side of their European energy equation. At the end of this examination the aim is to reach an assessment about where the 28 countries of the EU currently stand in meeting the ambitious energy targets published in the June 2014 EU Commission's Strategy document. To conclude, this paper will try to reach a determination on whether the EU is likely to overcome their hydro-carbon supply dependency on Russia through the exploitation of various alternative resources.

Brussels, so as to bring about a balanced energy security equation for its 28 members, has decided to initiate new measures to enable the Union to both increase its indigenous hydrocarbon production and decrease European energy consumption.

EU's Energy Outlook: The Demand Side of the Story

Europeans since 2000 could not have avoided focusing on the intensifying problems of the EU's energy supply security. This situation gained more weight after the two Ukrainian and Russian gas pricing disputes that occurred between 2006 and 2008 and which resulted in disruptions of gas supplies to Europe. Brussels, so as to bring about a balanced energy security equation for its 28 members, has decided to initiate new measures to enable the Union to both increase its indigenous hydro- carbon production and decrease European energy consumption.

The EU- based initiatives that have been launched so far and aimed to achieve progress on the demand side of the Union's energy security strategy have fallen short of meeting all of the members' energy needs. The objectives outlined in the EU Commission's June 2014 Energy Security Strategy Document further strengthen the viewpoint that there is still a need for the Union to re-visit and re-emphasize the implications of certain measures related to the demand side of the EU's energy mix. The brief analysis contained in this paper aims to bring forth the current status of the initiatives associated with the demand elements of the EU's energy security policy. In this part of the paper, through the help of this inquiry, it is hoped to ascertain whether the introduction of the demand related measures are likely to be effective in overcoming the EU's immediate and future energy supply security requirements, especially with regard to Russia.

European Integrated Internal Energy Market: Where Do the 28 countries Stand Today?

In the aftermath of the latest Ukrainian crisis, the EU's dependency on Russian gas imports has become more apparent and a matter of real concern especially to those countries which are solely dependent on Moscow. Currently, six of the 28 members of the EU are sourcing 80-100% of their gas supplies from the Russian Federation. Countries like the Baltics, Finland, Slovenia, Hungary and Bulgaria are therefore highly dependent on this volatile source. What is worse is that some of these countries, like the Baltics states, still have energy islands status within the EU since they remain reliant on both a single electric and gas supply operator- the Russian Federationand have not yet become part of the Union's integrated single gas market. In 2007 the EU launched a new strategy/ game plan to create a common internal energy market to be in place Europewide by the end of 2014, but they have not been able to achieve this goal. According to the Third Energy Package, by the end of the 2014, 14 countries in the northwestern region of Europe were expected to complete the integration of their energy markets.3 Currently there are six other geographical markets other than the northwestern region of Europe

that the EU is expected to operate. However, not all of the markets have recorded the same pace of development as the northwestern regional market.⁴

The diversification of routes and sources as well as the implementation of energy infrastructure such as power plants, interconnections, electricity grids, liquid natural gas (LNG) terminals, and gas mains, lies at the core of the EU internal energy market.

In actuality, European institutions since 1992 have been busy with liberalizing the European gas markets while at the same time they have launched an initiative to integrate them as one single market by the end of 2014. However, despite the EU Commission's explicit ambition to achieve an integrated internal market within this timeframe, this process is still far from completion. The EU's domestic production of natural gas is currently decreasing in spite of the largely flat demand and the negative effects of the economic crisis on European economics. According to BP's forecasts, the Union's demand for natural gas is expected to stay at around 55% by 2035.5 Hence, EU countries need to both secure their future gas supply security while concurrently stabilizing the demand for natural gas across the whole of Europe. The integration of the European gas market as a single market is an efficient way of achieving this. Consequently, the diversification of routes and sources as well as the implementation of energy infrastructure such as power plants, interconnections, electricity grids, liquid natural gas (LNG) terminals, and gas mains, lies at the core of the EU internal energy market. Up to now, the EU has only managed to complete its integrated market in the northwestern part of Europe, via the re-connecting interconnector and other measures. Across the rest of Europe the Union has not yet achieved this objective.6 That is why the planned winter 2014 deadline for an operational European internal gas market has not been met.

According to the diplomat and newly appointed vice president of the Energy Union, Maros Selcovic, the EU will only realize the Energy Union aims among the 28 member states after it has met the prerequisite of an intended integrated internal gas market⁷. In Selcovic's view, when the EU is able to marshal its purchasing power via the construction of the Energy Union it will simultaneously increase its bargaining power in the face of Russia's likely attempts to use its natural gas resources as a foreign policy pressure mechanism. It is true that the EU currently pays around € 400 billion per year for imported fossil fuels and that is why the European Commission has already set

some important priorities, like cutting energy use and diversifying supplies, as well as developing a closer energy union, which will enable the sharing of energy across borders via the improved Europeanwide infrastructure. The aim is to reduce the demand in Europe for imported fossil fuels from abroad.8 As Selcovic asserts, the EU today deserves to pursue a more assertive European energy diplomacy and he advises that energy diplomacy needs to become one of the Union's external policy priorities as it has the spending potential of € 400 billion a year on energy imports, and affects a half billion fossil fuels consumers who reside in Europe.9

Though Selcovic agrees that the energy mix in Europe is a national competence, he argues that Europe should give priority to finding better means of increasing its common bargaining power especially in the process of purchasing of gas from abroad. In this regard, he suggests that the EU should first re-consider its gas security supply regulation and hence try to go beyond the existing Third Energy Market Liberalization Package. He believes that increased cross-border cooperation in gas supplies among EU members through the attainment of internal energy market means should be encouraged and finally be completed.¹⁰ aware of the continuing energy export requirements to Europe, which represent 52% of the Russian Federation's state budget, has strongly suggested that the EU use this

market power to stand up to Russia. When Selcovic made this statement in November 2014 he said this new EU stance should be accompanied by the strategy of relying on the Southern Gas Corridor (SGC) and hence the support that was given for the South Stream, which does not abide with the EU rules, should be withdrawn.¹¹

Under the present conditions one may evaluate the EU's decision to suspend the South Stream project as one indication of Brussels' new will to exert its market power as it relates to its current standoff with Moscow.

As a result, the EU's latest suspension of the South Stream pipeline project in response to the outbreak of the Ukrainian crisis cannot be seen as a big surprise. Moreover, under the present conditions one may evaluate the EU's decision to suspend the South Stream project as one indication of Brussels' new will to exert its market power as it relates to its current standoff with Moscow. On the other hand, according to BP energy forecasts for 2035, the Union's gas import dependency will be expected to remain at about 50%.12 Hence, despite the intended achievements in renewables and energy efficiency, which are not yet completed, the EU will continue to import gas, at least in the coming next few years, from Russia if not via South Stream.

Can Energy Efficiency, Renewables and Low Carbon Economy Targets Help in Overcoming the EU's Current Energy Consumption Stand?

In the wake of the on-going Ukrainian crisis, the West's worsening diplomatic and economic relations with the Russian Federation have further intensified the mounting pressure on Brussels to increase its energy security. Brussels, so as to take better precautions in this regard, has started to intensify its focus on both the demand and supply sides of energy use in Europe. The EU Commission with this objective launched its latest Energy Security Strategy in June 2014¹³ as well as the 2014 Climate and Energy Change Policy Framework.¹⁴ The EU's energy efficiency targets, together with the role of renewables that emphasized the achievement of low carbon economy in Europe, stand as the two most significant issues in the EU Commission's 2014 documents.

The main objective in launching the EU's European Energy Security Strategy document of 2014 and the 2014 Climate and Energy Change Policy Framework was to support the Union's long time determination to acquire and implement an energysecurity strategy that is simultaneously competitive, secure and sustainable. One of the EU's main priorities in launching the European Commission 2014 policy framework on climate was of course directly associated with the Union's long time desire for the achievement of a lowcarbon economy as part of the Union's overall efforts in attaining a balanced energy security strategy. It is clear that the EU with this new policy framework wants to ensure affordable energy for all European consumers, but at the same time wants to increase the security of the EU's energy supplies. The hope in this regard is to help reduce the Union's overall dependence on energy imports.¹⁵

The newly proposed 2030 policy framework for climate and energy in fact delineates the same objectives as the 2014 policy framework on climate. In actuality, the targets that are set for the 2030 framework were actually based on and inspired by the EU's previous climate and energy targets that were previously set for 2020, and are still in force.16 However, the targets put forward by the EU Commission for 2030 seem more ambitious than those set for 2020. The centerpiece of the framework is the intended reduction by 2030 in EU domestic greenhouse gas emissions to 40% below the 1990 levels.¹⁷ These climate and energy targets set for 2030 have been launched with the assumption

that renewable energy will be playing a key role in the EU's future overall energy security strategy, especially in making and facilitating the anticipated transition towards a competitive, secure and sustainable energy system. The European Commission, with this mindset, has set a target of increasing the share of renewable energy by at least 27% of energy consumption by 2030. Additionally, with the same aim in mind, the Commission has also proposed a target of a 30% reduction savings in energy by 2030. However, this efficiency goal of 30% was later reduced to 27% across the EU. This newly proposed efficiency target has, in fact, been built on the achievements of the previously declared targets of 20%.18

Energy efficiency has gained new meaning and attraction within the context of the Ukraine crisis as EU countries have started seeking new ways of reducing their dependence on Russian gas imports.

According to the EU Commission's expectations, for every 1% increase gained in EU energy efficiency, gas imports are likely to fall by 2.6%. Hence, the EU Commission, by increasing the percentage of energy efficiency that has been set for 2030, is hoping to both

increase energy self-sufficiency and at the same time attain overall reductions in consumption across the Union. For instance, in most of Europe, newly constructed buildings are already using half the energy amounts that were common in the 1980s, whilst European industry is now using 19% less energy than it did in 2001. In line with the EU's new energy policy, the Union's CO2 emissions are also expected to drop by more than a quarter as natural gas and renewables will increase their share of European energy consumption. In this context, by 2023, renewables are expected to replace nuclear energy as the dominant source of power generation, making up 37% of the EU's energy production. According to these estimations, this far-reaching shift in energy diversification is expected to demonstrate its true worth by 2035.19

Seeing the low natural gas prices on the American continent, Europen states have attempted to realize their own transition from coal or lignite burned/based power generation to gas burned power generation with the help of the horizontal drilling method.

Energy efficiency has gained new meaning and attraction within the

context of the Ukraine crisis as EU countries have started seeking new ways of reducing their dependence on Russian gas imports. But, on the other hand it has become a divisive issue among the 28 member states due to the costs individual countries must bear in laying down the necessary infrastructure. That is why the member states have for some time debated among themselves whether the energy efficiency, as well as the renewables targets would be binding either at the individual nation level or at the EU-wide level. The international community has become aware that after the EU Commission's declaration in 2014, energy efficiency and renewable targets were somehow watered down. Since then for instance it has become clear that the 27% target for energy efficiency has not been accepted as either legally binding at the national level or even at the EU level. In fact this energy efficiency target has been postponed until a review in 2020, with the hope of having an achievable 30% EU target level. On the other hand; the renewables target was first thought to be binding at both at the EU and national levels. However, it has been decided that this renewable target of 27% will not be binding at the national level due to opposition from countries like the UK.²⁰ Similarly, the EU member states have also displayed divergent stands on the climate change issue. This was again directly related to both the different levels of indigenous resource capacities of each of the 28 members as well as to their different levels of dependency on single gas or electricity operators. This resource divergence that currently exists across the Union seems likely to persist until an integrated European gas and electricity market is achieved across the whole of Europe. Unfortunately, the EU 2014 energy efficiency and renewable target numbers for 2030, which aim to bring a low carbon economy into Europe, are not expected to bring about a radical change in the EU's current 'on the ground' energy supply security reality. For instance, according to BP forecasts for 2035,21 the decrease in the EU's energy consumption is set to continue because of the expected strong growth in renewables, but this is not expected to change the reality that Europe's dependency on energy imports will continue to remain at approximately the same levels as they are today. Again according to BP forecasts, fossil fuels are expected to account for about only 67% of the EU's overall European energy consumption by 2035, in contrast to 77% in 2012.22 According to the EU Commission, "The EU is currently highly energy dependent because it [still] nearly imports 53% of all the energy it consumes at a cost of more than one billion euros per day. Among the EU's energy imports, 88% currently goes to crude oil, 66% goes to natural gas, 42% goes on solid fuels such as coal and

95% goes to uranium".²³ These figures are clear evidence that the EU is still open and vulnerable to future external energy shocks. Despite the growth of renewables and energy efficiency targets that were launched in the EU's energy security strategy, the current statistical information reveals that the Union's energy dependency on foreign fossil fuels from abroad, especially from Russia, will continue to persist for some years.

Can the North American Shale Revolution be Helpful in Ending Europe's Foreign Energy Dependency?

Now that Europe's conventional gas production is decreasing, some European countries have started to view the North American shale revolution as a model for an alternative strategy for reducing the EU's continuing energy dependency abroad. It is true that Europeans, in the aftermath of Russia's annexation of Crimea have sped up their attempts to diversify their energy mix by using their own indigenous resources. Shale gas, especially among some of the European countries with little or no indigenous energy resources, has gained significant attention. Seeing the low natural gas prices on the American continent, these states have attempted to realize their own transition from coal or lignite burned/ based power generation to gas burned

power generation with the help of the horizontal drilling method. At the end of this shale exploration journey these states hope to eventually attain both cheap and clean energy, but at the same time, to bring an end to the EU's longstanding dependency on Russian oil-indexed price gas.

In the last decade, the issue of shale gas has turned out to be a very divisive issue both among the various EU states as well as with the European public. Shale gas production is a national prerogative in Europe, which explains why the 28 member countries of the EU have naturally developed divergent policies. On the one hand, there are countries like France and Bulgaria that have already passed laws to ban fracturing of shale gas. Paris' decision to ban fracking is significant because France is known to have the second largest shale reserves in Europe after Poland. In contrast, Poland stands to be the only country in Europe that is determined to make the most of its shale gas potential in order to ensure energy supply security. As is well known, Poland has very small gas reserves, and being under pressure from the European states to reduce its carbon emissions, has seen the shale drilling method as an opportunity to compensate for its high dependency on coal production in the electricity generation business. However, despite Poland's great expectations at inception of shale gas drillings, Warsaw

has failed to achieve any substantial production/output to date.²⁴

It has been argued that the broad rejection of shale gas drilling in Europe has been based on three main reasons: (i) geological; (ii) legal and (iii) environmental.²⁵

Geological Reasons

More than 42 wells have now been drilled in Poland since 2010 and as a result, it has become clear that the geological conditions are not as conducive to shale gas drilling as first thought. As a result, the main America foreign oil companies have already started to leave the country. Currently Italian Eni and American Chevron are the only foreign companies still continuing with shale gas exploration in Poland. Under the present conditions in Europe, in contrast to Poland's and France's extreme cases. there are several other EU countries that stand somewhere in between on the shale exploration issue. For instance, Great Britain's stance among these countries is unique. London has become more inclined towards shale drilling since 2013, and has proclaimed that it is soon planning to start shale gas exploration within the UK.26

Though there has been little horizontal 'fracking' in Europe compared with the US, it has become clear that the geological conditions on the European

continent overall are not as amenable to this process as first thought. This makes the shale fracking issue even more undesirable to sections of the European community and consequently affects the willingness of governments to develop policies in favour of any likely drilling projects within their borders.

Legal Reasons

The second difference between the US and European cases relates to the legal status of horizontal fracking on the two sides of the Atlantic. The EU Commission, while still supporting shale fracking, has also implemented serious regulations binding each of the Union members. However, in the case of the US, both the extensive property rights that give permission to an individual to own both the rights of resources over and under the land, as well as the given support of government to entrepreneurs, have certainly helped to accelerate the pace of the shale boom occurring in America.

Environmental Reasons

Due to the European public's well-known 'not in my back yard' reaction and the consequent government sensitivity about the environmental side effects of shale drilling, in most EU countries this kind of horizontal fracking has been banned. Conversely, in America, apart

from a few states like New York and California, shale fracking is currently proceeding at a rapid pace.

The basic concern has been related to the problem of how Europe's current gas demands could be met in the case of another Russian gas stoppage and whether the US LNG imports would be helpful in overcoming this interdependency.

So far the reports that have focused on the future of shale gas-oil horizontal fracking in Europe, have in general estimated that shale drilling can be productive in only a few geographical locations in Europe, and it is also believed that it will probably be decades before this productivity could be achieved. Moreover, these reports assert that due to the limited shale drilling that has been undertaken in Europe to date, it is too early to anticipate substantial results across the whole continent.27 However, what is more interesting is that the expected maximum shale output at the end of drilling will total only 10% of the EU's current Russian gas imports. So, even if at some time in the future these shale deposits are recovered in Europe, they are likely to be used in complementing conventional the declining gas

resources of Europe or some of the European states' lack of renewables stocks.

The Supply Side: What are the Alternative Means of Diversifying Russian Gas Supplies to Europe?

Can US LNG Gas Supplies Become an Alternative Substitute Resource to Europe's Russian Gas Imports?

Since the outbreak of the third crisis Europeans made it a priority to diversify their gas supplies with the basic aim of bypassing Russia. This effort in reality has gained momentum since February 2014 as a result of Russian President Putin's threat to halt gas supplies to Ukraine unless action was taken over Ukraine's unpaid bills. Additionally, in the aftermath of the Russian annexation of Crimea, as relations between Moscow and the Euro-Atlantic world deteriorated, the EU Commission issued its Energy Security Strategy document in June 2014.

In the medium to long term the EU Commission's June 2014 Energy Security Strategy document²⁸ anticipates the possibility of increasing LNG imports from the US or elsewhere as one way

of attaining diversification from Russia. That is why energy experts since February 2014 have been focusing on the question of whether there is a real prospect of Europe importing additional gas LNG gas supplies from the US. The worsening relations between the government and secessionists in the Ukraine have also played a great role in triggering debates around finding new sources. The basic concern behind these questions has been related to the problem of how Europe's current gas demands could be met in the case of another Russian gas stoppage and whether the US LNG imports would be helpful in overcoming this interdependency.

Research has been conducted in Euro-Atlantic circles in order to find answers to questions such as (i) whether US LNG exports to Europe are likely in the near future and (ii) whether LNG diversification could be helpful for Europeans in securing their immediate energy needs. For instance, according to Columbia University's Center on Global Energy Policy report, the supply of US exports of LNG in time are expected to strengthen Europe's bargaining position vis-a-vis Russia by generating a more diverse global gas market where greater amounts of new American natural gas supplies can be found. However, as this reports states, LNG gas supplies either coming from the US or elsewhere is not yet a realistic solution to either the current crisis in Ukraine nor do they have the capacity to free Europe from its continuing dependence on Russian gas at the present time.²⁹

LNG has often been considered as one of the most promising sources of non-Russian gas in Europe. It is true that some European states like those in Central-Eastern and Southern Eastern Europe are more open and welcoming than the rest of the EU states to the prospect of having both American and other sources of LNG supplies because of their domestic gas production shortages. Currently, the North American shale gas revolution has already crippled the profits of the Russian producers and in a way that most benefitted European consumers. In a report by Jason Bordof and Trevor Houser, the authors share the conclusion of a related report stating that future US LNG exports are expected to further boost Europe's bargaining position with regard to Russia. On the other hand, American supplies of shale gas are not expected to be put in the service of Europeans or other countries before 2018.30

At present, there are still several obstacles that will continue to hinder the delivery of US LNG gas supplies to EU countries for at least a few more years. One of these is related to Europe's own purchasing capacity. There are of course other reasons why Europe has found it difficult to access sufficient LNG gas supplies. Europe, despite its numerous regasification terminals that have the

capacity to produce 200 bcm/year (equivalent to the imports from Russia) only reached 22% of that potential in 2013. The reasons for this are various. Firstly, the economic crisis that broke out in 2009 in Europe has surely affected the European consumer's behavior in a negative way. This situation especially in the Central-Eastern and Southeastern European countries has resulted in a drastic decrease in gas consumption. Another reason for the 52% drop in European LNG consumption came to the fore in 2013 and was related to the increase in the Japanese demand for LNG that occurred in 2011. Immediately after the Fukushima nuclear reactor disaster Japan needed to acquire more LNG gas supplies as an alternative to its indigenous nuclear energy, and this caused changes in the prices of gas in the market. Naturally, Europeans, in the face of increased LNG prices, decided to cut down their LNG consumption.31

The future LNG gas supplies to Europe are likely to be affected to a large extent by fluctuations in the international gas price movements, for instance, in the face of excessive Chinese or other LNG gas demands.

What is more important is that the existing LNG import terminals in the EU

today are not in a position to serve the vulnerable Southeastern part of Europe, which is seriously in need of energy diversification to withstand the negative repercussions of another series of Russian gas stoppages in the future. It is true that this latest Ukrainian crisis has already persuaded many countries of the value of constructing LNG import terminals in the Southeastern parts of Europe to complement those already in the Baltics. Surely if this could be achieved in time, these countries' dependence on a single energy gas supplier would be mitigated to a certain extent. On the other hand, although some of the Central and Eastern European countries' gas contracts will expire within one or two years, some of the other EU states' contracts were made on a long term basis, and those countries that have signed long-term gas contracts with Russia will naturally find it difficult to back out of their legal liabilities immediately. This legal obligation would hence continue to keep these EU states dependent on Russian suppliers for several more years.³²

Today, by looking at the negative ramifications of the on-going Ukrainian crisis it is easy to forecast that the future scope and nature of Russia's relations with the EU/ US will be cooler than they were before the outbreak of the third Ukrainian crisis.

Lastly, apart from the lack of readiness of both Central Eastern and South Eastern Europe's LNG infrastructure, which is expected to ease the need for US gas imports to replace the Russian gas, a problematic issue for both European and other international markets is that they will still have to wait several years before US is able to provide the much needed LNG exports to the market place.

According to current energy forecasts, it is estimated that the US could potentially be able to produce LNG gas at nearly equal to a sixth of the EU's overall gas consumption. But unfortunately half of this amount is reserved for already existing agreements with India and South Korea in order to supply gas for their industry demands. Another half of the US LNG gas production is expected to go to in a similar fashion to meet both the UK and Spain's industry needs. True, the Transatlantic Trade and Investment Partnership agreement, when finalized, is expected to be a positive factor that would help accelerate the supply of more US LNG exports coming into Europe, but, again according to the newly made forecasts, US LNG exports to Europe are not expected to reach 66 bcm a year before between 2018 and 2020. Just on this evidence, EU countries will be forced to continue importing Russian gas from Moscow at least until 2018 or 2020. On the other hand, looking at other issues, the future LNG gas supplies to Europe are likely to be affected to a large extent

by fluctuations in the international gas price movements, for instance, in the face of excessive Chinese or other LNG gas demands.

Can the Southern Gas Corridor be an Alternative in Europe's Diversifying of its Gas Supplies?

In the aftermath of the Ukrainian crisis, energy experts have once again shifted their focus onto the viability of the Southern Gas Corridor (SGC) as one way of diversifying or substituting the Russian gas supplies that Europe is in need of importing. The SGC option was raised by an EU Commission decision back in 2008 to find new gas providers as well as to seek diversified transit routes that would by-pass Russia as the only gas supplier to EU states. To this end, the countries in the Caspian and Middle East-Mediterranean basins have been mentioned as the likely new resources and transit routes. Due to the geo-political situation in these areas, so far only the TANAP-TAP gas pipeline has found life. So far, the SGC is most frequently referred to as the Caspian pipeline because Azerbaijan is committed to supply 16bcm gas to Turkey by 2018 and to Europe in 2019. Under the present geo-political conditions, the prospect of bringing gas from countries in Turkey's vicinity to the SGC in the upcoming short-to-midterm period (meaning from today up to 2020-2025) may prove a rather challenging business.³³ That is why major critics of the

SGC have so far based their argument on the reality that the SGC, with its current capacity, cannot provide more than 3% of Europe's total gas consumption (that is nearly equal to the EU's gas imports total made from Nigeria). In contrast to this viewpoint, currently some energy experts are supporting the idea of bringing an expanded TANAP project to the fore so that Europe's urgent demands for gas may be addressed in the near future. To support this viewpoint these scholars came up with new opportunities that could be a new source of gas supplies to the SGC. Azerbaijan's gas reserves are thought to be the first option. In this regard, the recent founding of six wells in the Shah Deniz-2 field are thought to be the new basis for additional gas supplies to the EU via the TANAP-TAP project. According to proponents of this viewpoint, since Malaysia's state-owned Petronas has purchased 15.5% of Statoil's stake in Azerbaijan's Shah Deniz Productionsharing Agreement, it is asserted that this could be a good opportunity to use this extra amount in the service of the SGC.34

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Especially after the EU's cancellation of the South Stream gas pipeline project, it is highly likely that the preponderance of the SGC project, which will deliver

gas via TANAP-TAP, will from now on be expected to gain more substance in the EU's overall strategy of reducing dependency on Russia.

The Union should start by accelerating its own common energy market needs approach, together with strengthening the Southern gas corridor by enlarging the capacity of TANAP.

It is true that the SGC, even in its expanded form, will not be able to substitute all of the gas that is coming from Russia, but when the SGC is combined with the completion of the compulsory energy infrastructure in Europe, including the construction of certain interconnectors, flow pipelines, LNG terminals and so on, then the substantial value of the SGC as the fourth alternative means of diversification to the Russian route will be more apparent. In the immediate future, with the construction of certain interconnectors, such as for instance the one between Greece and Bulgaria, and together with the initiation of several reserve flow pipelines, Southeastern Europe's emergent need for gas and its current dependency on one source could be relieved via the initiation of the TANAP-TAP pipeline project in the very near future.

New volumes of gas, in the amount of about 10 bcm, are expected to first start flowing into the European markets via the SGC in 2019, and the EU countries will then start to gain relative market leverage over Russia during the price bargaining process. Hence, under the current conditions the SGC appears to be one of the best diversification alternatives available to Brussels and Washington in the short term. Currently, some of the most eminent energy experts are already advising the Euro-Atlantic world to do everything they can to assure the realization of the SGC, together with pursuing the means to attain the expansion of TANAP. These scholars believe that depending on the geo-political openings in the future, the identified resources in the Caspian and Middle Eastern basins, both on-shore and off-shore, could be linked to the SGC via multiple transit pipeline routes to provide more gas for the purpose of overcoming Europe's gas overdependence on Russia.

Conclusion

According to energy experts, the EU will continue to be dependent on Russian gas imports until the mid-2020s. This continuing energy dependency on Russia once again became a great concern among the 28 member countries especially after the third Ukrainian crisis and as a result, the search for alternative means to

overcome this dependency has become a priority in the Union. The latest EU Energy Security Strategy report issued in June 2014 brought a road map for the Europeans to follow both in the short to medium and long-term period, and can thus be considered as a clear guide in this regard. However, it is true that there remain several crucial challenges before the member states can achieve the main prerequisites of the EU's strategy. This situation emanates from the different position of each country's natural resource basis and the varying degrees of their current dependency on Russian gas imports. Among all of the EU countries, the position of the northern western European countries in terms of being self-sufficient in meeting their energy supply security, in comparison to the previous 2009 Ukrainian crisis, is now much better. On the other hand, as many energy experts believe, the countries in the Baltics and in South Eastern Europe, that are highly dependent on Russian gas and hence extremely vulnerable to any likely interruptions, can at best be expected to reduce their reliance on Moscow only after 2020, through either the introduction of LNG supplies of gas or pipeline gas from Azerbaijan. The case of central and Eastern European countries is more or less the same.

Therefore, the best available strategy that seems reasonable for the EU

in the medium to long term period is to concentrate on achieving the prerequisites of forming a European common integrated energy market by increasing the availability of the interconnectors, reverse gas flows and so on, so that Brussels' overall dependency on Russian gas supplies can be reduced. Under Europe's current conditions, the attainment of conventional gas supplies via diversification of sources and pipeline routes and sourcing affordable LNG stands as the immediate best alternative in reducing the EU's overall gas dependency on Russia in the short term. On the other hand, the shale gas source seems a rather weak option for all but a few EU countries, and therefore would be an unlikely solution in overcoming Brussels' broad dependency on Russian gas imports. In the immediate future, the best that the EU can do is to mitigate the likely impact of Russian dependency on gas imports. The Union should start by accelerating its own common energy market needs approach, together with strengthening the Southern gas corridor by enlarging the capacity of TANAP. As a result, the EU's ambitious 2014 program for both renewables and energy efficiency are in due course expected to provide great support for Brussels' development and improvement of the demand side of its energy security.

Endnotes

- 1 Vladamir Isachenkov, "New Russian Military Doctrine Says NATO Top Threat", *AP: Big Story*, at http://bigstory.ap.org/article/be313436667346828c4c45978abc01b4/new-russian-military-doctrine-says-nato-top-threat?mkt_tok=3RkMMJWWfF9wsRolu6jBZK XonjHpfsX66%2BwoUaOg38431UFwdcjKPmjr1YABRMt0aPyQAgobGp5I5FEIQ7XY TLB2t60MWA%3D%3D (last visited 31 December 2014).
- 2 "European Energy Security Strategy", *European Commission*, at http://ec.europa.eu/energy/security_of_supply_en.htm, (last visited 12 December 2014).
- 3 "Single Market for Gas and Electricity: Third Package for Electricity and Gas Markets", European Commission, at http://ec.europa.eu/energy/gas_electricity/legislation/third_legislative_package_en.htm (last visited 11 September 2014).
- 4 Karel Beckman, "Everthing You Always Wanted to Know about Russian Gas Supplies to Europe", *Energy Post*, 4 November 2014, at http://www.energypost.eu/everything-alwayswanted-know-russian-gas-supplies-europe/ (last visited 13 December 2014).
- 5 "BP Energy Outlook 2035, January 2014", at http://www.bp.com/content/dam/bp/pdf/ Energy-economics/Energy-Outlook/EnergyOutlook_2035_booklet.pdf (last visted 22 September 2014).
- 6 "European Energy Security: Concious Uncoupling", *Economist*, 5 April 2014, at http://www.economist.com/news/briefing/21600111- reducing-europes-dependence-russian-gas-possiblebut-it-will-take-time-money-and-sustained [last visited 22 September 2014]
- 7 Sonja Van Rensen, "Brussels Gives First Glimpse of What it Means by Energy Union", Energy Post, 21 October 2014 at http://www.energypost.eu/brussels-gives-first-glimpse-means-energy-union/, (last visited 1 October 2014).
- 8 "Sefcovic Tells MEPs He Has a Vision for EU's Energy Union", *EurActiv*, 21 October 2014, at http://www.euractiv.com/sections/energy/sefcovic-tells-meps-he-has-vision-eus-energy-union-309359 (last visited 27 October 2014).
- 9 Ibid.
- 10 Van Rensen, "Brussels Gives".
- 11 Ibid.
- 12 "BP Energy Outlook 2035, January 2014".
- 13 "Energy: Security of Energy Supply", European Commission, at http://ec.europa.eu/security_of_supply_en.htm (last visited 20 September 2014).
- 14 "2030 Framework for Climate and Energy Policies", at http://ec.europa.eu/clima/policies/2030/index_en.htm [last visited on 15 September 2014]
- 15 "2030 Framework for Climate and Energy Policies".

- 16 "The 2020 Climate and Energy Package", at http://ec.europa.eu/clima/policies/package/index_en.htm (last visited on 10 September 2014).
- 17 By setting this 40 % target below the 1990 level by 2030 EU actually aims to be able to engage actively in the negotiations on a new international climate agreement that should expected to take effect in 2020.
- 18 "The 2020 Climate and Energy Package".
- 19 "Energy: Security of Energy Supply". See also Nurşin Ateşoğlu Güney, "The Future of European Energy Security: Where Next?", *BİLGESAM*, 11 November 2014, at http://www.bilgesam.org/Images/Dokumanlar/0-100-20141111121164.pdf (last visited 15 November 2014).
- 20 "EU Leaders Adopt 'Flexible Energy and Climate Targets for 2030", *EurActiv*, 24.10.2014, at http://www.euractiv.com/sections/eu-priorities-2020/eu-leaders-adopt-flexible-energy-and-climate-targets-2030-309462 (last visited 11 October 2014).
- 21 "BP Energy Outlook 2035, January 2014".
- 22 Ibid.
- 23 "Energy: Security of Energy Supply".
- 24 David Buchan, "Can Shale Gas Transform Europe's Energy Landscape?", *Center for European Reform,* July 2013, at http://www.cer.org.uk/sites/default/files/publications/attachements/pdf/2013/brief_burchan_shale_10July13-7645.pdf (last visited 12 December 2014).
- 25 Nurşin Ateşoğlu Güney, "Can the North American Shale Revolution Help Transform Europe's Energy Landscape?", *BILGESAM*, 10 December 2014, at http://www.bilgesam. org/en//incele/1868/-can-the-north-american-shale-revolution-help-transform-europe-senergy-landscape-/#.VKrOhCw5nrc (last visited 13 December 2014).
- 26 Ibid.
- Alexander Gusev, ""Shale Gas: What it Could Really Mean for Europe", *Energy Post*, 16 June 2014, at http://www.energypost.eu/shale-gas-really-mean-europe/ (last visited 15 September 2014).
- 28 "Energy: Security of Energy Supply".
- Jason Bordoff and Trevor Houser, "American Gas to the Rescue? The Impact of US LNG Exports on European Security and Russian Foreign Policy", Columbia/SIPA: Center on Global Energy Policy, September 2014, at http://energypolicy.columbia.edu/sites/default/files/energy/CGEP_American%20Gas%20to%20the%20Rescue%3F.pdf (last visited on 1 October 2014). See, Jonathan Stem, Katja Yafimava, Howard Rogers, Simon Pirani, Laura El Kaitiri, Anouk Honore, James Henderson, Elham Haddanzadeh and Ralf Dickel, "Reducing European Dependence on Russian Gas:Distinguishing Natural Gas Security from Geopolitics", OIES Paper: NG 92, October 2014, at http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/10/NG-92.pdf (last visted on 15 October 2014). See, also Karel Beckman, "Everything You Always Wanted to Know about Russian Gas Supplies

- to Europe", *Energy Post*, November 2014, at http://www.energypost.eu/everything-always-wanted-know-russian-gas-supplies-europe/ (last visited 1 November 2014).
- Bardoff and Houser, "American Gas", at http://www.energypost.eu/everything-always-wanted-know-russian-gas-supplies-europe/ (last visited 6 November 2014).
- 31 Tim Boersa, Tatiana Mitrova, Geert Greving and Anna Galkina, "European Gas Market Functioning in Times of Turmoil and Increasing Import Dependence", *Policy Brief 14-05*, October 2014, at http://www.brookings.edu/~/media/Research/Files/Papers/2014/10/european%20gas%20market%20import%20dependence/business_as_usual_final_3.pdf (last visted 12 November 2014).
- 32 Roman Kilisek, "In Ukrainian Crisis Wake: Geopolitics and a Case for European LNG Import Terminals", *Breaking Energy*, August 2014, at http://breakingenergy.com/2014/08/04/in-ukraine-crisis-wake-geopolitics-and-a-case-for-european-lng-import-terminals/ (last visted 13 September 2014).
- 33 David Korayni, "The Southern Gas Corridor: Europe's Lifeline?", *Istituto Affari Internazionali: IAI*, April 2014, at http://www.iai.it/pdf/DocIAI/iaiwp1407.pdf (last visited 1 October 2014).
- 34 Denise Wee, "Petronas Buys Stake in Azerbaijan Oil Field", *Finance Asia*, 14 October 2014, at http://www.financeasia.com/News/391165,petronas-buys-stake-in-azerbaijan-oil-field. aspx (last visited 27 September 2014).