

## **Russia and the EU Natural Gas Market**

**Matthew Coulson<sup>1</sup>, Yulia Shalamov<sup>1</sup> and Will Tianyang Wang<sup>1</sup>**

### **Introduction**

The European Union is at a crossroads. The ongoing crisis in Ukraine has necessitated a serious reevaluation of the EU's relationship with Russia. In the face of Russian aggression and violations of international norms, the European Union finds itself divided and unable to take a strong stand against an increasingly unpredictable neighbor. A key driver of the EU's lack of leverage over Russia is its dependence on Russian energy resources – particularly natural gas. In addition, this fixed dependence on Russia's gas supplies bears direct implications for European energy security. For in the absence of either reliable source variants for natural gas or sustainable energy alternatives, European energy security is implicitly bound to Russian gas deliveries and the durability of economic, and by extension political, relations. Therefore, in dealing with Russia, the EU leadership must develop a full understanding of the importance of natural gas to Russia's political interests, and its utility as a foreign policy instrument. This report seeks to analyze the role of natural gas in Russian-EU relations and provide recommendations for improving the EU's position in the event of escalated tensions with Russia.

### **European Natural Gas Market**

Natural gas is quickly becoming a mainstay of European energy consumption. In 2012, natural gas accounted for 24% of the European Union's total energy consumption, marking a decrease of 3.6% from 2011. However, current estimates predict this number will rise to 30% by 2030, due in no small part to member states' ambitious carbon emission reduction targets.<sup>1</sup>

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<sup>1</sup> Elliott School of International Affairs, George Washington University, USA.

The EU presently imports 64% of its natural gas, but the European Commission anticipates that it will be importing as much as 80% of its natural gas needs by 2030. These estimates coincide with the continuous reduction in production levels among traditional EU natural gas suppliers, the United Kingdom and the Netherlands.<sup>ii</sup> Currently, the Netherlands and Denmark are the only net exporters of natural gas in the EU.<sup>iii</sup> More worryingly, the EU's natural gas supply lacks diversity, with increasing reliance on imports from Russia. In 2012, Russia supplied 34% of the EU's natural gas imports, becoming the second biggest exporter of natural gas to the EU—directly behind Norway, which constituted 35% of total gas imports to the EU.<sup>iv</sup> However in 2013, natural gas imports from Norway dropped by 5%, while imports from Russia increased by 16%, rising from 148 bcm to 167.5 bcm. This is due in large part to the growth of Russia's energy relations with Italy, Germany and the UK, which is particularly significant given that the latter is a traditionally nominal importer of Russian gas. Similarly, two important external suppliers, Norway and Algeria, cut back production in 2013, and industry experts estimate that this reduction is likely to continue. Therefore, as of 2013, Russia is the leading natural gas supplier for the EU.<sup>v</sup>

### **Source Alternatives**

Over the years, various proposals and attempts have been put forth to expand the pool of potential gas suppliers for the European states. The EU's hopes of finding a non-Russian source of natural gas have long rested on Azerbaijan via the Southern Gas Corridor. Since the collapse of the Soviet Union, various plans to move Azerbaijani gas into Europe have hit negotiating tables. The most famous of these was the ambitious Nabucco pipeline. Initially proposed in 2002, Nabucco would have run from Azerbaijan's Shah-Deniz Field through Georgia and Turkey before entering EU territory in Bulgaria and terminating in Austria, entirely bypassing Russian territory.<sup>vi</sup> However, the project gradually diminished in scale over the next ten years until it completely died in 2013, when it was deemed financially untenable in comparison to the rival Trans-Adriatic Pipeline (TAP). In 2011, Azerbaijan and Turkey agreed to the construction of the Trans-Anatolian gas pipeline, which will carry Azerbaijani gas only to the Turkish-Bulgarian border when it becomes operational in 2018. In 2013, Azerbaijan's Shah-Deniz Consortium approved TAP to transport gas from Turkey through the Caspian Sea into Italy and Western Europe. The selection of TAP was the final blow to Nabucco, as the Consortium rejected even a much-reduced version of the pipeline.<sup>vii</sup> Collectively, the two pipelines will allow Azerbaijan to export 565 bcf of natural gas to Europe annually.

Nevertheless, 215 bcf will remain in Turkey every year. Moreover, the entire route only has a third of the capacity of the proposed Nabucco project, and even the most optimistic estimates predict that this will satisfy only one percent of the EU's natural gas needs. In contrast, the planned South Stream pipeline, which was long thought to be a direct rival to any planned pipeline from the Caspian region, could deliver 63 bcm of natural gas directly to Europe.<sup>viii</sup> Moscow has repeatedly opposed any Southern Gas Corridor Project, but has made no objections regarding the construction of the TANAP/TAP, likely understanding the relative insignificance of the Azerbaijani pipelines for Europe's energy security, and the minimal competition it presents to Russian energy contracts in the region.

Other possible supplies of natural gas would require significant development. Kazakhstan, Turkmenistan, and Uzbekistan have significant untapped natural gas reserves, but government corruption creates an unfriendly investment climate, and all three are firmly oriented toward Russia and/or China in their foreign policy. Additionally, both Turkmenistan and Uzbekistan lack the necessary infrastructure to export gas, and require large-scale capital investment for such development.<sup>ix</sup> North Africa shows more potential as a significant natural gas exporter. Algeria is already the EU's third-largest supplier. However, security concerns and an unfriendly business environment limit the potential for further trading relations. Similarly, political unrest in Libya and Egypt has severely affected the gas infrastructure of both countries, and neither is in a position to substantially raise export levels.<sup>x</sup> Rather, LNG exports from the Gulf States—especially from Qatar—would prove a more feasible, although expensive, short-term alternative. Japan's growing demand for LNG after the Fukushima disaster in 2011 has dramatically inflated prices to a point beyond which Europeans are willing to pay.<sup>xi</sup> Europe's share of the global LNG trade dropped by 7% from 2011 to 2012, and utilization rates at Rotterdam's GATE LNG terminal are down to an all-time low of 10%.

Should Europe turn to LNG, it would need to undertake extensive infrastructure renovations. Most LNG terminals are currently located in Western Europe, where states are less susceptible to shortages from a Russian shut-off and thus have less use for them.<sup>xii</sup> Furthermore, pricing concerns make potential LNG imports from the United States a less than ideal long-term option, though many in Central Europe and the Balkans would likely welcome a U.S. presence in the European energy market.

For it would both create pressure on Russia and grant EU member states more bargaining power going forward. Yet if the United States becomes an LNG exporter, domestic energy firms will likely look to East Asia as its target destination due to more lucrative market conditions. Even if U.S. natural gas does make its way into Europe energy markets, it likely will not be for several years as a result of export restrictions.<sup>xiii</sup>

EU member states are also seriously considering less environmentally salient options in the interest of bolstering energy security. On March 20, 2014, the European Parliament passed environmental legislation requiring stricter controls on conventional oil and gas exploration that made no mention of shale gas. Although shale gas exploration has been a traditionally divisive issue in the EU, this legislation suggests a policy shift in the interest of practicality. Yet while the United Kingdom and Poland have long pushed for shale gas development as a means of limiting energy dependence on Russia and lowering gas prices, other member states, most notably France and Bulgaria, strongly oppose such measures and will likely block attempts at development.<sup>xiv</sup> Poland was long thought to be a potential shale giant, but Polish geologists have recently revised the country's estimated shale reserves from 5.3 trillion cubic meters to just under 800 billion cubic meters, prompting Talisman, Marathon and Exxon Mobil to withdraw from Polish shale gas. Likewise in October 2013, Chevron announced its intention to pull out of Lithuania, citing domestic legislation that has made investment less attractive.<sup>xv</sup>

Increasingly conservative estimates of the European Union's shale reserves; outright opposition to fracking in countries with shale potential; high urban density; exacting environment goals; and a restrictive regulatory environment have undercut the operational capacity and commercial feasibility of shale gas exploration. Shale gas is therefore another option that is unlikely to come to fruition in the short term. A recent report by the Institute for Sustainable Development and International Relations warned that shale gas will not be a realistic energy alternative for at least a decade. Current estimates predict that shale gas will meet no more than 3-10% of EU gas demand by 2035.<sup>xvi</sup>

Therefore, with no immediate alternatives to European dependence on Russian gas, it is imperative that the EU better understand its biggest supplier and the condition of European energy security.

## Russian Foreign Policy Concept

The underlying goals, principles, and priorities of Russian foreign policy are expressed in the *Concept of the Foreign Policy of the Russian Federation*. In February 2013, President Vladimir Putin ratified the newest version of the doctrine, which details the intended reprioritization of the state government towards the development of a 'new vision' and approach to Russian foreign policy. This move comes amid a shifting geopolitical landscape, engendered by the steady globalization of economic and interstate relations. Since 2000, Russia's *Foreign Policy Concept* has consistently expressed the state's commitment to the preservation of state sovereignty, territorial integrity, and security; as well as the promotion of national interests and non-discrimination in international relations, in order to ensure national economic growth and diversification, and an elevated standard of living. However, the 2013 edition emphasizes a new assertiveness and readiness of the Russian government to assume greater responsibility for "setting the international agenda and shaping the system of international relations."<sup>xvii</sup> The document describes the state's intent to help sustain regional and global security, as well as act as a 'counterbalance' in the global system. These policy priorities are largely predicated on the dual assumption of an increasingly decentralized international order and waning western global influence. These conditions consequently produce a polycentric system of global governance that is characterized by both heightened interstate competition and global turbulence.

In this context, the doctrine proposes that regional governance be remodeled as the new basis for the multipolar system, whereby "new centers of economic growth and political power" accept "responsibility" for their respective regions of the world. This paradigm promotes the development of multiple centers of "influential and competitive" regional power hubs, Russia among them, for undergirding it is the inherent assumption that regional dominance is the principal path to global eminence. As a result, Russia's foreign policy places overt precedence on the cultivation of amicable neighborly relations, strong cooperation with the Commonwealth of Independent States and economic integration to form the Eurasian Economic Union and Collective Security Treaty Organization.<sup>xviii</sup> Russia's foreign policy is thus a readily utilized tool for fostering advantageous conditions for state development and global competitiveness in the pursuit of national interests.

Russia's conceptualization of international affairs is by and large a reflection of its historical and enduring self-identification as a major global power. The legacy of the Tsarist regime's quasi-divine status, a tradition later expropriated by the Communist Party to aggrandize socialism and the new Soviet state, has substantiated historical glorification of the Russian empire as "destined" by the strength of its history and geography to serve as a custodian of the international political order. Moreover, the country's shared geography, history, and economy with the European states, fostered internal conceptions of Russia as a vital and indivisible part of European civilization. Thus ingrained in the political consciousness of the Russian people, the loss of power and prestige associated with the collapse of the Soviet Union inflamed domestic frustration and competition with the west. Many Russians viewed the ensuing years as a period of external subjugation and political derogation. This notion was acutely reinforced by the 1999 western-led intervention in Kosovo, against explicit Russian objection.<sup>xix</sup> This dynamic has manifested in Russia's opposition to the development of the European Union, which it perceives as having monopolized European identity and sociopolitical order; marginalized national interests in the region; and encroached upon its sphere of influence in Eastern Europe.

It has likewise aggravated internal apprehension of and opposition to the western-bloc military alliance, seen as subversive to the development of equal and indivisible security and facilitating the emergence of new dividing lines in Europe that effectively exclude Russia.<sup>xx</sup> Moreover, Russia has historically feared encirclement, as it occupies a vast expanse of land with a highly diverse ethnic composition regularly in conflict with the central government in Moscow. Yet, it possesses no easily fortified borders to protect against the surrounding great powers, thereby making it vulnerable to both domestic instability and external assault. Thus NATO's eastward expansion signifies a direct national security threat, as it forewarns of foreign troop contingents being placed within proximity to Russian borders.<sup>xxi</sup> In particular, Ukraine's defection to the west in the event of its accession into the EU and subsequently, the Euro-Atlantic alliance, would both exacerbate the observed foreign military threat to Russia's borders and jeopardize its Black Sea Fleet, stationed in Sevastopol—likely one of the security concerns that has today catalyzed the annexation of Crimea.<sup>xxii</sup> This has intensified efforts to re-establish a direct regulatory role in the political and economic affairs of the former Soviet sphere of influence to sustain a buffer zone against western advances.

Moreover, since 2000, Russian political elites under the leadership of President Putin have repeatedly drawn upon the country's cultural history to reinforce enduring domestic exaltation of Russian global preeminence, and thereby, challenge the west's unfair treatment of and discrimination against Russia.<sup>xxiii</sup> As a result, Russia's foreign policy has developed to prevent the loss of global political, economic and military influence; the expansion of military-political blocs and alliances, as well as foreign military bases and troop contingents near Russian borders; hampered integration with the Commonwealth of Independent States; territorial claims against Russia; and potential conflict along both Russian and CIS borders.<sup>xxiv</sup>

However, absent the political clout and legitimacy of the former Soviet Union, the principal tool for the realization of Russia's political agenda and regional resurgence has been its resource potential, particularly its national energy reserves. Exploiting the OPEC-induced restrictions on oil supply and the consequent rise in oil prices at the end of the 20<sup>th</sup> century, Putin employed the residual Soviet energy infrastructure to expand Russia's energy trade and industrial growth. By developing Russia's natural comparative advantage in energy, Putin instigated a process of domestic political stabilization and economic recovery in the aftermath of widespread political unrest and socioeconomic decline during the 1990s. Ensuing GDP growth and declining poverty rates ultimately facilitated Russia's transformation into a petrostate with significant political power due to its ability to directly influence the energy market. The relative success of this economic model has engendered public support for Putin's political regime, and has excited national conviction in the resurgence of Russian might, therefore strengthening efforts to remake the state into an energy superpower and thus solidify its status as a regional hegemon and a leading global power. Yet under Putin, this policy agenda has embraced a fundamentally realpolitik conceptualization of global relations, characterized by a state-centric and power-politics basis for diplomacy, which often facilitates the employ of hardpower. This strategy is primarily exercised through control of the natural gas trade.<sup>xxv</sup>

### **Russian Natural Gas Sector: Foreign Policy Tool**

Since coming into office, Putin has promoted the reconstruction of the government as a managerial entity, with direct oversight capacities over the capitalist economy, needed to boost efficiency and revenue generation.

Believing that Russian economic security rested on the political championship of national business interests in international markets, and furthermore encouraged by the failure of Yeltsin's privatization program, Putin successfully mobilized public support for the re-nationalization of Russian industries.<sup>xxvi</sup> The protection of national economic interests is a definitive element of Russia's foreign policy doctrine, which pledges the provision of diplomatic support for national businesses operating abroad to strengthen their positions in the global market and protect them from perceived "discrimination against Russian goods."<sup>xxvii</sup> However, the consequent structural integration of domestic political and economic institutions and the 'co-option' of state oligarchs underscore the inherent politicization of the economic system. This is best exemplified by Russia's natural gas sector. Russia possesses the world's largest proven natural gas reserves, nearly a quarter of the world's total proven reserves. Russia is the world's second-largest producer of natural gas—with 196 million cubic meters sold as of 2013—becoming the biggest national exporter of natural gas.<sup>xxviii</sup> Recently declining production rates and concurrent growth in global consumption levels have likewise strengthened market reliance on Russian gas supply. The country's natural gas sector is regulated almost exclusively by GAZPROM, a nationalized natural gas corporation that serves as the focal point of Putin's state-led capitalist system.

GAZPROM is a vertically integrated corporation with control over both upstream and downstream gas flows. It is the world's largest extractor and supplier of natural gas, and has the largest gas transport system. In 2011, the company was responsible for 17% of worldwide gas production.<sup>xxix</sup> Originally the former Ministry of Gas Industry, it was restructured and privatized in 1989. The state government has since become the largest stakeholder in GAZPROM, with direct influence over the company's pricing scheme and corporate leadership. The government has regulated GAZPROM's natural gas prices since the early 1990s; while initially determined by the Ministry of Energy, prices are now under the direct control of the Federal Tariff Service.<sup>xxx</sup> Moreover, the corporation's top leadership comprises a band of Putin's former political associates and members of the national security service—'silovoki,' put in power through state appointments. Former Chairman of the Board of Ministers and current Prime Minister Dmitry Medvedev, as well as former Deputy Minister of Energy and current CEO of GAZPROM Alexey Miller, among others, have either held or continue to hold high-level political posts.<sup>xxxi</sup> Since the passage of the Federal Law on Gas Export in 2006, GAZPROM has maintained a legal export monopoly on both pipeline gas and liquefied natural gas.

Yet in December 2013, Putin ratified a landmark bill breaking GAZPROM's exclusive monopoly on natural gas by opening LNG trade in international energy markets to rival energy corporations, Novatek and Rosneft. Both companies are governed by long-standing members of Putin's inner circle. These policies have ensured Moscow's ability to directly regulate natural gas prices in domestic and foreign markets, as well as preside over contract negotiations with foreign trading partners.<sup>xxxii</sup>

The country's growing stake in the energy market and regional reliance on Russian natural gas supplies has given the Kremlin leverage to bargain with neighboring countries and balance against great power states beyond its immediate periphery to structure political negotiations to the advantage of national interests. The absence of both a global market and benchmark price for natural gas has created a regionally segregated natural gas market that places price regulation largely under the control of producers. This has made the market extremely susceptible to price shocks brought on by disruptions in supply or demand. Russian gas supplies are therefore sold according to a formula that pegs prices to an oil index in order to maintain gas prices uncommonly high. Meanwhile, the reliance on long-term, bilateral energy agreements with take-or-pay provisions, which enforce fees for unused gas, simultaneously ensure advantageous contract terms for Russia, while subverting efforts to develop a unified European energy policy.<sup>xxxiii</sup> Thus bolstered by 'petro-confidence,' Moscow has increasingly exploited these circumstances to reclaim control over strategic natural resources and renegotiate former deals with foreign investors.

Moreover, natural gas has become the chief foreign policy tool for reconstructing Russian regional hegemony, as Moscow repeatedly capitalizes on the natural gas market to contain and effectively suppress sources of regional political or economic competition. Russia has traditionally bargained low transit costs for the use of Ukrainian and Belorussian pipelines in return for cut-rate natural gas prices. However, the repeated use of transit tariffs as a bargaining lever in energy negotiations with GAZPROM in response to pricing conflicts and supply disruptions has prompted GAZPROM officials to purchase controlling stakes in foreign transit companies, like Beltransgaz.

Likewise, given the relatively acrimonious nature of relations with Kiev, Russia has begun building alternative pipeline systems to bypass traditional transit states like Ukraine, through which nearly 80% of natural gas exports into Western Europe were transported, in order to minimize dependence on external entities for access into the European markets. The development of both Nord Stream and South Stream, in tandem with efforts to undermine the construction of independent pipelines leading from Central Asia to Europe, has diminished the potential for regional competition in the gas market sector and cemented Russia's status as a principal gas supplier to Europe. This runs parallel to Russia's stated intent to become the principal transit state for trade and economic relations between Europe and the Asia-Pacific region.<sup>xxxiv</sup> Furthermore, the new pipelines bypass Estonia, Latvia, Belarus, Lithuania, Ukraine and Poland, making them more vulnerable to market machinations affecting gas prices and supply, and consequently, more dependent on Russia gas exports.<sup>xxxv</sup> Conversely, economic ties between Russia and the pipeline states Germany and Italy have been significantly bolstered, as is reflected in the appointment of former Chancellor Gerhard Schröder as chair of Nord Stream's shareholders' committee, and economic integration with business sector giants like E.ON, BASF and ENI—a 20% stakeholder in South Stream. These relationships afford Russia considerable political leverage, discussed in more depth further below.

Russia has frequently utilized the natural gas trade as both a carrot and stick to exert economic pressure and political coercion on its trading partners. Moscow has developed an ingrained policy of rewarding states that adopt pro-Russian policies with profitable energy contracts and price discounts. This approach is predicated on Russia's strategic prioritization of political and economic integration with the member states of the CIS.<sup>xxxvi</sup> Natural gas prices for states belonging to Russia's 'sphere of privileged interests' have traditionally been subsidized, which is made financially tenable by the production of cheap gas from Soviet-developed fields and higher gas prices gas for importing states in western Europe.<sup>xxxvii</sup> For example, in 2010, Moscow offered to mark down gas prices by as much as 2/3 for the next ten years if Kiev acquiesced to extending Russia's use of Crimea as a base for its Black Sea Fleet until 2042.<sup>xxxviii</sup> Russia also recently negotiated price cuts and new contract agreements utilizing spot pricing with Italy and Germany, the largest western European markets for Russian gas exports.<sup>xxxix</sup> Yet importantly, in 2012, gas supplies to Italy were cut by 12% after ENI filed a lawsuit against GAZPROM's 'take-or-pay' contracts.<sup>xl</sup>

Similarly, Russia has also habitually threatened to or imposed arbitrary price hikes and disruptions in gas supply during periods of political conflict and economic disagreement, or in response to integration with the west. As a result, Eastern European countries like Poland that are members to the EU pay far higher prices for Russian natural gas supplies. The most prominent example of such market manipulation is the pricing dispute between Russia and Ukraine in 2009, which culminated in a three-week suspension of gas deliveries to Ukraine that left much of Europe without heat in the middle of winter. While an agreement establishing new price, tariff and fee standards was eventually reached, the conflict ultimately cost Russia \$1.5 billion in lost revenue.<sup>xii</sup> Likewise, during the 2007 Russia-Belarus energy dispute, enforced price hikes against the latter saw Russia compromise on \$100 per 1,000 cubic meter—far less than what was initially demanded—in return for payment of Belorussian debt and the acquisition of a 50% share in the Belorussian pipeline network.<sup>xiii</sup> In recent months, Russia again utilized energy relations with Ukraine to pressure former President Yanukovich to suspend negotiations for an Association Agreement with the EU, promising cheaper gas prices and relief for the state's exorbitant debts to Moscow as inducements.

Although this has precipitated widespread uprisings throughout the country and the overthrow of Yanukovich's government, the scheme's failure is attributed to the opposition of public forces rather than a breakdown in political relations. More importantly, it has resulted in political and military aggression against the interim Ukrainian government and arguably unlawful annexation of Ukrainian territory, at the expense of ruptured relations with Ukraine, worldwide condemnation, and the enforcement of sanctions against Russian officials by the US and EU member states. These case studies underscore the inherent politicization of the gas trade, whereby Russia gambles general economic interests to advance its geopolitical ambitions. The use of energy as a foreign policy tool thus frequently necessitates the manipulation of trade relations in a manner that is antithetical to profit-generation and intrinsic business interests.<sup>xliii</sup> This system is perpetuated by Moscow's control over state industries and the natural gas market.

## Market Implications

Regardless of the pivotal role that natural gas plays in the formulation and execution of its foreign policy, Russia is no less dependent on natural gas exports for economic sustainability, or less vulnerable to a disruption in trade relations that would jeopardize access to foreign gas markets. Energy trade is the backbone of Russia's economic development. Oil and natural gas exports constitute nearly 70% of Russia's annual exports and 52% of the federal budget. Furthermore, GAZPROM's foreign sales comprise 13% of Russian exports, nearly 8% of Russia's GDP and 5% of tax revenues. Thus both the natural gas sector and GAZPROM are indispensable for Russia's economic health, particularly given the persisting decline of national economic growth and productivity in the energy sector. GDP growth has improved only marginally after the economic contraction in 2009; GDP grew by only 1.3% in 2013, after falling by more than 2% since 2012 due to consistently low domestic consumption rates. Meanwhile, natural gas exports, already in decline, are expected to shrink another 2% in 2014<sup>xliii</sup>. Nevertheless, the political crisis in Ukraine; mounting apprehension about Russian geopolitical interests; and spurred efforts within Europe to divert towards alternative energy sources are likely to exacerbate export contraction.<sup>xliiv</sup> Russia has also seen a precipitous drop in foreign investment due to concerns about rampant corruption and poor property rights protection. The high level of capital outflow has impeded repair of Russia's outdated pipeline system and technology, as well as slowed progress in the development of supragiants fields in the Barents Sea and Yamal Peninsula in the Arctic.<sup>xliv</sup> Yet long-term prospects for energy-driven economic development without substantial foreign investment into the domestic energy infrastructure are limited. The profitability of the Russian natural gas industry will also remain structurally contingent on ready and supportive European markets.

The EU is Russia's biggest trading partner and importer of Russian natural gas. More than 76% of Russia's exports into EU are comprised of mineral fuels.<sup>xlvi</sup> In 2012, nearly 57% of Russia's natural gas exports made their way into Western Europe—76% if taking into account Turkey. Nearly a quarter of total gas exports were delivered to Germany alone. Although 24% of Russian natural gas is exported into Eastern Europe, prices in the former Soviet states are subsidized, while payments are frequently overdue and unreliable, thus placing greater precedence on western gas markets.<sup>xlvii</sup> Yet the continued recession throughout the EU and the emergence of lucrative economic hubs in Eastern Asia have shifted global economic growth beyond Europe, prompting a re-balance of the monetary and trade system eastward.

The Kremlin has emphasized the importance of fostering deeper strategic ties with China, Japan, South Korea, Vietnam and India. In March 2013, Chinese President Xi Jinping reached an agreement with Moscow delineating the price, export capacity, and start date of natural gas trade. GAZPROM announced that it will begin exporting 380 bcm of natural gas per year to China through the Eastern pipeline in 2017, and plans are being discussed to expand the west and central China Pipelines to transport gas from Russia.<sup>xlviii</sup> Trade with the Asian-Pacific region is predicted to grow by as much as 20% of gas shares, a significant growth from 2011 when it made up 7% of total Russian gas exports. Russian dependence on European markets would thus likely decline by 2030 if not sooner given the renewed concentration on economic diversification and expansion eastward following the Ukrainian political conflict.<sup>xlix</sup> Nonetheless, the eastern pivot is a long-term investment that has only recently made its first successful foray into the Asian energy markets, and Russia faces stiff competition from international energy producers. Rather, in the meantime, falling production rates, increasingly inefficient energy infrastructure and limited foreign investment will necessitate reliance on Europe for a stable flow of revenue.

In light of Russia's domestic economic environment, significant deterioration of relations with Europe can inflict serious damage to the economic stability of the country, which can arguably curb Moscow's ability and willingness to use natural gas sales to the detriment of European countries. However it is unlikely to prevent Russia from leveraging Europe's energy reliance to pursue its geopolitical agenda. The politicized nature of Russia's economic structure intimates that more so than just a source of revenue, its natural gas industry functions as an extended arm of the state in regional politics. Rampant corruption and collusion between government officials and energy oligarchs buttresses Putin's extensive patronage network and control over the energy sector. Meanwhile, a policy of artificially reduced domestic gas prices ensures the support of the both the public and energy-intensive domestic industries reliant on low energy prices.<sup>1</sup> For as long as the natural gas trade continues to generate enough profit to achieve those two objectives, internal economic forces will exert little pressure to temper Moscow's geopolitical objectives. Nor, as patently demonstrated by the 2013 Ukrainian political crisis, is Russia likely to suffer serious consequences for doing so.

## Power Unbalance: The Case of Ukraine

The unfolding situation in Ukraine emphasizes the EU's energy dependence on Russia, but more importantly, it accentuates the comparative imbalance in political power between the two parties. In 2012, the EU paid \$160 billion for Russian oil and gas exports, a point that reaffirms the volume of business that would suffer if diplomatic or economic relations between the EU and Russia were to falter or cease completely.<sup>ii</sup> While the reduction or suspension of trading relations with the EU would no doubt cripple the Russian economy, the EU's reliance on Russian energy resources makes such a move nearly impossible to execute. Sweden, Finland, Estonia, Latvia, Lithuania, and Bulgaria all rely exclusively on Russia for natural gas. In 2012, eighteen members of the EU were running a trade deficit with Russia.<sup>iii</sup> All-time high Russian gas imports for Germany and Italy – two of the EU's largest gas markets, were also reached in 2013.<sup>iiii</sup> Alternatively, Russia has cultivated extensive business contacts throughout Europe. Germany currently has roughly €20 billion invested in Russia and nearly 6,200 companies operating there; as of 2013, bilateral trade between the two has reached €76 billion. Similarly, Russia has become one of the biggest investor economies, injecting enormous capital into both the British and Cypriot economies.<sup>lv</sup> Such integrated economic ties will act as a 'restraining hand' against the implementation of sanctions against Russia, thus further elevating Moscow's political leverage against its European neighbors.

The EU's dependence on Russian gas makes it vulnerable to hostility from Moscow's end. Although Nord Stream and improved energy infrastructure in Europe now allow countries with excess supply to use interconnectors to redirect gas to those who need it most, thereby minimizing European vulnerability to contrived gas shortages, there remains a precedent for Russian interference with gas flow through Ukraine, and another shutdown would especially hurt Central European states like Austria and the Czech Republic.<sup>lv</sup> Energy security has become a hot-button issue in the EU's internal energy debate since Russia's incursion into Crimea, exacerbating the disparity in national interests engendered by states' individual energy policies. Due to its dependence on Russian gas flowing through Ukraine, Bulgaria has begged Brussels to minimize sanctions on Russia. Latvia and Cyprus have likewise requested assurances of compensation for countries disproportionately affected by proposed sanctions. Even pro-sanction countries like Poland and Germany face strong internal pressure to avoid costly sanctions due to energy supply concerns.<sup>lvi</sup> In a situation where the West seeks to send a strong message, dependence on Russian gas has limited the EU's ability to assume a strong political position.

The actions of the European Commission and other EU leaders indicate a clear understanding of the need to minimize energy dependence on Russia before the Ukrainian crisis began. EU heads of state continue their efforts to establish an “Energy Policy for Europe” to both liberalize and integrate Europe’s internal energy market.<sup>lvii</sup> Similarly, the European Commission opened antitrust investigations against GAZPROM in September 2012, which could potentially force the Russian gas giant to sell the pipelines that it owns in Europe and cease its practice of differential pricing to client states in the EU. Former Soviet satellite states in Central and Eastern Europe pay as much as 1.5 times more for Russian gas than their Western counterparts, and the lack of competition puts these states especially at the mercy of GAZPROM’s pricing decisions.<sup>lviii</sup> Nonetheless, both endeavors have met with considerable resistance from Russia. Moscow has been openly critical of the antitrust investigation, and has striven to undercut the EU’s attempts at forming a unified energy policy, primarily through the use of long-term natural gas contracts.<sup>lix</sup> In particular, negotiated contracts with Germany and Italy—the destination points for the Nord Stream and the planned South Stream pipelines respectively—force the EU’s two heaviest consumers of Russian gas to deal with Moscow through bilateral engagements, thus heavily impeding progress toward European energy integration and a collective EU energy policy. Moreover, similar bilateral agreements with Hungary, Greece, Bulgaria and Romania have incensed strong proponents of European energy market integration like Poland and Lithuania, both of whom are heavily critical of Russia’s energy and foreign policies. By most estimates, the EU’s stated goal of an integrated and liberalized European energy market will not materialize by the target date of 2014.<sup>lx</sup>

The Ukrainian political crisis has forced to the surface problems that have long been festering within the EU. Excessive energy dependence on Russia limits the EU’s sanctions power when Moscow violates international norms. EU member states also find themselves susceptible to energy aggression from Russia, whether through price manipulation or cut-offs. It is unlikely that Russia would cut off gas lines directly to the EU, but ongoing unrest in Ukraine still leaves Eastern European member states vulnerable to shortages. Additionally, the lack of an integrated European gas market weakens the EU’s ability to negotiate with Russia on energy issues. Russia’s preferred method of striking bilateral deals with member states leaves a divided Europe that is susceptible to Russia’s substantial leverage.

These problems will not go away without a concerted effort by the EU member states to diversify energy use and supply; rather, perpetuation of the status quo will further weaken European energy security and political might. Therefore, more so than anything else, the Ukrainian crisis should serve as an impetus for the EU to address these issues head-on.

## **Recommendations & Conclusion**

Given the nature of EU energy dependence on Russia's natural gas supply, and the latter's use of those relations in pursuit of its political ambitions, continued energy dependence on Russia is a threat to EU energy security. Therefore, it is imperative that the EU construct and implement a series of structural reforms for its economic system and energy policy that will both improve its position vis-à-vis Russia and limit its vulnerability to changes in the natural gas market. Therefore, we recommend that the EU:

1. Take substantial steps to enhance the collective EU energy policy, addressing the conflict of interests between small and large states to mitigate divergences in national policies and accession to bilateral contracts with Russia, which effectively undermine the collective bargaining position of the EU.
2. Increase energy efficiency by expanding the internal pipeline system leading from Italy and Spain so as to more efficiently transport gas imported from non-Russian suppliers throughout Europe; as well as constructing storage facilities alongside these pipelines and LNG facilities where they can best be accessed and utilized.
3. Pursue energy supply routes that bypass Ukraine and politically unstable regions, primarily through the development of direct trading relations with energy producing states in the Caucasus and Central Asia.
4. Encourage debate at the member state level on diversification of resource supply to minimize dependence on natural gas; this could consist of increasing nuclear and shale gas production.
5. Lastly, leverage Russia's capital deficiency to negotiate a political agreement, by exploiting the emergent vulnerability of Russia's dominance over the energy market generated by the declining efficiency and competitiveness of its energy industry amid revolutionary changes in the energy market and shale gas production.

These steps are not easily implementable, and some will likely be controversial. However, these recommendations address the glaring deficiencies in the EU's energy policy laid bare by the crisis in Ukraine. Postponing action on these issues will only further endanger Europe's energy security and weaken its collective bargaining position with Russia or other potentially threatening international players. Though taking action may be difficult, it is imperative for ensuring Europe's long-term energy security in a region that, as demonstrated by historical precedent, is predisposed to instability and conflict.

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