

Russia's hybrid warfare in the form of its energy manoeuvres against Europe: how the EU and NATO can respond together?

Vira Ratsiborynska¹



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Research Division

Thierry Tardy, PhD, Division Head
NATO Defense College
Via Giorgio Pelosi, 1
00143 Rome – Italy
website: www.ndc.nato.int
Follow us on Twitter and Facebook
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*"Resilience of [NATO]'s energy supply [...] highlights the need to work closer together with civilian authorities in the different member countries, but also work together with the European Union."*²

(J. Stoltenberg)

Introduction

NATO continues evolving and adapting to new security challenges and threats coming from the East and the South. At the NATO Summit in Warsaw in July 2016 the member states of the Alliance reaffirmed their commitments on the core purposes of the Alliance: collective defense, crisis management and cooperative security. The Warsaw Summit marked a shift from reassurance to deterrence posture sending a signal that the Alliance is ready and is able to meet the challenge of hybrid threats. The changing security landscape in the Eastern flank reinforces NATO's need to strengthen its core 'hard power' principles as well as update its 'soft power' influence on issues such as energy security.

NATO has an interest in reducing its strategic, operational and tactical energy security vulnerabilities not only for its members, but also for

¹ A former graduate of the College of Europe (Belgium) and Sciences Po (France), Vira Ratsiborynska obtained a doctoral degree from the University of Strasbourg. Dr. Ratsiborynska's research interests include the external relations of the European Union with its Eastern neighbours, e.g. in energy, trade, geopolitics, border management, conflict management and peacekeeping. Dr. Vira Ratsiborynska is a Visiting Scholar at the Research Division of the NATO Defense College (NDC). The views expressed are the author's and do not necessarily represent those of the NATO Defense College or the North Atlantic Treaty Organization.

² *Remarks by NATO Secretary General Jens Stoltenberg at the Inauguration of the Helsinki Centre of Excellence for Countering Hybrid Threats, with EU High Representative Federica Mogherini, speeches, NATO, https://www.nato.int/cps/ua/natohq/opinions_147499.htm?selectedLocale=uk*



its partners. In a globalized world the protection of energy infrastructure and reinforcement of energy efficiency, diversification, and resilience is a NATO strategic interest. The Strategic Concept of 2010 emphasized a need to unite “international efforts to ensure [member states] resilience against attack or disruption.”³ As stated in the Warsaw Summit declaration, “energy developments can have significant political and security implications for Allies and the Alliance.”⁴ NATO should pay particular attention “to diversification of energy supply in the Euro-Atlantic region.”⁵

Hybrid threats in the East challenge NATO’s cohesion and represent a threat for Europe’s security and international order. The energy security challenges posed by the hybrid threats are diverse and may include disruption of critical energy infrastructure and energy supply. These can affect not only the national defense of Allies or partner nations, but they can alter the principles and the basis of Europe’s collective defense.

Russia considers energy an important non-military element in its hybrid warfare toolbox - not only against the Eastern Partnership countries⁶ but also against the West. Russia’s energy resources are used as a weapon to accomplish its political goals. It seeks to increase energy dependence and to put additional political and economic pressure on the European Union (EU) member states and on the neighbouring countries that depend on Moscow for

their energy supply.⁷ This energy weapon supports Russia’s national and global destabilizing strategies - strategies whose goals correspond to its geopolitical interests in the EU’s shared neighbourhood; and, beyond this neighbourhood, as an offensive tool to destabilize, divide and weaken the European Union proper.⁸

Given the importance of energy in Russia’s destabilizing strategies against Europe, how can the EU and NATO combine their efforts to confront Russia’s hybrid form of energy manoeuvre warfare in Europe, and how can the EU-NATO coordinate actions to reduce reliance on Russia’s gas in the region?

This research paper analyzes how Russia is using energy through destabilizing techniques in Europe, in particular in the Eastern Partnership region, and argues that the EU-NATO coordinated efforts can diminish Europe’s dependency on Russia’s gas and reduce European security challenges.

Russia’s use of energy in Europe

As stated in its *Energy Strategy of the Russian Federation until 2020*, “Russia possesses huge energy and fuel resources, which is the base for the development of its economy, an instrument of foreign and domestic policy implementation.”⁹ And, as stated in Russia’s *Energy Strategy through 2035*, “Russia as a

³ *Strategic concept for the defense and security of the members of the North Atlantic Treaty organization adopted by Heads of State and government*, Lisbon, 2010, http://www.nato.int/cps/en/natohq/official_texts_68580.htm

⁴ *Warsaw Summit Communiqué*, op.cit, paragraph 135, http://www.nato.int/cps/en/natohq/official_texts_133169.htm?selectedLocale=en

⁵ *Ibid.*

⁶ The Eastern Partnership countries (EaP) are the post-Soviet states of Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

⁷ V. Ratsiborynska, *When Hybrid warfare supports ideology: Russia Today*, Research Paper 133, November 2016, NATO Defense College, Rome.

⁸ *Ibid.*

⁹ Government of the Russian Federation, *Энергетическая стратегия России на период до 2020 года (Energy Strategy of the Russian Federation until 2020)*, May 2003, http://cpnt.ru/userfiles/_files_normativ_energofsafe_energostrategy.pdf



responsible state considers external energy policy not from the exporter's narrow point of view, intended to maximize short-term revenues, but as a tool to solve both national and global problems."¹⁰ These strategic documents specify that energy is a matter of national security policy that aims to promote Russia's political and economic interests. To paraphrase Clausewitz's hybrid warfare dimension as "a mere continuation of policy by other means,"¹¹ a wide range of political, economic and information elements are used by Russia to reach political goals. Employing energy is a hybrid form of political, societal or economic coercion to meet political ends that can expose vulnerabilities of energy dependent countries.

In the hybrid warfare context the energy dependency on Russia of some EU member states and of the Eastern Partnership countries can be exploited by Moscow to exert pressure on the political decision making processes of the affected countries, to bend them to Russia's will, and to further undermine their potential to put up effective resistance in economic or energy matters against the Kremlin.¹² Moreover, energy dependency on Russia can create vulnerabilities that give Russia a political, economic, geopolitical advantage that can be used as a part of non-military means of pressure. In addition, the vulnerabilities caused by energy dependency create immediate or everlasting risk that Russia can manipulate in relations early or later depending on levels of cooperation and subordination between Russia and the client state. Energy dependency

establishes a geopolitical dimension to energy relations and gives a geopolitical, economic or psychological advantage to one country while minimizing an ability of other dependent country to respond to this existing pressure. It challenges state sovereignty.

As stated in the EU Commission staff working paper *Renewable energy: a major player in the European energy market*, the EU is relying on natural gas import from Russia, Norway and Algeria.¹³ Russia's energy connectivity to Europe creates the world's largest revenue of natural gas and grants Russia a leverage to expand its geostrategic influence in Europe and to shape its strategic relationships with European states. According to BP Statistical Review of World Energy 2017, energy dependence is determined as a percentage of direct Russian imports divided by annual country's gas demand.¹⁴ Countries such as Finland, Bulgaria, Baltic States and Visegrad group countries etc. are states dependent on Russian gas supply (**Figure 1**). And according to Eurostat, in 2016 those countries were paying more for natural gas than other counterparts in Europe.¹⁵ Germany, Italy, and France are also importing a large proportion of natural gas from Russia but are not as vulnerable as others. Historically these countries sustain strategic political and economic partnerships with Russia, their support and their role are crucial for the realization of Russia's energy projects (such as Nord Stream 2) and they possess large diversification energy capacity, such as LNG facilities and indigenous supplies.¹⁶

¹⁰ Institute of the Energy Strategy, Energy Strategy of Russia for the period till 2035, Institute of Energy Strategy, <http://www.energystrategy.ru/>

¹¹ C. von Clausewitz, *On War*, London, Kegan Paul, Trench, Trubner & C., 1918, pp. 49-59.

¹² V. Ratsiborynska, op.cit, note 7.

¹³ Commission staff working paper, *Renewable energy: a major player in the European energy market*, Brussels SWD (2012) 149 final, European Commission, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2012:0149:FIN:EN:PDF>

¹⁴ BP, *BP Statistical Review of World Energy June 2017*, <https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review-2017/bp-statistical-review-of-world-energy-2017-full-report.pdf>

¹⁵ Eurostat, *Natural gas price statistics*, European Commission, http://ec.europa.eu/eurostat/statistics-explained/index.php/Natural_gas_price_statistics

¹⁶ G. Friedman, *Putin's evolving strategy in Europe*, Stratfor, <https://www.stratfor.com/weekly/putins-evolving-strategy-europe>



*Figure 1: European countries' dependence on Russian gas*¹⁷

As seen from the map, a large majority of the Eastern European countries, the Baltic States, Finland and Bulgaria are exposed to hybrid actions in a form of energy manoeuvres, and accordingly to economic or political coercions, politically motivated energy supply disruptions and gas price disputes. The key energy transit countries to Europe, such as Ukraine, Georgia or Belarus, are largely exposed to energy weaponization, energy blackmailing or other forms of geopolitical or psychological pressures that reveal their vulnerabilities.

Analysing an economic dimension of coercion, the

gas price dispute is used very often as one of the forms of an economic, societal and political pressure. Such form of coercion is designed to undermine economic stability of a dependant country and tends to weaken social cohesion. According to the European Commission, many Eastern European countries dependent on Russia's energy resources were punished with an unfair pricing policy.¹⁸ In 2015 Bulgaria, Estonia, Latvia, Lithuania and Poland were charged "higher compared to Gazprom's costs or to benchmark prices."¹⁹ Belarus, one of the Eastern Partnership countries, was pressured with the

¹⁷ G. Collins, *Russia's use of the "energy weapon" in Europe*, Rice University's Baker Institute for public policy, https://www.bakerinstitute.org/media/files/files/ac785a2b/BI-Brief-071817-CES_Russia1.pdf

¹⁸ European Commission, *Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets*, Press release, 2015, http://europa.eu/rapid/press-release_IP-15-4828_en.htm

¹⁹ *Ibid.*



increase of the price of gas in 2017.²⁰ Such economic sanction from the Russia was a result of a political pressure that Russians were putting on Belarus in order to coerce the Belarussian government to accept its role as a military outpost. In addition, Russia was not satisfied with the dissenting position Belarus had taken regarding the Russian-Ukrainian conflict and a position played inside of the Eurasian Economic Union membership.²¹ This gas dispute became a reminder to Belarus of its political dependence on Russia and on a decreasing significance of Belarus as a transit country.

Another illustrative example of the Eastern Partnership country that has experienced different sorts of hybrid actions in a form of energy manoeuvres is Ukraine. Being geographically located between consumer states and energy producers in Russia and the Caspian Sea areas, Ukraine offers not only energy transit routes, but also underground gas storage capacities.²² Since 2014, Russia has attacked several Ukrainian energy sources, including economic and energy infrastructure, illustrating how Russia employs its hybrid capabilities.²³

Russia has been weakening Ukraine's energy infrastructure since the beginning of the war.²⁴ By annexing Crimea, Russia had already reduced

Ukraine's energy potential, further compromising the country's position and accelerating its energy exhaustion.²⁵ During its military operations in the east of Ukraine, Russia targeted the country's gas transportation system.²⁶ At the same time the occupied territories increased the Kremlin's own energy resources, placing additional energy pressure on the West.

Russia not only seized the gas fields in Crimea, it also nationalized Chornomornaftogaz, the Ukrainian energy company which was operating the Hlibovske underground gas storage in Crimea, in the north-western part of the Black Sea shelf.²⁷ These actions allowed Russia to aggravate and further exploit Ukraine's energy vulnerability and to use Ukraine's energy potential on the Crimean coast for its own future energy purposes.²⁸ Russia's annexation of Crimea deprived Ukraine of marine gas production infrastructure as well as the access to and use of the mining and drilling rigs on the Black Sea shelf.²⁹

When Russia extended its military campaign to the eastern part of Ukraine, more precisely to the Donbas region, it caused not only significant economic damage but also opened another long-lasting chapter in the energy conflict between the two countries.³⁰ When Kyiv stopped the gas supply

²⁰ Russian analytical digest number 206, *Russian relations with Belarus*, Center for Security Studies, <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-security-studies/pdfs/RAD206%20%28002%29.pdf#page=14>

²¹ *Ibid.*

²² M. Balmaceda, *The politics of energy dependency: Ukraine, Belarus, and Lithuania between domestic oligarchs and Russian pressure*, Toronto, University of Toronto Press, 2013, pp. 150-160.

²³ European Parliament, *At a glance, Understanding hybrid threats*, European Parliamentary Research Service, [http://www.europarl.europa.eu/RegData/etudes/ATAG/2015/564355/EPRS_ATA\(2015\)564355_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/ATAG/2015/564355/EPRS_ATA(2015)564355_EN.pdf)

²⁴ V. Ratsiborynska, *op.cit.*, note 7.

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ M. Rühle, J. Grubliauskas, *Energy as a tool of hybrid warfare*, Research Paper 113, April 2015, NATO Defense College, Rome, see also, NJC "Naftogas," *Effects of the military aggression*, Naftogas of Ukraine, <https://annualreport2015.naftogaz.com/en/operacijna-dijalnist/naslidki-zbrojnoji-agresiji/> (Chornomornaftogaz operates offshore gas installations on the Black Sea shelf and has licenses for 17 fields, including eleven gas fields, four oil fields and two gas condensate fields.)

²⁸ NJC "Naftogas," *op.cit.*, note 27. (Crimea has a high energy potential: a large natural gas storage facility as well as underwater resources potential combined with the gas reserves in the Black Sea that can be exploited.)

²⁹ *Ibid.*

³⁰ The Donbas region has a rich energy potential: conventional and unconventional gas fields, coal sites, shale gas deposits such as "Yuzivska," transit pipelines.



to the occupied areas of Donbas, Russia openly started providing energy as “humanitarian aid” to these “separatist” regions³¹- while still billing Ukraine for the gas used by Russia’s proxies in the rebel-held areas; bills that Kyiv could ill afford to pay in its militarily and economically weakened state. Russia’s Gazprom increased the “amount of claim to [Ukraine’s] Naftohaz for gas supplies in [the] temporarily occupied territory of Donbas by \$700 million.”³²

Ukraine is also facing difficulties with accessing most of its coal mines since they are either located in the Donbas combat zones or in the zones firmly controlled by Russia’s proxies. Consequently, more U.S. companies, especially the nuclear power company Westinghouse, started providing Ukraine with coal and fuel supplies for its nuclear reactors beginning in 2014.³³

Ukraine is only one country impacted by the energy component of Russia’s strategy. Taking into account that Ukraine is an important energy transit country the West itself and the relations between Ukraine and the West have also been affected. By destabilizing Ukraine, Russia tried to convince the EU that the country is not a reliable zone of transit. The goal of this strategy is clear: to increase the EU’s concerns about the security of gas supplies to Europe, a problem that has been pondered seriously since the supply disruptions during the Russia-Ukraine gas conflicts in 2006 and 2009. Unhappy with the existing Russia-Ukraine-EU triangle, Moscow has

targeted the EU in its campaign to discredit Ukraine as a safe transit country. The Kremlin’s intention is to bypass Ukraine and to create different transit systems that would strengthen Russia’s direct energy relations with the EU and with some important states such as Germany, Netherlands, France and at the same time increase the EU’s energy dependency on Moscow.

By advocating energy projects such as Nord Stream 2 and Turkish Stream, Russia is aggressively pursuing its energy interests and its geopolitical strategies for ‘the shared neighbourhood’. If successful, this could give the Kremlin certain additional leverage for future political manoeuvres in Europe. A single energy route Nord Stream 2 can limit the flexibility of member states to change supply route and can serve as a choke point to potential energy supply disruptions for the West. The increase of Russian investments in the Swedish province of Gotland for example, aimed at securing a supply base for the Nord Stream 2 project, can be perceived by the West “as a threat to Sweden and Estonia.”³⁴ And, according to a resolution adopted by the Estonian National Congress in Sweden (ENCS), the construction of Russia’s Nord Stream 2 pipeline could be used by Russia as a means to legitimize its sphere of influence in the Baltic Sea.³⁵ The President of Lithuania goes a step further, stating that Nord Stream 2 “is a purely politicized project directed against Ukraine and some eastern EU countries. Also, there is apparently a divide and rule policy or a divide and influence policy.”³⁶

³¹ V. Soldatkin, D. Pinchuk, E. Piper (ed.), *Russia’s Gazprom says starts direct gas supplies to eastern Ukraine*, Reuters, <http://www.reuters.com/article/ukraine-crisis-russia-gazprom-idUS-R4N0T102J20150219>

³² 24today.net, *Gazprom increases amount of claim to Naftohaz for gas supplies in temporarily occupied territory of Donbas by \$700 million*, 24today.net, <http://24today.net/open/663896>

³³ N. Peterson, *Ukraine Turns to American Coal to Defend Itself Against Russia*, *The daily signal*, <http://dailysignal.com/2017/11/09/ukraine-turns-american-coal-defend-russia/>

³⁴ W. Jakóbič, *Will Russia use the Nord Stream II to expand its military presence in the Baltic Sea?*, *VocalEurope*, <http://www.vocaleurope.eu/2016/05/03/will-russia-use-the-nord-stream-ii-to-expand-its-military-presence-in-the-baltic-sea/>

³⁵ *Estonian world*, *Sweden’s Estonian community protests against Russian pipeline in Gotland*, *Estonian world magazine*, <http://estonianworld.com/security/swedens-estonian-community-protests-russian-pipeline-gotland/>

³⁶ ERR, *Eight EU members object to Nord Stream 2 pipeline project, Estonia among them*, *News ERR*, <http://news.err.ee/v/news/c568ade4-353a-41c4-ac3e-fd167b4f5c31/eight-eu-members-object-to-nord-stream-2-pipeline-project-estonia-among-them>

Russia's goal to gather EU member states behind its new energy project has been supported by an information campaign intended to sell the Europeans the idea of Russia's reliability in energy matters. Russia also desires to propagate the idea that each EU Member State could become a 'gas hub'. A very similar strategy had already been observed in the past in the case of Turkey when Russia had tried to sell to Ankara the idea of Turkey becoming an energy transit country that would be able to control the southeastern part of Europe. This idea started to be realized in 2014 with an initiation of the Turkish Stream by Vladimir Putin. This geopolitical energy project aims to create a hub on the Turkish-Greek border, which allows Turkey to supply gas to the

South-Eastern Europe; thus, making Turkey one of the key energy players in the Black Sea region and eliminating Ukraine as a transit country.

By providing gas export via a Turkish Stream across the Black Sea, Russia achieves several strategic objectives. On the one hand, Russia strengthens its position in the Black Sea region and in the European energy market, with countries such as Turkey, Greece, and Italy. On the other hand, Russia is able to project energy power towards South-Eastern Europe and the EU and to use this regional energy dependence power as leverage for its own purposes. In this sense, Turkish Stream and Nord Stream 2 are two important regional gas initiatives for Russia



Figure 2: Turkish Stream, a natural gas pipeline running from Russkaya compressor station to Kiyiköy, Turkey across the Black Sea³⁷

³⁷ E. Banco, "Russia And Turkey Agree To Route For New Turkish Stream Pipeline Through Black Sea," *The International Business Times*, September 2015, World Section, <http://www.ibtimes.com/russia-turkey-agree-route-new-turkish-stream-pipeline-through-black-sea-1915002>

that allow it to position itself as “the main natural gas distributor in Europe.”³⁸ Such a monopolistic position in the energy market could give Russia more options to exploit Europe.

Analysing Russia’s actions in the contested areas of the EU-NATO-Russia interaction, another example emerges illustrating the destabilizing potential of Russia’s energy strategy is the warming of frozen conflicts in the post-Soviet space: the Nagorno-Karabakh crisis in April 2016. Any escalation of

the conflict around the disputed Armenian-held enclave endangers Baku’s energy export route across the Caucasus.³⁹ Two pipelines transporting oil and gas from Azerbaijan westwards are located near the Nagorno-Karabakh frontlines, putting them within reach of both Russia’s influence and of weapon systems supplied to the warring parties should the Kremlin decide to take direct action. Closing this energy route would severely decrease Europe’s hopes to reduce its dependence on Russian energy sources.⁴⁰



Figure 3: Key transit energy routes running to Europe, located close to the Nagorno-Karabakh disputed area⁴¹

³⁸ P.M. Richter and Franziska Holz, “All quiet on the eastern front? Disruption scenarios of Russian natural gas supply to Europe,” *Energy Policy*, volume 80, May 2015, pp. 177-189.

³⁹ A. Paul and D. Sammut, *Nagorno-Karabakh and the arc of crisis on Europe’s borders*, European Policy Center, http://aei.pitt.edu/71652/1/pub_6287_nagorno-karabakh_and_the_arc_of_crisis_on_europe_s_borders.pdf.

⁴⁰ *Ibid.*

⁴¹ C. Recknagel, *Explainer: Why the Nagorno-Karabakh crisis matters*, RFE/RL, <http://www.payvand.com/news/16/apr/1027.html>

⁴² H. Helén, *The EU’s energy security dilemma with Russia*, POLIS Journal, 2010, <http://www.polis.leeds.ac.uk/assets/files/students/student-journal/ma-winter-10/helen-e.pdf>



As it is seen on the example of the Nagorno-Karabakh, a zone of Russia's strategic interests, Russia is using "energy disruptions for political ends."⁴² This allows Russia to keep its dominant and monopolistic position in the energy markets of the former Soviet republics, to control its energy transit corridors, and pipeline routes, and further developments to future energy markets in Europe.

The examples above demonstrate Russia's ability to use energy to gain political advantage and influence in Europe. Discriminatory pricing, the strategy to counter energy routes that bypass Russia, disruption of gas flows and the "rewarding" of compliant behaviour with favourable gas deals gives Russia significant influence in the Eastern neighbourhood and with many countries in Western Europe.

All of those examples serve different Russian national geopolitical, political, economic, psychological purposes of influence on a strategic security situation in Europe.

Current EU and NATO diversification measures

Russia's hybrid warfare in the form of its energy manoeuvres against Europe has become a destabilizing strategy with two main objectives: to undermine the EU's energy and infrastructure potential and that of its neighbourhood, thus creating a higher degree of energy dependency; and to sabotage and cripple the EU's and its member states' capacities to quickly and effectively respond to Russia's hybrid warfare threats

and actions in general.

The EU's strengthening of its common energy market on the other hand would drastically improve the Europeans' resilience against Russia's energy pressure – a scenario that the Kremlin considers so threatening it uses energy hybrid warfare tactics to counter it.

Taking all this into account, the EU launched an initiative aimed at strengthening the energy resilience of its partner nations and of the member states themselves.⁴³ In 2015, the European Commission made an attempt to improve resilience by proposing a European Energy Union, a strategy aimed at diversifying suppliers, becoming less dependent on Russia's Gazprom and prioritizing "energy security, solidarity, and trust."⁴⁴ The EU's energy strategy leading up to a European Energy Union could include a diversification strategy aimed at creating an interconnected and transparent gas market in Europe, "the completion of the internal energy market and more efficient energy consumption."⁴⁵ As stated in the Energy Union package or "A framework strategy for a resilient Energy Union with a forward-looking climate change policy," published by the European Commission in 2015, the Energy Union strategy includes "energy security, solidarity and trust; a fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonising the economy and the research, innovation and competitiveness."⁴⁶ It also involves different energy mechanisms to strengthen the European energy market and to become more

⁴³ European Commission, *Energy Union and climate, Energy Union: secure, sustainable, competitive, affordable energy for every European*, 2015, http://europa.eu/rapid/press-release_IP-15-4497_en.htm

⁴⁴ European Commission, *A framework strategy for a resilient Energy Union with a forward-looking climate change policy*, 2015, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2015%3A80%3AFIN>

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*



united and resilient in the face of Russia's energy pressure.

A fully integrated and diverse internal energy market is one of the key policy dimensions of the European Energy Union, which is enhanced through a harmonization of common energy practices of the member states. The EU institutions have a key role in ensuring compliance with the EU's internal market rules and security of supply criteria driven by objectives of competitiveness, diversification and energy efficiency.⁴⁷ The European Commission's assessment of the Gazprom's compliance with the EU competition law and with the fair pricing benchmarks is vital in this regard. In 2015 the European Commission issued a Statement of Objections to Gazprom expressing its preliminary view "for breaking EU antitrust rules by pursuing an overall strategy to partition Central and Eastern European gas markets," in particular "by denying access to gas pipelines by third parties, and unlawful pricing."⁴⁸ As a response to the European Commission's competition concerns from 2015 Gazprom proposed commitments in 2017 that "will enable the free flow of gas in Central and Eastern Europe at competitive prices."⁴⁹ The European Commission is ensuring that all Gazprom's commitments are in line with the EU competition concerns and rules.⁵⁰

A regulatory implementation of a so-called Third Energy Package is one of the legislative mechanisms that could lead to improvement of the internal energy market. The Third Energy Package that entered into force in 2009 regulates the EU gas and electricity markets and requires "the separation of gas production and sales from the transmission networks."⁵¹ It aims at the ownership unbundling of energy companies' assets in European energy infrastructure and "the segments of the energy supply chain such as production, refining, processing, transportation and distribution" under the companies' own ownership.⁵² Since Russian energy companies control a large amount of stakes in production, processing, energy trading, storage facilities and distribution especially in Central and Eastern Europe, an unbundling of their assets can make the European energy market more transparent, robust, secure and competitive.⁵³ In 2017 the EU made several steps in order to improve the existing EU Gas Directive of the Third Energy Package which ensures that "all major gas pipelines entering EU territory comply with EU rules."⁵⁴ In this directive the EU institutions are promoting such principles of the EU's gas market completion as freedom of gas transit, access to common pipeline network, more transparent competition between gas suppliers, more regulatory transparency, stability, competition and

⁴⁷ European Commission, *Security of gas supply regulation*, European Commission, 2016, press release database, http://europa.eu/rapid/press-release_MEMO-16-308_en.htm

⁴⁸ B. Corker et al., staff report "Putin's asymmetric assault on democracy in Russia and Europe: implications for U.S. national security," *Committee on Foreign Relations United States Senate*, January 10, 2018, U.S. government publishing office: see also, European Commission, *Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets*, European Commission, 2015, press release database, http://europa.eu/rapid/press-release_IP-17-555_en.htm

⁴⁹ European Commission, *Antitrust: Commission invites comments on Gazprom commitments concerning Central and Eastern European gas markets*, European Commission, 2017, press release database, http://europa.eu/rapid/press-release_IP-17-555_en.htm

⁵⁰ S. Tagliapietra, *The EU antitrust case: no big deal for Gazprom*, Bruegel, 2017, <http://bruegel.org/2017/03/the-eu-antitrust-case-no-big-deal-for-gazprom/>

⁵¹ T. Papademetriou, *European Union: Russia challenges EU energy laws before WTO*, Global Legal Monitor, <http://www.loc.gov/law/foreign-news/article/european-union-russia-challenges-eu-energy-laws-before-wto/>

⁵² A. Krickovic, "When interdependence produces conflict: EU-Russia energy relations as a security dilemma," *Contemporary Security Policy*, 36:1, Routledge Taylor and Francis Group, 2015: see also, European Commission, *Market legislation*, 2017, legislation database, <https://ec.europa.eu/energy/en/topics/markets-and-consumers/market-legislation>

⁵³ *Ibid.*

⁵⁴ European Commission, *Energy Union: Commission takes steps to extend common EU gas rules to import pipelines*, European Commission, 2017, press release database, http://europa.eu/rapid/press-release_IP-17-4401_en.htm?t=1&cn=ZmxleGlibGVfcmVjc18y&refsrc=email&iid=3d0d02ed2bb2482f9302fef4b8241f42&uid=4106408159&nid=244+272699400



solidarity within the EU which are necessary for the EU internal gas market.⁵⁵

A promotion of energy efficiency, covering renewable resources, is amongst other key policy dimensions of the Energy Union which improves robustness of the energy market. Since the priorities of the Energy Union include “secure, affordable and climate-friendly energy,”⁵⁶ the EU institutions set up “the 2030 EU targets and policy objectives” aimed at achieving best practices model in renewables.⁵⁷ The Renewable Energy Directive establishes national priorities for member states and “requires 20% of EU final energy consumption” to come from renewable forms of energy by 2020.⁵⁸ This EU legislative framework requires a proactive national role of a Member State in supporting renewable form of energy which means that member states should set up conditions for energy modernization, identification and promotion of new technologies and reduction of energy imports.

The current Energy Union legislation and energy efficiency package constitutes an attempt to decrease the dependency on Moscow while working on its objectives both inside of the EU and also in close cooperation and coordination with each individual Member State and with the outside partner countries. In this regard the Member State’s implementation of best practices in energy security

is the fundamentals of the Energy Union’s success. Some member states take a lead in implementing the priorities of the Energy Union, especially with regard to the diversification of sources of energy supply and energy efficiency. One of the illustrative examples of such a proactive approach in energy security matters is the Lithuanian case study. In 2010 the Lithuanian government separated “the gas sales and gas transmission operations” of the Lietuvos Dujos gas utility company “in which Gazprom owned a 37 per cent stake.”⁵⁹ In 2014 the Lithuanian government completed the Floating Storage and Regasification Unit and established a Liquid Natural Gas terminal in Klaipeda that highlighted an increased role of alternative forms of energy supply as well as a role of transit routes.⁶⁰ Such a strategic move helped Lithuanian government to reduce the price for the Gazprom natural gas through 2015 and to diminish Lithuania’s dependency on Russia’s gas.⁶¹

The best practices and lessons learned are shared amongst other member states and partner nations that try to implement the best case model of energy diversification and efficiency. Poland is another example of establishing necessary leverages to reduce energy dependence on Russia. In 2016 the liquefied natural gas (LNG) terminal in Swinoujscie, near Szczecin, became operational.⁶² This terminal “of a capacity of 5bcm per year” allows Poland to reduce

⁵⁵ *Ibid.*

⁵⁶ European Commission, *Energy Union priorities*, press release database, Commission and its priorities database, https://ec.europa.eu/commission/priorities/energy-union-and-climate_en

⁵⁷ European Commission, *2030 Energy Strategy*, Commission and its priorities database, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2030-energy-strategy>

⁵⁸ European Parliament, *Promotion of renewable energy sources in the EU*, EU policies and Member State approaches, [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_IDA\(2016\)583810](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_IDA(2016)583810)

⁵⁹ A. Krickovic, “When interdependence produces conflict: EU-Russia energy relations as a security dilemma,” *Contemporary Security Policy*, 36:1, Routledge Taylor and Francis Group, 2015, p. 12.

⁶⁰ *Ibid.*

⁶¹ N. Cunningham, Gazprom cuts gas price for Lithuania amid new LNG supplies, *The Christian Science monitor*, <https://www.csmonitor.com/Environment/Energy-Voices/2014/0512/Gazprom-cuts-gas-price-for-Lithuania-amid-new-LNG-supplies>

⁶² *Swinoujscie LNG Gas Terminal, Baltic Coast, Poland*, Hydrocarbons Technology, <http://www.hydrocarbons-technology.com/projects/swinoujscie/> And *LNG Terminal, Gaz system*, <http://en.gaz-system.pl/terminal-lng/>

its reliance on Russian gas and to strengthen its resiliency in energy.⁶³ Another Member State, the Czech Republic, is focusing its energy policies on decreasing its dependence on imported resources and on promoting energy efficiency and the principles of energy sustainability.⁶⁴ Ukraine, one of the Eastern Partnership countries largely exposed to energy weaponization, is focusing its energy priorities on the development of unconventional sources of energy and on modernization of energy infrastructure.⁶⁵ All these policy objectives require public and policy efforts, alignment of national objectives with the EU regulatory norms and development of practical measures of ensuring compliance with the best

models of energy market.

The EU's regulatory and diversification energy mechanisms, the promotion of alternative energy projects within the EU, such as the Southern Gas Corridor, can also help to promote energy market integration and to diversify energy, reducing the influence of Gazprom. The components of the Southern Gas Corridor are the Trans-Adriatic pipeline (TAP) bringing new opportunities for transporting gas from Greece to Western Europe and the White Stream pipeline, aiming at transporting Turkmen gas to Europe (Figure 4). The Trans Anatolian Gas pipeline (TANAP) and the Trans-

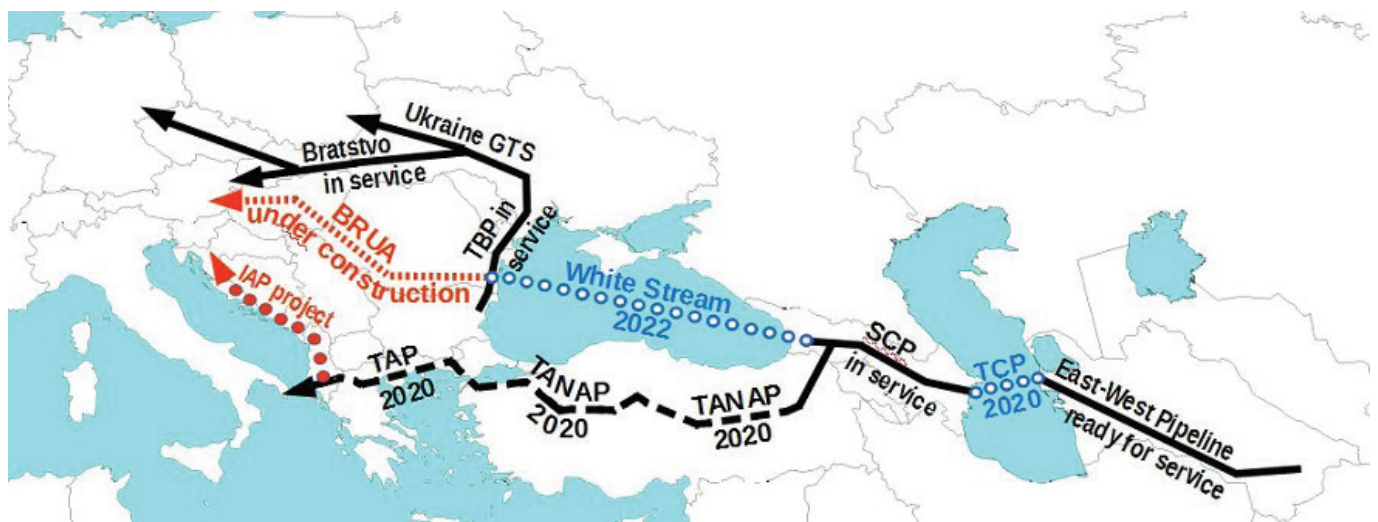


Figure 4: Components of the Southern Gas Corridor (TAP, TANAP, White Stream and TCP)⁶⁷

⁶³ UPDATE 1-Poland to receive its first U.S. LNG supplies in June, Reuters, <https://www.reuters.com/article/poland-gas-lng/update-1-poland-to-receive-its-first-u-s-lng-supplies-in-june-idUSL8N1HZ1UV>

⁶⁴ Czech Republic: State energy strategy approved, <http://www.cms-lawnow.com/ealerts/2015/05/czech-republic-state-energy-strategy-approved> : see also, *Energy Strategy of the Czech Republic up to 2040*, http://www.dreberis.com/sites/default/files/projekty/4_p_gebauer_cz_presentation.pdf

⁶⁵ Energy Strategy of Ukraine through 2035. White Book of Ukrainian energy policy "Security and competitiveness," Kyiv, 2014, http://www.niss.gov.ua/public/File/2014_nauk_an_rozrobku/Energy%20strategy%202035%20eng.pdf

⁶⁶ White Stream, *The Project-White Stream*, <http://www.white-stream.com/the-project/>

⁶⁷ *Ibid.*



Caspian Pipeline (TCP) complement the Southern Gas Corridor pipeline chain and are amongst the key elements of this Gas Corridor connecting reserves of Central Asia to Europe.⁶⁶

The reduction of Russian gas with other sources can strengthen Europe's capacities to respond adequately to external energy shocks and to Russia's energy geopolitics. Moreover, a liberalization of European energy market through the implementation of energy market regulatory and diversification policies in Europe can help to decrease significantly the leverages of Russian state over its energy supplies, to overcome the energy dependence on Russian energy imports and to promote competitiveness, stability and energy resilience in Europe.

Analyzing its role in energy security and diversification measures, NATO could also play an important part in the reinforcement of Europe's energy resilience. For example, with regard to the protection of transit zones or through cooperation with partner countries and international organizations, NATO can ensure energy resilience against energy attacks. NATO pays particular attention to the protection of critical energy infrastructure, particularly in energy producing and transit countries; to the increase of energy efficiency of military forces; to the security of transport routes; and to intelligence sharing on energy security issues with international organizations, especially the International Energy Agency and the EU.⁶⁸ The emphasis in NATO and its member

states is on situational awareness and on energy risk assessment and management in operational energy security.⁶⁹ Entities such as the Energy Security Center of Excellence in Lithuania (ENSEC CoE) provide NATO and partners with "timely subject matter expertise on all aspects of energy security."⁷⁰ This and other NATO entities, such as the NATO Cooperative Cyber Defence Center of Excellence in Tallinn and the European Centre of Excellence for Countering Hybrid Threats, are working on complementary roles towards a reduction of security risks and energy vulnerabilities inside of Europe. NATO conducts different types of exercises, such as Cyber Coalition as well as workshops and research on reinforcement of crisis response mechanisms.⁷¹ These initiatives can also support the protection of energy critical infrastructure and evaluate the diversification of energy sources as well as reduce energy vulnerabilities from hybrid attacks.

According to the NATO's resilience guidelines, one of the seven baseline requirements to be assessed is resilient energy supplies.⁷² NATO emphasizes allies' civil preparedness resilience, and preservation of critical energy infrastructure supporting military capacity during peacetime and crisis. NATO's role focuses on risks anticipation that may target modern critical infrastructures and the resilience of critical service systems.⁷³ Nowadays the NATO's new priority, "military Schengen," requires a "removal of all obstacles to cross-border military transport."⁷⁴ This strategic objective is leading to an evolution of

⁶⁶ NATO's energy security agenda, *NATO Review*, <https://www.nato.int/docu/review/2014/NATO-Energy-security-running-on-empty/NATO-energy-security-agenda/EN/index.htm> : see also, M. Rühle, "NATO and energy security: from philosophy to implementation," *Journal of Transatlantic Studies*, 10:4, 2012, pp. 388-395.

⁶⁹ *Ibid.*

⁷⁰ *NATO ENSEC CoE*, <https://enseccoe.org/en/about/6>

⁷¹ *NATO Communications and Information Agency*, https://www.ncia.nato.int/NewsRoom/Pages/19_12_2017.aspx

⁷² Resilience: a core element of collective defence, *NATO Review*, <https://www.nato.int/docu/review/2016/Also-in-2016/nato-defence-cyber-resilience/EN/index.htm>

⁷³ T. Prior, "NATO: Pushing Boundaries for resilience," *CSS analyse in security policy* No.213, ETH Zurich, September 2017.

⁷⁴ NATO in Europe needs 'military Schengen' to rival Russian mobility, *DW*, <http://www.dw.com/en/nato-in-europe-needs-military-schengen-to-rival-russian-mobility/a-40470302>



NATO logistics matters in energy supply, to a greater connectivity, interoperability and interdependence of strategic infrastructure and energy systems such as the NATO Pipeline System. This will require better fuels interoperability for energy efficiency in military operations, and will lead to a shift from static to a higher deployable infrastructure. Germany agreeing to establish a sustainment command and control agency, as well as Polish road network improvements, will greatly help with the synchronization and flow of fuel as well as military formations in time of crisis.

NATO's cooperation with partner nations in energy security matters is also one of the important roles that the Alliance is undertaking in its projecting resilience mission beyond borders. NATO's role can be strengthened through an identification of lessons learnt from cyberattacks on energy critical infrastructure or from energy supply disruptions. The best practices identified on critical energy infrastructure protection which derive from those lessons learnt are shared with NATO member states and partner nations in order to reinforce their strategic thinking on energy security matters. Moreover, education, training and wargames on energy security are a core of intelligence sharing mechanisms between NATO member states and partner nations that facilitate an identification of best practices and lessons learned. Currently many NATO wargames and training exercises where partners participate include hybrid warfare scenarios where energy, cyber and information dimensions are interconnected and where some components such as the cyberattacks on energy infrastructure are a part

of complex multi-dimensional threat environment.⁷⁵ The dynamic interaction of different elements in hybrid warfare scenarios serves learning purposes to NATO member states and partner nations. For example, the cyberattacks on Ukraine's power grid which had happened on December 23, 2015 were examined by NATO and partner nations.⁷⁶ The lessons learnt from this and other similar case studies such as in Estonia had led to an identification of the Europe's energy security risks and vulnerabilities which contributed in its way to the enhancement of the Europe's responsiveness to intentional or accidental energy supply disruption from Russia.

Overall, NATO's objectives in energy security are directed towards an assessment and a reduction of energy security risks and an enhancement of energy efficiency and resilience measures. The EU-NATO cooperative efforts in energy security are mutually inclusive and complement each other: while the EU is focusing on regulatory side of the EU's policy aiming at pursuing single energy market and increasing energy security diversification effects, NATO is focusing on the operational side of energy risk identification and assessment, enhancement of the protection of critical energy infrastructures and reduction of energy vulnerabilities. Both organizations create synergies in energy security and promote consultations and best practices in renewables, diversification of supply, protection of critical energy infrastructure and energy infrastructure integrity.

Information and intelligence sharing in energy security questions play a crucial role in the enhancement of the EU-NATO crisis management

⁷⁵ SOROTAN will challenge NATO against hybrid threats, Allied Command Transformation, <http://www.act.nato.int/sorotan-will-challenge-nato-against-hybrid-threats>

⁷⁶ V. Butrimas, *Threat intelligence report cyberattacks against Ukrainian ICS*, NATO Energy Security Center of Excellence, https://www.sentryo.net/wp-content/uploads/2017/09/EBOOK_CYBERATTACKS-AGAINST-UKRAINIAN-ICS.pdf



cooperation aimed at minimizing risks within energy systems and at maximizing resilience efforts to respond or to adjust to energy disruptions. Both organizations can be engaged more in bolstering energy resilience in its member states and partner nations while promoting strategic communication on energy efficiency mechanisms and encouraging better situational awareness of hybrid threats between the EU, NATO and partners. A particular attention should be devoted to the best case scenarios on energy resilience and to the transfer of NATO's resilience guidelines knowledge from NATO member states to the Eastern Partnership countries for further implementation amongst them. Since energy security interdependence is affecting all nations, the risk assessment on energy vulnerabilities and hybrid threats dynamics in the form of its energy maneuvers should be equally addressed and analyzed to anticipate energy disturbances and shocks and to adapt to the future energy security challenges of a globalized world.

Conclusions

Russia's use of the energy dimension represents a challenge for both EU and NATO and their collaboration in this field could be reinforced through an enhancement of strategic assessments, communication and intelligence sharing between the two organizations in the field of energy security and energy hybrid risks. A reinforcement of warning processes and crisis response mechanisms in Europe could also contribute to enhance the resilience against energy hybrid threats in Europe. In this regard, the NATO Energy Security Centre of Excellence in Lithuania could constitute an important link in conducting corresponding energy related exercises and trainings in order to better anticipate energy risks stemming from hybrid threats in the energy dimension. Finally, the strengthening of the strategic communication between NATO and EU and a constant dialogue between them on the issue of hybrid threats - including in energy - could prove beneficial not only for the elaboration of a comprehensive approach on security matters but also for an enhancement of their future institutional basis in this field.

