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## **Strategic Analysis on the Energy Security Measures of Russia**

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### ***List of acronyms***

Bcm – billion cubic meters

Bcm/a – billion cubic meters per annum

EC – the European Commission

ES – Energy Security

FDI – Foreign Direct Investment

FSRU – Floating Storage Regasification Unit

GDP – Gross Domestic Product

IEA – International Energy Agency

KO – Kaliningrad Oblast

LNG – Liquefied Natural Gas

NATO – North Atlantic Treaty Organization

NS (2) – Nord Stream (2)

UGS – Underground Gas Storage

WTO – World Trade Organization

## OUTLINE

*The aim of the present report is to provide an analysis of the energy security measures implemented by Russia, an energy exporter country, together with the implications that such actions have on NATO countries and on its energy-reliant partners. The findings suggest that the concept of Energy Security, one traditionally linked to energy-importer countries, is also dominant among the Russian political élite, as per official documents such as the Russia's energy strategy to 2035<sup>1</sup>, and Energy Security Doctrines. Interestingly enough, a discrepancy can however be noted between what stated in the above-mentioned documents and the actual role played by the energy sector, with the latest maintaining its strategic and geopolitical pivotal role in Russia. Evidence suggests that the relationship between Energy Security of resource-rich countries and importers is a multifaceted one, presenting both shared concerns and interdependency issues, as different and irreconcilable views.*

## INTRODUCTION

The rationale behind the present report is to provide the reader with a clear understanding of Russian current approach to energy security, together with the latest internal trends and developments that the sector has faced. Moreover, the reader will also be presented with the factual implications that the strive toward what is conceived to be “Energy Security” in Russia will play on NATO countries and on its energy-reliant partners. To achieve so, the report will focus on the concept of Russian Energy Security vis-à-vis that of energy importer countries. The particularly significant case of the Kaliningrad Oblast<sup>2</sup> will also be taken into account. The report is enriched with the current points of view and opinions of many experts, whom have been interviewed and will be quoted anonymously. The report will be divided as it follows:

The first chapter will be devoted to shedding some light on the complex and multifaceted concept of Energy Security. Different definitions and viewpoints will be analyzed, with the final goal in mind to assess whether or not a common ground between the two could be found.

The second chapter will focus on the Russian case. The present situation of the country will be analyzed starting from two official documents, the *ES-2035*<sup>3</sup> and the latest *Energy Security*

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<sup>1</sup> From now, ES-35.

<sup>2</sup> From now, the KO.

<sup>3</sup> Проект Энергетической стратегии Российской Федерации на период до 2035 года.

*Doctrine of the Russian Federation* (Kremlin.ru, Kremlin.ru, 2019), while the law on security of 1992 (kremlin.ru, 2010; Jirušek M. , 2020; Kalinkaitė-Matuliuskienė, 2020; BNS, 2020; Colins, 2017) will provide some useful insight of the internal situation of Russia prior to the Doctrines being published. This purely theoretical approach will then be complemented with the factual analysis of the energy sector in Russia, with the role of the national companies and of sanctions being evaluated. Also, some space will be devoted to the assessment of the new Russian projects (namely the Nord Stream 2<sup>4</sup> and the TurkStream), trends (LNG; export of nuclear technologies; *etc.*) and areas of interests (such as the Arctic; Africa; *etc.*).

The third chapter will revolve around the risks and implications that the trends and changes discussed in the second chapter may have on the Alliance and its partners. These very same aspects will therefore be evaluated and commented under an opposite perspective, that of energy-import countries.

In the fourth chapter, the (*sub*)case of the Kaliningrad Oblast will be mentioned and assessed. As a matter of facts, because of its belonging to Russia on the one side, and its geographical encirclement and proximity to Europe on the other, the region appears to be the perfect example of the applications and implications that different sets of ideologies can have on security and geopolitical matters.

Lastly, some conclusions will be drawn with regards to the irreconcilability of the different sets of ideologies portrayed in the present report, at least under the present circumstances.

## **CHAPTER I – ENERGY SECURITY**

### **What is it?**

Although many studies have been conducted on the concept of Energy Security (ES),<sup>5</sup> the existing literature still appears to be incomplete and almost entirely focused on the ES of exporting

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<sup>4</sup> From this point forward, referred to as *NS2*.

<sup>5</sup> From this point forward, referred to as *ES*.

countries, thus leaving that of resource-rich countries, just like Russia, out of the picture. As a matter of fact, the concept of ES firstly appeared in relation to consumer states (Kaveshnikov, 2010) in order to protect their markets through a guaranteed security of supply. The concept has since then evolved because of the need to reduce the existing dependence and vulnerability of those states from their energy exporters. The growing importance of ES and the strategic and security impacts played by the concept has been the direct result of the increasing reliance of those exporting countries on energy (Bahgat, 2006), as ES “is an international issue that necessarily entails growing interdependence between major producers and consumers” (*Ibid.*).

Before embarking into the analysis of the Russian ES, its effects on NATO countries and on its energy-reliant partners, it is therefore fundamental to assess the concept of ES per-se, as well as to provide the reader with a clear and complete definition of it. However, as it appears that an “indissoluble link [exists] between both sides of energy security”, (Kaveshnikov, 2010) with ES being the shared, common target in the otherwise opposite agenda of both energy exporting and importing countries, the present chapter will try to investigate both the European and the Russian stances and approaches on the topic. Before embarking into that, however, a brief overview on the scholarly approaches toward ES will be provided.

### Different perspectives on ES

The available material on the topic of ES appears to be limited – both in number and scope - as “scholarly discourses on ES have developed in response to initially separate policy agendas [...]” (Cherp & Jewell, 2011) and led, according to Cherp & Jewell, to the emergence of three perspectives on ES.

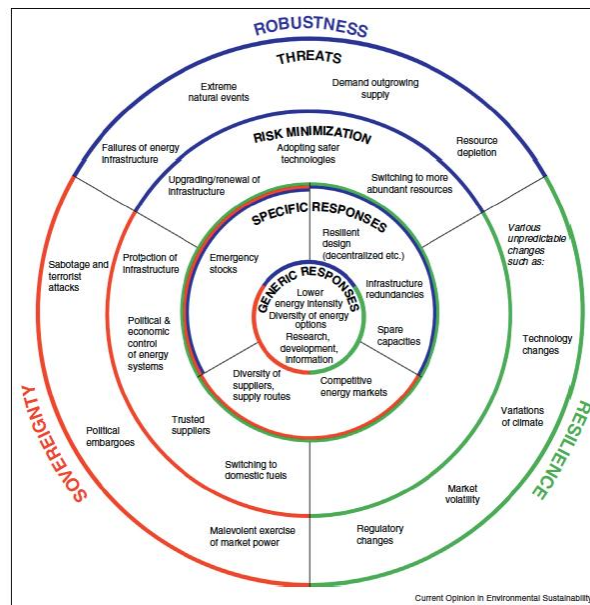


Figure 1- The three perspectives on ES.

Retrieved from Cherp & Jewell, 2011. Graphic design: V. Vinichenko.

These three perspectives, the Sovereignty perspective, the Robustness perspective and the Resilience perspectives flourished from different disciplinary areas, namely political science, engineering and economics.

- The Sovereignty perspective

As per the first half of the 20<sup>th</sup> century, the concept of ES was inextricably connected to the military realm, with the importance and consequent protection of oil supplies being fundamental for the existence of the modern armies and economies. Today, and mainly as far as the Eastern European countries are concerned, the issue has extended to gas as well. At the same time, however, ES has started to be perceived as an issue by exporters as well because of the realization of one's vulnerability vis-à-vis price fluctuations. Many countries, Russia being among those, pay now increasingly attention to the notion of "demand security".

- The Robustness perspective

Only between the 1980s and 1990s did the concept of ES acquire an economic dimension. As per Cherp & Jewell, this stream of thinking originated from the deregulation of energy supply

taking place in those decades. Such a deregulation process was intended to depoliticize energy supply, thus making “it less vulnerable to the types of politically motivated disruptions that shaped the earlier thinking on energy security” (*Ibid.*). However, this process has some evident fallacies. For one, profit-driven investments may not be synonym of secure ones.

- The Resilience perspectives

By the end of the last century, yet another challenge was added to the already entangled picture of ES, namely the vulnerability of the technical system. Moreover, for the first time those different challenges, which had historically been dealt with separately, are now more than ever intertwined. An example of this interconnection is shown by Russia itself, where natural gas exports of 2018 accounted for more than 7% of the country’s national budget revenue and 3.7% of its GDP, with the latter figure almost coinciding with official defense spending (Mae, 2020).

### Toward a definition of ES

The shortest definition of the concept is probably that published by the IEA, which defines ES as the “uninterrupted availability of energy sources at an affordable price” (2020). Longer and more complex definitions are provided both by Russia (within the ES-2030 and the Energy Security Doctrine of 2019) and the European Commission. In the National Security Doctrine to 2030, ES is defined as “governmental policy mechanisms and actions to assurance regular energy supply for domestic and international energy markets and protect this energy supply from external and internal threats that can potentially bring serious damages to national economy and energy sector” (Ministry of Energy of the Russian Federation R. , 2009; Rapoza, 2020). In the latest document, the Doctrine of Energy Security of Russia, which dates back to 2019, ES is described as “a state of protection of the national economy and population from the threats to national security in the energy sector, in which a compliance with the legislation of the Russian Federation for fuel and energy supply to consumers, as well as fulfillment of export contracts and international obligations of the Russian Federation, is ensured” (Doktrina energeticheskoy bezopasnosti Rossiyskoy Federatsii, 2019). The case of Russia is particularly emblematic as internal ES is fundamental to ensure the economic well-being of the state, as well as a sound Federal Budget. To further clarify the concept and to use Seliverstov’s words, one could assess the Russian ES as made up of the



following core elements: “the ability of the energy sector to meet internal and external demand; the ability of consumers to use the energy resources efficiently; and the stability of the energy sector in the face of internal and external economic, technical and natural threats and its ability to minimize the damage caused by different destabilizing factors” (Seliverstov, 2009).

As per the definition of the European commission, ES is “the ability to ensure that future essential energy needs can be met, both by means of adequate domestic resources worked under economically acceptable conditions or maintained as strategic reserves, and by calling upon accessible and stable external sources supplemented where appropriate by strategic stocks” (Green Paper - Towards a European strategy for the security of energy supply, n.d.). As long as the case of the EU is concerned, it is of vital importance to underline that this sense of growing vulnerability in the realm of energy is the results of many different developments. First, it has been caused by the many geopolitical and economic occurrences unrolling during the first decade of the 21<sup>st</sup> century, which took place both on the supply (diplomatic confrontations over Iran’s; rising ethnic conflicts in Iraq; *etc.*) and demand (rapidly increasing energy consumption in the BRIC area) sides (Bahgat, 2006). The increasing dependency and reliance of the EU on Russia in the energy realm, coupled with the precipitating geopolitical situation have exacerbated the central European assumption of Russia being the the main threat to their ES, because of the country’s attempts “to use gas as a political weapon to blackmail [...] neighboring consumer states” (*Ibid.*).

### The four dimensions of ES

In the academic realm, ES has been described as the combination of four dimensions, (Bogoviz, Lobova, Ragulina, & Alekseev, 2018) being:

- a. *Energy availability*, aimed at measuring the level of dependency from a given commodity;
- b. *Energy affordability*, which refers to the ease of accessing a given commodity;
- c. *Economic and energy efficiency*, focused on consumption and saving potential;
- d. *Environmental stewardship*, focused on the kind and level of emissions.

According to the same authors, ES is a measurable and thus comparable concept (2019), as the energy security performance of a given country can be indeed measured. According to their findings, the Russian energy security performance has experienced a substantial, positive growth between 1990 and 2015 in all of the four dimensions of ES, with the most significant changes being evident in the realms of *availability*, *affordability* and *environmental stewardship*. As noted before,

the need to strengthen the own ES is particularly felt in Russia, being the country one of the largest energy producer and exporter in the world. However, in contrast to the positive and energy secure environment showcased up to 2015, the latest international and internal trends have started to cause many concerns toward the strategy to follow for the nearer future and studies have shown a regression of ES indicators in Russia (Karatayev & Hall, Establishing and comparing energy security trends in resource-rich exporting nations (Russia and the Caspian Sea region), 2020). This regression can be easily explained. For instance, the quantitative analysis carried out by Bogoviz et al. (2019) using the z-scores methodology developed by Brown et al. (2014) suggested that the registered increase of 1.2 points over the 1990-2015 period in the *availability* dimension, was the direct consequence of the increased Russian ability to export coal (in 73 times) and keep almost the same negative values in oil and natural gas dependency” (Bogoviz, Ragulina, Lobova, & Alekseev, 2019). However, it is very much self-evident that this trend cannot be kept-up in the current global environment, that points toward decarbonization and a quest toward a greener approach to energy. The same rationale applies for the analysis of the *environmental stewardship*, which increased of 0.91 points (*Ibid.*), as Russian progresses toward energy efficiency and a higher share of renewables appear to be almost non-existing, with the country’s high-estimated bioenergy potential still unexploited (Karatayev & Hall, Establishing and comparing energy security trends in resource-rich exporting nations (Russia and the Caspian Sea region), 2020). As a matter of fact, as per the year 2017, data shows that Russia was, among the large economies, the second largest country in terms of emissions embodied in exports, while the first in terms of carbon intensity of exports (Makarov, Chen, & Paltsev, 2017). Moreover, with the energy sector as the driver of its economy, Russia is likely to be trapped between its current model and the risks of market barriers and other spillover effects coming from its reliance on polluting sources, and the diversification of its economy and a complete re-thinking of the strategic role of the energy sector within the economic and political spheres of Russia.

### ES of resource-rich countries

According to the IMF, a resource-rich country can be described as such “when exports of non-renewable natural resources such as oil, gas, coal, minerals and metals account for more than 25% of the value of the country’s total exports” (Hinchcliffe, Reinsdorf, & Stanger, 2017) and Russia, with its 62.7% attested share of non-renewables, (Karatayev & Hall, 2020) clearly fits well within the

parameter. Although as stated at the beginning of this chapter, the existing literature tends to focus on the ES of importing countries, resource-rich energy-exporting actors are those who face the more complex set of energy security options (*Ibid.*), mainly because of their vulnerability to external shocks. This general lack of researches and data goes hand in hand with the lack of understanding of the risks revolving around ES showcased by resource-rich countries, as the abundance of resources is perceived as a “cushion”. This internal conception often translates into a policy vacuum (*Ibid.*) or, as we will see in CHAPTER II, in not to-the-point or committed enough guidelines and strategic plans.

Generally speaking, the “countries-exporters of energy resources, to which Russia belongs, are in a more complicated situation” (Bogoviz, Lobo, Ragulina, & Alekseev, 2018), as the key features of their ES are numerous. Some examples are “the increase of the effective excavation and utilization of energy resources, monitoring of deposits of the key energy resources, such as oil, gas and coal, prevention of depletion of the fields, active exploration of new resources, development of the export and sales network and keeping control on the markets of the importing countries” (*Ibid.*).

### Is there a common ground?

If one takes into account the basic elements of the Russian ES and the vision portrayed by the European Union in 2000 in the Green Paper, which revolves around the technical and commercial components, it is undoubtedly possible and correct to assume that the two sides have overlapping but distinct ideas, because of their position of provider and importer (Seliverstov, 2009).

It should by now be clear that, ideally, a common ground should be found. The emergence of a meeting point to bridge the opposite views that different actors hold on ES, both in the academic world and in the political and economic realms would lead to a stronger and more complete methodology (as per the academic dimension) while creating economic and political predictability (Kaveshnikov, 2010). The latest would, at least theoretically, ease the countries’ “quest” toward ES. According to Kaveshnikov some practical actions to reach such an outcome would be, among the many others: to share the infrastructural costs, being transportation one of the crucial aspects of ES and security of transit another shared concern; to create shared and accepted mechanisms; to create some ground rules for the establishment prices so to provide the lowest possible volatility and to agree on stable and predictable energy flows. (2010) However, these conditions appear today, even more so than ten years ago, almost impossible to be fulfilled

as the incompatibility of the two approaches do not allow the creation of a stable common ground. As a matter of fact, security of demand remains the mirror image of security of supply and the improvement of the former, cannot but jeopardize the latter and vice versa. On the other hand, being ES an international issue that entails growing interdependence between producers and consumers, it appears that no country could, on its own terms, achieve it (Bahgat, 2006).

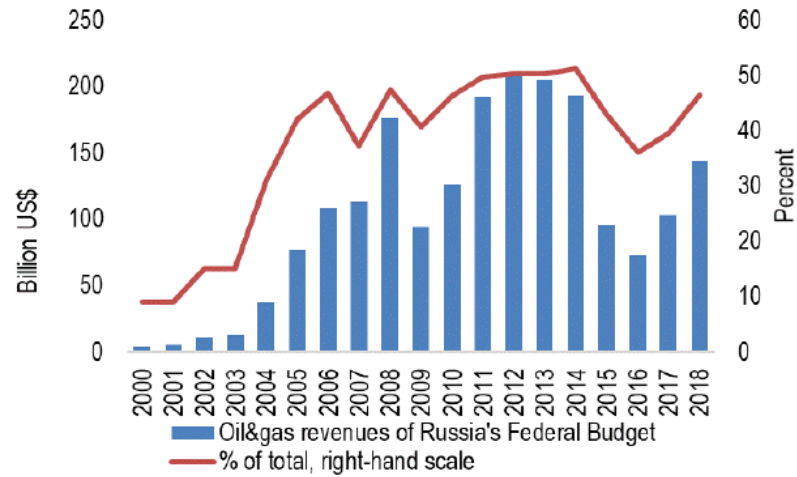
The Energy Dialogue of 2000 had indeed been created to function as a permanent consultative mechanism between the two parties, and it was shaped around five agreed core interests: the insurance of security of energy supplies of the European continent; the development of the potential of the Russian economy; those of the pan-EU market: to address the challenge of climate change and, lastly, to assess the conditions framing the use of nuclear energy (Seliverstov, 2009). In spite of the establishment of the Roadmap until 2050, “a long-term perspective to their mutual energy relations” (European Commission, 2013), “the level of legal formalization (is) not enough, compared to the scale of relations and amount of supplies” (Seliverstov, 2009), thus not entirely solving this very debated, both conflictual and lucrative, relationship.

Future research should therefore move away from the too-often and too-simplistic used approach as, in spite of being divergent and incompatible, the European and Russian views on security issues also present some shared concerns. It is on those very same shared concerns that scholars should focus in order to provide satisfactory answers that could be beneficial to the academic world and to the political/economic realm, as “ES analysis should [...] be regarded as a positive sum game, as security of consumers could not be achieved if Risks of producers increase or vice versa” (Kaveshnikov, 2010).

## CHAPTER II – THE CASE OF RUSSIA

### ... through the Russian conception of ES

As per 2019, the fuel and energy sector of Russia employed more than two million people; accounted for more than 20% of the country’s GDP, for 50% of its exports and for more than 40% of its budget (Lobova, Bogoviz, Ragulina, & Alekseev, 2019).



Source: Authors, Ministry of Finance of the Russian Federation

Figure 2 – Oil and gas revenues in the Russian Federal Budget

The importance played by this sector in the overall performances of the country is therefore uncanny.

Since the end of the Soviet Union and some period of reassessment and set-backs - namely the transition to a market economy and the credit crunch of 2008 generated from a spill-over effect of the global crisis - Russia has seen its GDP growing at a fast pace to the point that, in 2007, the World Bank declared that the Russian economy achieved “unprecedented macroeconomic stability” (PBS, 2009); (Rozhnov, 2007) and in 2012 the Financial Times rated Russia as second by economic performance among G20 (Atkins, 2012). These eulogies, coming from international - thus external - observers, have been strong drivers in the consolidation of the internal economic and political structure of the country, both revolving around the primacy of the Fuel and Energy Complex (FEC)<sup>6</sup>. The pivotal role of the FEC explains the strongly felt importance of achieving ES, the strategic importance of Russian national energy companies and their well-being as key to national ES (Novikau, 2020).

<sup>6</sup> From this point forward, referred to as *FEC*.



Figure 3 - Russia GDP Annual Growth rate

This primacy also shines through the internal priorities stated in the Energy Security Doctrine of the Russian Federation and in the ES-35, primarily under the form of defending those “National champion” companies in Russia (by ensuring security of production, the access to qualified labor and top-notch technologies; *etc.*) and abroad (protection of legal rights; access to the market; *etc.*).

### The Russian Energy Security Doctrine(s)

The latest Energy Security Doctrine has been approved on May 13, 2019 to replace the previous document dating back to November 29, 2012. Prior to the Energy Security Doctrines, Russian ES was not assessed separately, but could only be found mentioned as a mean to ensure security in comprehensive official documents such as the Law on Security of 1992 (Art. 12) and the Concept of National Security of the Russian Federation of 1997 (BaseGarant, 1992); (Bogoviz, Lobova, Ragulina, & Alekseev, 2018). In those two documents, which became “the major [ones in] defi[ning] governmental policies in the sphere of security” (*Ibid.*), ES was only approached from afar, within the contest of the deteriorating ecological situation of Russia and circumscribed to the threat of natural resources depletion. The Energy Security Doctrine of 2012 was therefore shaped out to be the first official existing document in Russia fully focused on the concept of ES; thus its importance for the present report.

The Energy Security Doctrines are official documents issued with the aim to define the strategies and actions that the Government should follow to achieve a climate of ES in Russia.

## - THE RUSSIAN ENERGY SECURITY DOCTRINE OF 2012

In this first version of the document, the ES of Russia had been defined taking into account three different levels – the global, the national and the regional. Two main categories of threats to ES have been: external and internal ones (Energy Security Doctrine of the Russian Federation, 2012). The threats the Doctrine refers to, appear to rest on the “Robustness perspective” assumption discussed above, thus encompassing many different sectors, such as the economic and political, and recognizing that ES cannot be analyzed, nor achieved, if considered as an isolated factor. Among the external threats, it appears that “international politics and economics [...] could weaken the ES of Russia as a result of their accumulative actions or separately (Bogoviz, Lobova, Ragulina, & Alekseev, 2018). The internal threats focus, instead, on the FEC itself and, among the others, they are of economic, political, technogenic and natural origin.

In accordance with the Doctrine, Russian ES is characterized by three factors: the ability of the FEC to provide enough and high-quality energy resources at an accessible price; the ability of the economy to expand the availability of these resources while, at the same time, limiting their demand; and the obtainment of a sufficiently high enough level of sustainability of the FEC, so to shield the country and its economy from the event of any disruption. In light of this, the Doctrine of 2012 pushed forward some challenges and opportunities for the ES of Russia. For the sake of the present report, in this section only the most important ones will be briefly analyzed, so to enable the reader to compare the version of 2012 with the subsequent one, that of 2019.

Already back in 2012, the emergence of new technologies was seen as both a menace and a possibility, as the nature of the changes those new technologies would have implied were still unknown. However, the Doctrine was very forward in assessing that a rethinking of both priorities and provisions of ES was to be undertaken (Energy Security Doctrine of the Russian Federation, 2012). Moreover, to quote President Putin, other pivotal issues to which the attention was drawn have been “the growth of trade in liquefied natural gas [...]” a market “all of us know this well [...] and understand its laws”, urging to be “very prudent in our actions and at the same time very flexible” (Meeting of the Commission for strategic development of the Fuel and Energy Sector and environmental security, 2012). In the very same meeting, he then added that “our priority must be the domestic market [...] taking into account the potential of Asian countries [...] and gas delivery methods. [...] Let me reiterate; we must take full account of the current trends in the global gas market in cooperation with our international partners, to find new mutually acceptable forms

of cooperation, to be closer to the end users. Taken together, these steps will increase the export potential and competitiveness of Russian energy resources and enhance the status of our country as one of the leaders in the global export market” (2012).

#### - THE RUSSIAN ENERGY SECURITY DOCTRINE OF 2019

This second version of the document was approved on May 13, 2019 and offers a more-to-date scenario of ES in Russia, one that necessarily encompass all of the changes that have been ongoing since 2014. To quote the Secretary of the Security Council Nikolai Patrushev, “during this time some fundamental changes have been taking place both in the world and in our country, giving rise to new challenges and threats that cannot be ignored” (Gerejxanova, 2018). In light of this, the new Energy Security Doctrine is about “strengthening cooperation with foreign partners, defending Russian energy companies’ legal rights abroad and access to international markets, and further developing Russia’s import replacement program<sup>7</sup>” (Griffin, 2020). As reported in the Kremlin.ru website, “the Doctrine is a strategic planning document in the field of national security reflecting the official view on ensuring Russia's energy security. The legal framework for the Doctrine includes the Constitution of the Russian Federation, federal constitutional laws, federal laws, and normative legal acts of the President and the Government” (2019).

As per its predecessor, also this second version of the Energy Security Doctrine identifies the internal and external threats jeopardizing the country’s ES. As long as the external dimension is concerned, the four main sources of insecurity are coming from: a reduction of the traditional sales markets; the implemented measures to damage the Russian FEC and, consequently, the Russian economy; discrimination toward Russian companies operating in the energy sector; and illegal selection of exported resources from third states (Kravčenko, 2019).

On the domestic front, threats to the ES of Russia steams from the high level of corruption witnessed in the country, thus leading to uncertainty and to an unproductive and unattractive environment for FDI. Another issue is provided by the lack of technologies and high-quality resources, which is a direct consequence of International sanctions (Putin's New Energy Security Doctrine Preaches self-reliance, 2020). The Doctrine then proceeds with the identification of economic challenges to the Russian ES, namely the market shift toward the Asia-Pacific region; the

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<sup>7</sup> *Импортозамещение.*



growing production and strategic importance of LNG; the global slowdown in the demand of energy resources (now exacerbated by the COVID-19 pandemic) and the steady growth of alternative, greener forms of energy (Kravčenko, 2019).

In light of the above-mentioned, it becomes evident that Russia's new stance is one of "self-reliance in face of isolation" (Putin's New Energy Security Doctrine Preaches self-reliance, 2020), with its key external priorities being the development of effective cooperation through the EEU, CIS, BRICS, SCO, OPEC and the Gas exporting countries forum; while the key internal ones targeting the defense of companies and investors' rights, an increase in energy efficiency, the achievement of technological independence and the development of Russia's own LNG facilities (Griffin, 2020). The Doctrine appears to be "written about the need to create conditions for internal competition and the stability of regulation [...] as many companies are cut off from Western capital markets due to sanction" (Kravčenko, 2019), turning themselves into a burden on state institutions and banks, on which they are also dependent for finances.

### The Russian ES-35

The Russian ES-35 is the long-awaited successor of the ES-30; the latest being a document approved by the decree N°1715-r of 2009 (Ministry of Energy of the Russian Federation, 2010) with the objective of "maximiz(ing) the effective use of natural energy resources and the potential of the energy sector to sustain economic growth, improve the quality of life of the population and promote strengthening of foreign economic positions of the country" (*Ibid.*). Its updated version, the ES-35, is set to illustrate the new long-term, proactive strategic behavior, in contrast to the short-term reactive one adopted by Russia at the eve of the 2014 sanctions. The ES-35 long-term vision is mainly directed toward the development and the safeguard of the Russian FEC. This should not come as a surprise, as data shows that about half of Russian Federal Budget revenues are directly stemming from it (Lobova, Bogoviz, Ragulina, & Alekseev, 2019), with hydrocarbons still making up for roughly  $\frac{1}{4}$  of the Russian GDP and for  $\frac{2}{3}$  of the earnings from exports (Novikau, 2020). The validity of a secure FEC, together with evidence of it being still too-closely linked to the country's wellbeing, have started to be self-evident after the oil price plunge of 2014-2016, and once again proven by the latest slump in global oil prices and its consequences. However, "having almost unlimited access to domestic hydrocarbons, Russian policymakers are not concerned about dependency on fossil fuels and the diversification of supply, and therefore these components are largely neglected in the

document” (*Ibid.*). According to Natalia Orlova of Alfa Bank, 2020 “bought [...] a very strong increase in the federal budget’s dependence on oil prices” (Korsunskaya & Ostroukh, 2020), while the Russian Finance Minister Anton Siluanov have affirmed that the Russian budget of 2020 is expected to be a negative one, with a deficit of 0.9% of GDP, a stark percentage if compared to the initial expected surplus of 0.8% of GDP (Reuters Staff, 2020).

According to Russian Federal law, the “Energy Strategy” document of the country should be updated every five years (Mitrova & Yermakov, 2019); thus, the ES-35 was a much needed and awaited document, both because of the prominent role of energy in Russia and because of the legal loopholes that such a vacuum was creating (*Ibid.*). However, in spite of being the “best available indication of Russian energy policymakers’ plans” (*Ibid.*), the ES-35 fails to address several crucial issues, while at times postulating some contradictory points, notably if analyzed in comparison with the Energy Security Doctrine. The main points listed in the ES-35 as hindrances to the development of the Russian energy sector could be divided into three main categories: economic, sanction-related and on climate policies.

As long as the economy is concerned, the main problems arise from the low competitiveness of the Russian economic model, one that is still very much revolving around commodity prices and their oscillations in the global arena; low rates of economic development; an unstable and uneven economic recovery; and the substantial changes underwent in the global energy markets, where new exporters, markets and practices have emerged, thus leading to the structure and volume of demand to change and competition to aggravate (Alekseev, Bogoviz, & Goncharenko, 2019) .

Under the sanction-related umbrella, the authors mention the aggravated geopolitical relations and the consequent transformation of regulations and emerging of market barriers; the lag in technological development and the consequent dependency from third-parties technologies; the low renewal of production assets and infrastructures; the difficulty in attracting foreign loans and investments (*Ibid.*).

For what concerns the “green turn”, the ES-35 conceives the tightening of international climate policies as a hindrance to the ES of Russia, while at the same time addressing the need to develop renewable energy systems (RES) and reducing the country’s energy intensity and emissions (Mitrova & Yermakov, 2019). Those promulgated points appear to be strikingly at odds with Russia’s track record and future intensions, but also to be missing a solid logical ground. As a matter of facts, it is blatant that the efforts in one direction cannot but even out the improvements in the other, as

it is impossible to lessen one's footprint while at the same time preaching the importance of hydrocarbons and emphasizing the need to develop carbon resources, as per in the ES-35.

Another contradictory point within the ES-35 is the document's lack in real commitments with regards to structural reforms in the sector and, "although this is not explicitly mentioned [...], the tone clearly suggests that the Russian government continues to view Gazprom as the most important actor in the sector for the future, [...] (with no mention to) the possibility of Gazprom's unbundling and the separation of the gas transportation network or going doing away with the concept of the single export channel for pipeline gas" (Mitrova & Yermakov, 2019). Therefore, with Gazprom maintaining its centrality in the energy sector and with no real scheduled data for the company - nor for the arena in which it operates - to undergo any internal restructuring, it remains to be seen *how* and *if* Russia will be able to achieve what the ES-35 postulates. The example of Gazprom and the neutral stance applied to it, are "clearly a reflection of the impasse between Gazprom and the government on the issue. Although both sides agree on the end – the need to develop a real market for natural gas in Russia – the means are still being vigorously debated [...]" (*Ibid.*). Therefore, while portraying a correct and expansive analysis of the state of Russian ES at present, with the reaffirmation of the role of the "National Champions" in general, and of Gazprom in particular, the above analyzed document seems to stop short, as it fails in allowing the implementation of what it postulates.

Hence, one could conclude that in both the Energy Security Doctrine and in the ES-35 some contradictory points and questions emerge: How does Russia plan to couple its dependency on energy exports and its willingness to compete on the global market? To achieve its ES, will Russia try to further centralize State's control over the sector? How does Russia plan on managing to support transition patterns and to achieve energy efficiency while maintaining its reliance on polluting fuels and exploiting cheap technologies, together with affirming that the world community should not impose restrictions on the country's ES? Here below, I will try to provide an answer.

### *The green turn*

Alexander Novak, the Minister of Energy of the Russian Federation has recently admitted that the COVID-19 pandemic will undoubtedly (Novikau, 2020) and radically change the energy sector, as it will work as an incentive for the making of a larger share of renewables in the overall energy mix. Russia has about seven to ten years to adapt to the sector's structural change and to

complete its transition (Makarov, Mitrova, & Kulagin) but, as energy policies are closely monitored by the Government, changes have so far lagged behind in favor of the well-being of those strategic national companies. As a matter of facts, domestically, tighter environmental regulations would primarily translate into additional financial and bureaucratic burdens on them (Novikau, 2020), which would in turn undermine the ES of Russia. In line with this, Russia has only participated to Kyoto's first-round and has signed and ratified the Paris Agreement with a baseline emission level so high that it would literally require no efforts nor major investments in complying with it (Cordell, 2019).

#### - SPILL-OVER EFFECTS

However, although via spill-over effects, there is evidence that the *Post Paris Agreement* international landscape could heavily affect the ES and economy of the Russian Federation. Any external progress in renewable energy, efficiency and energy intensity are viewed as a risk to the internal ES (Novikau, 2020) as they would translate into a reduced consumer base for Russia and, in turn, disable the current way of fossil export-based development and led to the country's GDP growing rate to fall of half of a percentage point (Manfred & Tagliapietra, 2020). It is therefore evident that the picture is bigger than the mere Russia's stance on its own climate policy, and that the country will have to consider other actors' choices, as it will be inevitably affected by them.

#### - THE ROLE OF CARBON

Another climate policy, risk-related factor, are the market barriers Russia may find itself facing as a result of its exporting energy-intensive goods (Makarov, Chen, & Paltsev, 2017). Those barriers would in turn limit Russia's capacity to attract FDI. As a matter of facts, Russia is the second largest country in terms of emissions embodied in exports, while it ranks first among the carbon-intensive exporters (*ibid.*) and, as the carbon sector is concerned, prospects look particularly grim. As a matter of facts, Russia's coal sector appears to be the most vulnerable one for many reasons: first, coal production in Russia is concentrated in small towns, with no diversification of their local economy; second, not only coal consumption is expected to decline both in Asia and the EU, but trade and market barriers are being used globally to disincentivize its utilization; and third, the ES-35 lacks in acknowledging these ongoing processes and in providing any domestic regulation, while

on the contrary pushing forward the possibility to expand coal exports 1.5 times in its “optimistic scenario” (Griffin, 2020).

## - RENEWABLES

In addition to this, Russia’s renewable share is to this day certainly well-inferior to that of other developed economies, so as its targets are.

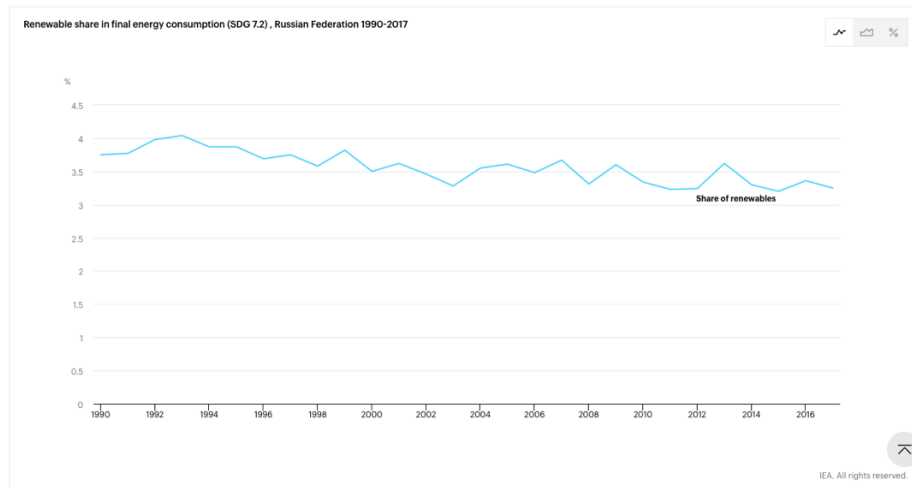


Figure 4 - Renewable share in final energy consumption in the Russian Federation.

In 2009, Russia introduced a 4,5% target to be reached by 2020 as per the share of its renewable electricity production (Cordell, 2019), a threshold still unachieved and twice revised, as deemed unreachable. At present, the target to be reached is of a mere 2,50% by 2024 (*Ibid.*), with evidence suggesting that, at best, the country will be able to better its current 0.16% share up to 1% (Makarov, Chen, & Paltsev, 2017).

## - BIOENERGY AND ENERGY-SAVING POTENTIAL

These percentages become even more enlightening if related with Russia’s enormous, yet unexploited, bioenergy and energy-saving potential (Karatayev & Hall, 2020); (Alekseev, Bogoviz, & Goncharenko, 2019). As a matter of fact, the Russian economy is extremely energy intensive, thus its energy efficiency and savings could be drastically increased, if not for the lack of effective policies and studies to initiate and track progresses. According to Lobova *et al.*, when tracking its energy efficiency, Russia still relies on unreliable indicator and “has no effective evaluation mechanism [...] for providing policy makers with relevant and accurate information”, nor any kind of subsidy or loan

to incentivize the changes (2019). So far, as long as Russia is concerned, the only positive example of low-carbon technology development seems to be the nuclear (Makarov, Chen, & Paltsev, 2017).

#### - LIQUEFIED NATURAL GAS

The status of the LNG as a “less-polluting fossil fuel option” is still at debate, also in the EU, now actively working toward its emission-free target for 2050. The pivotal role of LNG in Europe has been first acknowledged by the European strategy of 2014, whose main priority was on diversification, to be then reaffirmed in the European Strategy for liquefied natural gas and gas storage of 2016. However, since the issuing of the Winter Package, the European agenda has swiftly moved toward the goal of climate neutrality, thus all subsidies towards fossil fuels, as the LNG is, have been stopped. The European Green Deal<sup>8</sup> of 2019 does not contain any direct reference to the LNG.

When discussing Russia and the LNG, one needs to take into account both internal and external dimensions, namely the Yamal LNG, the first successful Russian LNG project; and the Klaipeda LNG terminal, the floating storage and regasification unit terminal built in Lithuania that has drastically changed the energy equilibrium in the Baltic States. The terminal started operating in December 2014, and it could be seen as a timely implementation of the main short-term obligation of the European Energy Strategy, namely the need to diversify energy suppliers. Interestingly enough, with 90% of the energy arriving at the Klaipeda LNG terminal being of Norwegian origin, one still cannot talk about *diversification* as such, but it is evident that this whole new degree of independence from Russian energy exports has been beneficial.

#### - YAMAL LNG

Yamal LNG is the first *successful* LNG project implemented by Russia, but it is not the first LNG facility to be ever build in the country<sup>9</sup>. The Yamal LNG also becomes the first strategic project to be owned and operated by a Russian private company, Novatek. This could be read as a sign of competition in the Russian energy sector, as the forecast of Gazprom’s decline, as the two

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<sup>8</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)

<sup>9</sup> The first one is Sakhalin 2 by Gazprom. It dates back to 2009.

companies may engage in cooperation for the same market (Mikulska, 2018), or as the enhancement of the overall ES of Russia, especially in those projects translating into further cooperation in the Arctic region. The Yamal LNG supplies both the Asian and European market, depending on the season, and it was constructed mainly in cooperation with Chinese companies, once again underlying the increased difficulties that Gazprom faces in accessing the European market.

As per above, some have advanced the hypothesis that “Novatek’s gain could become Gazprom’s loss – if not Russia’s loss” (*ibid.*), although it appears naïve to believe that Novatek is operating as an individual market player, fully detached from the Kremlin. Quite the contrary, under a purely security stance, the development of a proper LNG market demonstrates a step forward in Russian ES, as the outcome is coherent with the ES-35 and, although not mentioned in the strategy, Novatek’s success may also point to a the directed promotion of more than a single national champion (Mitrova & Yermakov, 2019), proving that “diversification is popular also in the export business” (Anonymous, 2020). The role of the LNG and, more broadly speaking, of the Russian Arctic, seem to fall into the “new generation of pipelines aimed at ensuring sustainability of Russia’s gas output in the 21<sup>st</sup> century” (Mitrova & Yermakov, 2019), with the LNG directed at the growing Asia-Pacific market.

### The role of sanctions

As seen above, economics sanctions figure among the external threats to ES acknowledged in the Russian ES-35. However, when talking about the international sanctions imposed on Russia after the events of 2014 and their consequences on the country’s economy and global posture, it is hard to find agreements between scholars, both in terms of the *nature* and the *effectiveness* of the measures. For instance, some believe that “the European sanctions have been light and that the blows suffered by Russia came from the falling oil prices, and not from the sanctions per se” (Anonymous2, 2020). On their consequences, some have read sanctions as drivers for strategic developments - as they have enabled Russia to speed up some already-on-the-way processes, such as import substitution (*importzameshenie*), a program focusing on many issue-areas, from food to energy self-sufficiency - ; while others believe that sanctions have overall, together with other developments, threatened the status quo of Russian natural gas as, “like any state-imposed

unexpected actions on market operation, [they] reduce the predictability of the operative environment on both the supply as well as the demand side” (Anonymous, 2020).

As a matter of fact, in 2015 the Kremlin approved a two-tier program aimed at finding different markets from where to import and, on the other, to push for the innovation and reindustrialization of the country, mainly in manufacture (Connolly & Hanson, 2016). Together with this grand plan, an official document listing “foreign” (meaning here from outside of EAEU) high-tech products not to use was issued. On August 11, 2015 the first meeting of the Government Commission on Import Substitution was held and in his opening speech, Dmitry Medvedev stated that “The commission's task is to create appropriate conditions for Russian producers in those industries and sectors of the economy that remain highly dependent on imports [...]. Our goal is not to substitute imported goods at any cost, especially for mediocre goods made in Russia. This is economically inexpedient and simply impossible. We are talking about helping Russian companies produce world-class, modern, high-quality and high-demand goods, which would be able to compete not only on our domestic market, but also internationally; [...] Such import substitution makes obvious sense, but of course, in some cases, foreign technology will have to be used” (Government.ru, 2015). However, the actions taken by the Kremlin after 2014 are in line with the Russian previous political agenda and, therefore, sanctions appear to simply have given them new momentum, as the above-mentioned projects fell into the short-term, reactive stance adopted by Russia at the eve of 2014 events. Both *importzameshenie* and self-sufficiency do not, however, eradicate the underlying issue: economic sovereignty cannot be reached as long as the GDP growth remains tightly correlated with the performance in the hydrocarbons industry. Moreover, those strategies have been much more difficult to be successfully carried out because of the post-2014 negative international environment. As the ruble depreciated, the prices of imported machinery and technology increased and this, coupled with the typically low availability of Russian replacements, led to a sharp increase in modernization and expansion costs. High interest rates are preventing people from embarking in accelerated investments and the easing supposed to be coming from the Governmental help is not enough, as funds are disbursed later than announced (Twigg, 2019).

For what concerns the energy realm, international sanctions were initially focused on the oil sector only, to later expand and include the natural gas exports as well, specifically targeting the NS2 pipeline (Novikau, 2020). As a result, many companies have been left unable to rely on Western capitals and technologies, thus turning toward the Russian government for support. International sanctions have clearly exacerbated Russian internal dynamics, thus allowing the state to play an



even bigger role in the economy; this at the expenses of neo-liberal macroeconomic policies and market behaviors (Mitrova & Yermakov, 2019). An enlightening example of the enormous impact of sanctions in the energy realm was the temporary halting of Russian offshore projects, as foreign companies essentially lost their interest. Moreover, it is believed that the impact of sanctions will be more heavily felt in the long-term (Hendersen & Grushevenko, 2019), as Russia has so far proved to be successful in utilizing its existing technologies to mature brown fields maintenance. However, as the country begins to rely on the so-called “green fields” - i.e. that are just starting to produce oil - and on new areas, such as the Arctic, advanced production technologies are needed as substitution of enhanced oil recovery (EOR), the one in use since Soviet times (*Ibid.*), together with foreign capitals, investments and loans.

### The turn toward China

With Russian companies obliged to tighten their budget, FDI backing away from Russian-led projects and Gazprom’s difficulties in accessing the European market, the country necessarily had to look for new exporting markets and partners. The Russian turn toward China and, more in general, toward the Asia-Pacific region (APR), an area that is increasingly pointed at as the new center of world economic growth and center of power of the global energy market (Kravčenko, 2019), was therefore conceived as the solution to the above-mentioned issues and as the tentative to increase energy exports, while also diversifying export markets. As long as exports are concerned, the Asian market could be doubly beneficial to Russian companies: first, “the largest niches for natural gas are in the countries where coal is still dominant in the energy mix” (Makarov, Chen, & Paltsev, 2017), as per in China and India; second, the recent rebound in global coal consumption (Hutzler, 2020) led by Asia is working in line with the ES-35 “Optimistic scenario”; and third, with China surpassing the US as the number one producer of cars by volume (Gortoni, 2019), Russia sees the potential for a peak in oil demand. As long as diversification matters are concerned, cooperation with China appears to be the right move, as the two countries are ideologically and geographically close, as well as linked by a clear supply-demand nexus.

However, as some Lithuanian experts have underlined, Sino-Russian cooperation is likely to be a short-term solution only, as China’s diversification of its energy supply portfolio is inevitably turning into more leverage on Russia (Anonymous3, 2020). Moreover, as long as the diversification argument is used, a Lithuanian scholar argues that “in order to have diversification in natural gas

infrastructure, you need to have different options from one natural gas field and, as far as this case is concerned, with one gas field devoted to the European market and one to the Chinese one, there is no evidence of such diversification” (Anonymous2, 2020).

Sino-Russian cooperation is the perfect epitome of the so-called “cost of doing business”, as the implemented business decisions often time lack the optimal economic logic and seem to be based instead on a political rationale. As a matter of fact, such cooperation is studded with Memorandum of Understanding (MoUs), with their role being to create a certain political perception rather than tangible results and, by the look of the many political, economic and scholarly debates that have started to flourish after the establishment of the Sino-Russian rapprochement, their political goal has been reached.

China, together with many other African and South American countries, is also fundamental for the continuation of Russian “nuclear renaissance” (Anonymous2, 2020), as Russia is imposing itself as an exporter of nuclear technologies around the world. As noted by a Lithuanian scholar Russia is, via Rosatom, diversifying its partners by providing (apparently) advantageous BOO contracts (Build, Owned and Operating). Via its state-owned companies, Russia is responsible for the provision of funds, on-site training, education and other attractive financial terms (Gordon, 2020), that Europe is unable to guarantee.

#### New pipeline projects and new trends

In spite of the new and stricter European rules and regulations on energy matters, together with the Union efforts on diversification, in 2018 Gazprom has doubled its annual net profit, with its gas sales to Europe accounting for almost 70% of the total (Soldatkin, 2019). Gazprom main supply route via pipeline is through Ukraine, with whom Gazprom has recently signed a 5-year agreement up to 2024. The agreement, much more modest in capacity terms (from 65 bcm/year in 2020 to 40 bcm/year in 2021/2024) and temporal length than its predecessor, could be read as a temporary setback in Russia’s strive toward independency from transit countries, efforts that are embodied by the pipeline projects NS2 and TurkStream. In the academic field, there is a very much shared vision that the above-mentioned projects are supported by a political rather than economic rationale, as they appear to comply with the Russian strategy toward the avoidance of transit country – and thus the risks stemming from the reliance on them.

- NS2

The NS2 is prospected to be an exact replica of the already operating NS1 pipeline, and it should connect the Slavyanskaya compressor station, Russia, with the Lubmin natural gas receiving station, Germany (Przybyło, 2019).

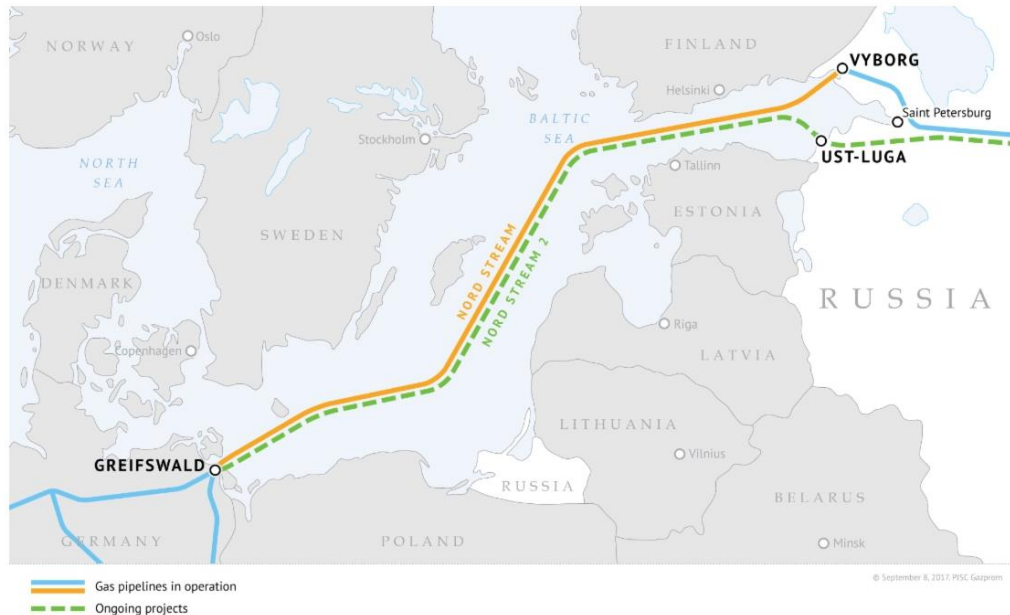


Figure 5- NS and NS2

Retrieved from Gazprom website - <https://www.gazprom.com/projects/nord-stream/>

The pipeline was expected to be operational before 2020 but, to date, works have reached deadlock because of the strong opposition that the pipeline project has generated both in the EU and in the USA, resulting in direct US sanctions and, in turn, to the 10% of the NS2 still having to be constructed. Together, the NS1 and the NS2 would have an aggregated design capacity of 110 bcma (Ibid.) and could effectively enable Russia to bypass transit countries that would, as a consequence, lose their prior status (and revenue) to become end-line clients. In such a situation, these Eastern countries may find themselves “forced” to buy the expensive pipeline gas reaching Europe via the NS2, while Russian pipeline gas could threaten to become the sole economically viable gas alternative for the EU as a whole. To quote the exact words of an expert, “by subverting transit countries, Russia is essentially minimizing risk and cost of gas to the end-consumer” (Anonymous, 2020).

For Russia, the NS2 seems however to be shaped out more of a political project, than a solely economic one. In fact, while Russia certainly “needs to stimulate the dependency of some European states on (its) pipeline-delivered gas by making it cost-competitive” (Baev, 2018), the economic evidence behind the NS2 project shows that its Net Present Value (NPV), in spite of not being

negative, is not higher than those of the already-existing alternatives (Przybyło, 2020). However, were the current situation to stall and the final 10%-segment not to be constructed, the NPV of the project would unavoidably become negative. This lack of a solid economic rationale is among the main points raised by European critics to oppose the project, together with the claims that NS2 “would reduce security of supply, weaken European solidarity and the Energy Union and destabilize Ukraine” (Barnes, 2017).

As long as the Ukrainian case is concerned, the line between political and economic rationale is more blurred, as bypassing the country would indeed result into an economic viability for Russia, even more so as 50% of the Russian pipeline gas to Europe is supplied via Ukraine (Naumenko, 2018). In this case, the NS2 could be seen as a guarantee of delivery overall more competitive and efficient than the route via Ukraine is (Barnes, 2017). However, this financial justification stands only partially, as under a cost-effect analysis, the most economically viable solution would be to circumnavigate Ukraine using the already existing pipeline networks running through Belarus and Poland (Przybyło, 2019).

As per above, in 2019 Gazprom and Naftogaz agreed on a short-term contract that, depending on one’s view, could be described as a *win-win* or *lose-lose*. As per the assessment of a Lithuanian expert, the 2019-agreement must be considered for what it is, “an agreement between two parties at war” (Anonymous3, 2020): thus, a very much temporal and nuanced document that has been made necessary as the American sanctions have led to a halt in the construction of the pipeline. If, on the one hand, Ukraine should be satisfied for Russia having to pay on a “flat” basis for capacity allocation regardless of the quantities it will transport as per their ship-or-pay arrangement, on the other hand Ukraine will inevitably lose some quantities (see Figure 5). Moreover, Ukraine has to fulfill its role of transit countries vis-à-vis the other European actors. Thus, the strategic goal of Ukraine is to operate as a transit country for as long as possible, a goal that this agreement only partially meets. On the Russian side, the 2019 agreement clearly underlined that the country is still unable to replace all of the gas volumes currently supplied crossing Ukraine by using instead NS2 and TurkStream; together with exposing Russian obligations toward Europe. Because of the current weak demand in gas in the European (and global) market and because of “changes in contractual terms with some customers regarding delivery points” (Elliott, 2020), Russian gas supplies via Ukraine have been running at around 150 million cu m/d (GTSOU gas grid operator), thus Gazprom is assumed to be paying a daily transit cost of \$5.65 million, regardless of the gas transit reaching the agreed-on minimum of 178 million cu m/d or not (Elliott, 2020).

	Fact				Forecast				
	2015	2016	2017	2018	2019	2020	2021		
via Ukraine	67,1	82,2	93,5	86,8	51-77,7	51-77,7	51-77,7	35,6	0-7
Nord Stream 2	-	-	-	-	-	-	-	-	55
TurkStream (branch 1)	-	-	-	-	15,75	15,75	15,75	15,75	15,75
TurkStream (branch 2)	-	-	-	-	-	-	-	15,75	15,75

Figure 6 - Transit of gas via Ukraine, if NS2 and TurkStream are activated and used to full capacity.

Source: Kardás, Loskot-Strachota, & Matuszak, 2019. The calculations are based on data published by Gazprom. The forecast is based on the volumes of Russian gas transit via Ukraine in the years 2015-2018.

As per Figure 5, data proves that, was Russia to fully exploit the capacities of its two pipeline projects, the NS2 and the TurkStream, it would be possible for the country to completely abandon the transit of gas via Ukraine (Kardás, Loskot-Strachota, & Matuszak, 2019), a possibility that would be economically destructive for the latest. In 2017, the Ukrainian revenues stemming from gas transit have been attested at \$3 billion (*Ibid.*), with Naftogaz reconfirming itself in 2019 as the biggest source of revenue to state budget (NAFTOGAZ group, 2020). It comes with no surprise that the country is among the fiercest opponents of NS2 and TurkStream.

- TURKSTREAM

TurkStream is a gas pipeline between Anapa/Russia and Kiyikoy/Turkey. The pipeline has 930 km off-shore length passing through Black Sea.

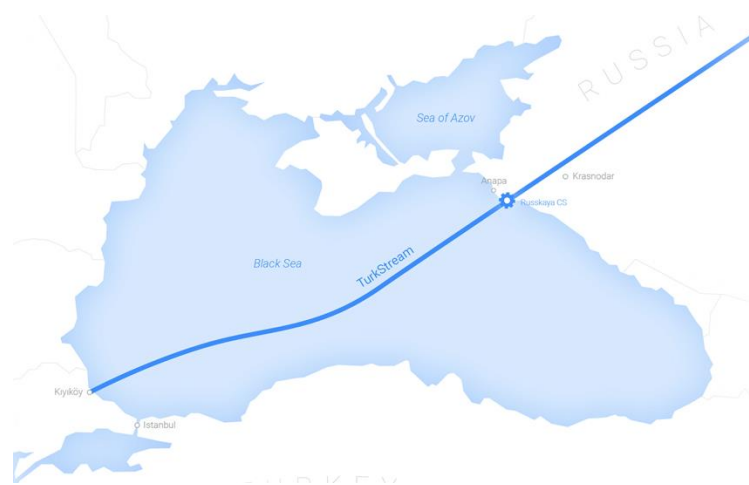


Figure 7 – TurkStream

Retrieved from Gazprom website - <https://www.gazprom.com/projects/turk-stream/>

The TurkStream would, as suggested by the name, circumnavigate Ukraine via a Turkish connection and turn Turkey into a gas hub. The TurkStream pipeline transfers gas from Russia to Turkey and also this gas can be transferred to Europe. In this case, Russian rationale could be two-folded and surpass the mere outcome of disposing of the Ukrainian transit route. According to Kemal Kirisci's, director of the Turkey project at the Brookings Institute, the second, implicit aim, is for Russia "to maintain a relationship with Turkey [...]" (Bauomy, 2020).

As Balkan countries are participating in the project, Gazprom will be forced to conform to the European third package, yet some are voicing their concern, as "Gazprom (is) testing the EU's legal stronghold in two places at the same time with its pipeline projects" (Jirušek M. , 2020).

### Risk and implications for the Alliance and its partners

In the last decade, the European posture vis-à-vis Russia on energy issues has noticeably changed, and even more momentum was gained as a result of the events of 2014. In 2009, the Third Energy Package was passed, a piece of legislation that came into effect in 2011 and that was ruled as lawful by the WTO (Siddi, 2018). The document main aim was to "improve the functioning of the internal energy market and (to) resolv(e) certain structural problems" (European Commission, 2009), together with creating the so-called level playing field. The latest was made possible via the notion of unbundling, "the separation of energy supply and generation from the operation of transmission networks" (*Ibid.*). In addition to this, as per May 2014, a trilateral format for talks with Russia and Ukraine was initiated by the European Commission, its primary aim being the creation of *ad hoc* rules governing Russian gas flows into the EU via Ukraine. The output was embodied by the two Winter Packages<sup>10</sup>. Moreover, in 2015 the three-pillar system introduced by the Lisbon treaty was transformed into a five-pillar one, with the main aim being the creation of a common market, so to create more internal competition to be managed by the right market signals.

NATO's efforts toward the achievement of ES, an area largely non-military in nature, can instead be tracked down to 2008, when the first report on NATO's role in ES was agreed on at the Bucharest Summit (Grubliasuskas & Rühle, 2018), driven by the evolution of the global energy landscape. Since then, the Alliance agenda has broadened to encompass, together with the three

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<sup>10</sup> The so-called "Winter Packages" are legislative proposals issued by the EC. More on the [Official website](#) of the Commission.

initial areas - raising awareness; supporting the protection of critical energy infrastructure; enhancing energy efficiency in the military – new dimensions, such as the one investigating the link between energy and hybrid warfare and the concept of enhancing resilience (*Ibid.*). This said, what are the most probable consequences that the discussed trends of Russian ES will have on the Alliance and its partners?

The NS2 appears to be the most urgent issue on the European energy agenda, as different actors are expressing different concerns – or the lack of them – on the pipeline. For instance, the German politician Kiesewetter wrote that the “NS2 is the most important bilateral economic project” between Russia and his country, together with urging against overestimating “the pipeline’s importance to the Russian (Federal) budget” (Kiesewetter R. , 2020). According to the data published by Gazprom Germany is, at present, “Gazprom’s largest export market” and many fears that the NS2 would only deepen the country’s dependency on Russian gas. As the European indigenous production decreases (Jirušek M. , 2020) and Germany becomes more reliant on gas as the result of its ongoing energy transition and phasing out of the nuclear (Bauomy, 2020), those fears are made even more pronounced.

On top of this, the NS2 project has once again tested the European ability to “speak with one voice” when it comes to energy issues, with some scholars believing that the takeaways of the present debate are that “the EU deploys *ad hoc* solutions to hastily put out fires, instead of assuming an overarching, transparent position based on wide consensus”, thus leaving “room for Gazprom to jump on every opportunity to penetrate the European market” (Jirušek M. , 2020). Different ideas of diversification are also coming to the fore: as long as Germany is concerned, the NS2 *does* fall into such a category, while for other actors, such as for the three Baltics, the NS2 could be better described using the opposite concept, conveyed by the term *dependency*. Also, the NS2 is currently stalled as a result of the US direct sanctions which, to quote a Lithuanian expert, “have been more effective than the European ones” (Anonymous2, 2020).

When it comes to the implications of the NS2, other scholars are more positive as they conceive that it is Russian dependency on the EU that will increase exponentially, not the other way around. As a matter of facts, the EU is now able to at least partially replace Russian gas via LNG (Bauomy, 2020) and this option, in spite of being more costly, gives some room of maneuver to the EU. However, an analysis carried out by IHS Markit has shown that, in spite of the new pipelines possibly having an overall positive effect on the EU gas market, the role of Ukraine as a transit country remains a fundamental point (Beckman, 2018) as the LNG alone, nor the other possible

solutions, could not make up for the loss of the Russian pipeline gas (Brooks R. E., 2017). As for the possible solutions, the scenarios run by the author point to Caspian gas from Azerbaijan; from Turkmenistan and via TurkStream (2017). More recent pieces of literature state that “replacing Russian natural gas with gas imported from some other part of the world would impact EU member states to the extent of reducing their GDP by an average of 0.13% [...]”, while “replacing Russia as the source of supply would be a heavier burden for Eastern and Central European countries” (Mae, 2020). Alex Barnes’ analysis appears in line with that of Mae, as he wrote that “NS2 will help meet the growing import gap for gas supplies as existing indigenous supplies decline” (Barnes, 2017). A Lithuanian energy expert and academic also appears to follow this line of thought, as he affirmed that, in spite of the NS2 being a political project devised to tighten Western relations with Russia by creating even more dependency, in the long term it could help European countries to achieve a lot, as it embodies the risk and challenges facing the Union, thus spurring toward continuous improvements. Always according to him, the NS2 has enabled the Energy Union to grow stronger: Member States now have to notify the Commission by submitting drafts of their Intergovernmental agreements<sup>11</sup>; and new infrastructure - such as the LNG terminal of Klaipeda and for energy to freely circulate among Member States - has been built (Anonymous3, 2020).

As far as LNG is concerned, its costs remain higher than pipeline gas. However, it would be a much logical move for Russia to preparing to export it, so to compete with the US on supplying the European market. “Russia could challenge the American *molecules of freedom* with its own *cheaper molecules* and, being the European countries very economically pragmatic, one could predict the outcome” (Anonymous2, 2020).

### CHAPTER III – THE CASE OF KALININGRAD

The decision to include the case of the Kaliningrad Region (or Kaliningrad *Oblast*)<sup>12</sup> in the present report was reached in light of the recent changes and advances that the area has underwent in regard to its ES, to the point that one could state that the region is now energy secure. The need

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<sup>11</sup> As per the Winter Package of 2016.

<sup>12</sup> From now, KO.



to make the KO secure stemmed from the region's strategic military importance in terms of army and navy infrastructures, a priority also underlined in the Art. 27 point A of the ES-35 (Sukhankin, Kaliningrad Oblast and the 'Sanctions War': Genuine Progress or Avoidable Stagnation? (Part Two), 2020). However, according to the thoughts of a Lithuanian scholar, "the ES was reached at the expense of the region's economy, as the power peak demand appears to be low" and, in spite of the KO being energy secure, it cannot be affirmed the same of all its other sectors. The post-2014 wave of international sanctions directed at Russia had a strong resonating impact on the KO as well, because of the region's heavy dependence on Federal subsidies, and the COVID-19 pandemic has only exacerbated the trend (Sukhankin, Kaliningrad Oblast and the 'Sanctions War': Genuine Progress or Avoidable Stagnation? (Part One), 2020). Moreover, the choice had also been motivated by the KO being an "anomaly" as far as the bilateral relation between Russia and the European Union in the field of commodities is concerned. As a matter of facts, Russia usually embodies the role of the supplier, while in this case, it was the KO to be dependent on the oil and gas coming through its neighbors countries.

The post-sanctions landscape obliged the KO to undergo some important socio-economic changes in the key areas of food security, tourism and local offshoring, with the latest conceived as a possible "remedy against Western sanctions" (*Ibid.*). However, *importzameshenie*, the Russian strategy to achieve food autarky, still has to deploy the wished results, thus leaving the KO to rely on imports from external actors. As per offshoring and tourism, the former was very limited in its reach (Новости Калининграда, 2020), while the latest was favored by the COVID-19 inability-led to travel abroad and the individual travel sanctions (Sukhankin, Kaliningrad Oblast and the 'Sanctions War': Genuine Progress or Avoidable Stagnation? (Part Two), 2020).

As long as the energy sector is concerned, the KO has up to recently been almost entirely dependent (93%) on external sources of energy (*Ibid.*), with the two main strategic resources being gas and electricity. To secure the region and make it self-sufficient, the two main steps taken by the Russian Federation came under the launching of four new powerplant stations (Lyrchikova, 2019) and the construction of the Floating storage regasification unit<sup>13</sup> vessel "Marshal Vasilievsky" (Team, 2019).

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<sup>13</sup> From now on, FSRU.

## Gas and oil

The KO does not share any of its borders with mainland Russia, a geographical disadvantage that forces the region to rely on Lithuania which, in turn, has historically been heavily dependent from Russian imports. The sole pipeline route for gas deliveries to the KO is provided by the Minsk-Vilnius-Kaunas-Kaliningrad gas pipeline (Gazprom, 2019).



Map 1- Energy infrastructure in the Kaliningrad Oblast.

Map retrieved from "Fortress Kaliningrad ever closer to Moscow", maps and charts of Urszula Guminska-Kurek, Wojciech Mankowski.

In spite of this, in recent years the Region has been provided with a totally independent gas supply route, thanks to the construction of the FSRU vessel Marshal Vasiljevsky, and the construction of the underground gas storage<sup>14</sup> facility. Additionally the capacity of the old Minsk-Vilnius-Kaunas-Kaliningrad gas pipeline increased, and the UGS is now connected to both the gas pipeline and the Marshal Vasilievskiy FSRU (Gazprom, n.d.). The FSRU vessel, of Korean manufacturer, is the sole floating storage regasification unit of Russia and, in spite of its strategic importance, some conceive it as a "form of insurance", rather than a resource to be swiftly used and as the evidence that, when dealing with the ES of the KO, the Russian Government was guided by geopolitical and military-strategic calculations, rather than by a purely economic agenda. To

<sup>14</sup> From now on. UGS.

quote Sukhankin, “the FSRU project poses serious questions regarding its economic sustainability (both) because of its price and the provision that citizens of the KO do not have to pay higher prices than Russians in the mainland” (2020). Moreover, as Gazprom and Lithuania have recently signed a five-year contract, it appears unlikely that the Marshal Vasilievskiy FSRU will be working at its full capacity prior to 2025, the expiration year of the agreement. On top of that, in the current scenario pipeline gas is still less expensive an option for the KO than LNG gas, and Gazprom is only able to supply up to 61% of the region’s need through the LNG station in the Leningrad region (Team, 2019).

Overall, one could say that, as long as gas supplies are concerned, the KO has recently moved toward a position on self-sufficiency, with an attested gas network coverage average of 83.6%, a number higher than the Russian national average (*Ibid.*).

### Electricity and desynchronization

With the desynchronization of the Baltic states from the BRELL underway, Russia has been quicker to adapt than the other actors involved, as showcased by the successful 72-hour trial of 2019 (Lyrchikova, 2019), during which time the KO had been supplied by its power stations only. Russia’s success resonates even more if compared to the Baltic States’ stance: as per 2019 the three states had just begun building the necessary infrastructure to synchronize their systems with CEN. The achievement was forerun by a 2014 failed attempt to operate the Kaliningrad system in isolate mode, and it has been enabled by the launch of new hydroelectric and gas-fired power plants in KO, in addition to the thermal ones already existing. The total capacity of Kaliningrad operational power plants skyrocketed to 200% of the maximum annual electricity demand of the region (Team, 2019), thus effectively strengthening the region energy self-sufficiency and answering the need for the area, which will effectively become an electrical zone on its one, to have the certainty of a reserve power.

## CHAPTER IV – CONCLUSIONS

To conclude, it appears clear that the theoretical concepts backing the Russian and the European idea of ES are not poles apart, but they are based on the very same, shared ground

assumptions. However, being the two actors placed on the two opposite sides of the cycle, one as a producer, the other one as a consumer, those theoretical assumptions cannot but translate into different needs and actions, which appear irreconcilable.

In the Russian case, the priorities to ensure the country's ES appear to be aimed at maintaining the role of hydrocarbons, stimulating the dependency of European countries on pipeline gas by making it cost-competitive, and entering new key strategic areas of production. However, the Russian strategy appears to be needing some rethinking, in particular in relation to the globally changing scenarios that could cause spill-over effects on Russia. As I have tried to explain in the main body of the present work, the ongoing decarbonization process involving - although to different degrees - European countries, could have negative repercussions on the final prices of Russian energy-intensive goods, as fines and market barriers could be imposed on such products. Moreover, it would be of great interest and strategic importance to analyze the discrepancies between the goals stated by the Russian strategies in approaching the Asian-Pacific market, and the reality on the ground, as it appears that many Asian customers may not be willing to accept Russian long-term contracts.

The case of Kaliningrad has here been used to portray a successful example of Russia achieving ES, although the economic costs and impacts have been high. We have picked and discussed the above-mentioned case starting from the rationale that ES and the military realm are intertwined, and to showcase how the economic side can be 'subdued' in favor of strategic and security needs.

As far as the Alliance and its partners are concerned, in the last decade a completely different approach towards the energy realm has been witnessed, and the positive outcomes of it are visible today. However, the Energy Union still lacks a one voice approach when it comes to its external dimension, a factor that hinders even greater achievements.

Finally, to shed a light on the initially mentioned dichotomy consumer/provider, the aim of the present report was not to identify who will ideally grow more dependent on whom, although the importance of such an assessment is uncanny. As a matter of fact, I strongly believe that such a task would require an additional work, one that should however come at the due time, as for as long the NS2 project will not reach its competition, it is too early to state how it will impact the current equilibrium.

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