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The Energy Security Dilemma of the European Union in the 21st Century

Master's Thesis

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Author's Declaration

Herewith I declare that I have written the Master's Thesis on my own and I have cited all sources.

Prague, 26, April 2019.

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Author's Signature

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List of Abbreviations, Figures and Maps

BCM	Billion Cubic Meters
BEMIP	Baltic Energy Market Interconnection Plan
CU	Customs Union
EC	European Commission
ESPO	Eastern Siberia-Pacific Oil pipeline
EU	European Union
GDP	Gross Domestic Product
GIPL	Gas Interconnection Poland Lithuania
IGA	Intra Governmental Agreement
NATO	North Atlantic Treaty Organization
OPEC	Organisation of Petroleum Exporting Countries
P-TEC	Partnership for Transatlantic Energy Cooperation
RCST	Regional Complex Security Theory
SPV	Special Purpose Vehicle
TAP	Trans Adriatic Pipeline
TEN-E	Trans-European Network for Energy

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Introduction

Energy security has become one of the most important factors and security issues of today's world. Generally speaking, energy such as crude oil and natural gas has gained an enormous value over the last century and is one of the most demanded raw materials on the planet. The importance of energy security and its influence on global politics can be displayed by the 1970s OPEC crisis. The OPEC countries imposed an embargo and decided "to boycott America and punish the west in response to support for Israel in the Yom Kippur war against Egypt led the price of crude to rise from \$3 per barrel to \$12 by 1974."¹ This resulted in a shock in stock markets and people saw the strength that a raw material like oil can have. Roland Dannreuther, the author of *Energy Security* explains that due to the OPEC crisis, energy security had a massive impact on the geopolitical distribution of power and helped to grow the environmental movement.² Further, Dannreuther writes that the 1968 Chernobyl crisis "brought in the more systemic risks of the complexity of modern energy systems,"³ and that post-Cold War wars in "Africa and elsewhere engendered greater attention to the linkages between security and development and, in relation to energy, the links between energy poverty and energy insecurity."⁴ Such examples only illustrate the vital importance of energy and energy security in the contemporary world. Energy affects all three important layers – economic, political and social.

Barely anyone can imagine energy shortages of either gas, oil or coal as it would very likely cause chaos around the world. Therefore, countries and regional institutions have to balance their global desires with their security factors. The world of energy security is very complex which creates a phenomenon called the security dilemma. Some countries are more dependent on energy supply than others while some are dependent on energy exports in order to keep their economy running. This strange relationship can be seen in the example of the European Union and the Russian Federation.

The EU is predominantly dependent on Russian gas.⁵ On the other hand, many scholars and politicians claim that Russia is more dependent on exporting gas to the EU. For example, Marco Sidi, a senior researcher at the Finnish Institute of International Affairs claims that 67%

¹ Terry Macalister, "Background: What caused the 1970s oil price shock?," The Guardian, accessed March 10, 2019, <https://www.theguardian.com/environment/2011/mar/03/1970s-oil-price-shock>.

² Roland Dannreuther, *Energy Security* (Cambridge: Polity Press, 2017), 20.

³ Dannreuther, *Energy Security*, 20.

⁴ Dannreuther, *Energy Security*, 20.

⁵ "2.3 From where do we import energy and how dependent are we?," Eurostat, accessed March 12, 2019, <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html>.

of Russia's tax revenues come from its energy exports. Therefore, Russia needs its energy trade with the EU proportionally more than the EU needs Russian gas.⁶ At the same time the European Union is trying to find different energy suppliers like the United States of America and the Islamic Republic of Iran while preserving their alliance with the U.S. and economic ties with Iran. The Russian government sees the EU's attempts to diversify energy supply from Russia as a threat. Thus, Russia tries to make the EU more dependent while also seeking for new business partners like China. Russia is currently building a pipeline called the Eastern Siberia-Pacific Oil pipeline (ESPO), which is supposed to supply China with around 42% of oil by 2035.⁷ Additionally, in the book *Energy Security: Europe's New Foreign Policy Challenge*, the author Richard Youngs writes "while reserves were set to decrease, demand for oil and gas was predicted to rise exponentially. It was estimated that in 2035 global energy consumption would be double that of 2005."⁸ These possible scenarios create a security dilemma for all involved actors and start a game that only the best can win.

The purpose of the thesis is to display the complexity of the energy security of the EU in the 21st century. As the EU's highlighted years approach, the discussion about energy security has become a hot topic again. The thesis focuses on the effects of the EU's transition from fossil fuels to the eco-friendlier ones like gas and renewable energy, which is scheduled to begin between 2020 and 2030. The idea behind the thesis is to acquaint the reader with the EU's current energy dependency and energy security in 2019 while taking new emerging energy actors into consideration. The second decade of the 21st century is going to be vital for the EU in terms of energy security. The EU will very likely increase its dependence on energy imports. As a result, the EU will probably lose its ability to spread its soft power to the supplier countries as it will be less able to interfere and influence due to its energy import dependence. On the verge of the 20th century, there has been an abrupt proliferation of academic studies related to energy security as energy was seen and used as a tool to influence and challenge the international system. The shift from ideological wars during the Cold War era to the energy-related wars has had an enormous impact on the world order. The importance of energy can be displayed by the fact that energy has become a dominant variable for the theories of international relations and security studies. In order to understand the complexity of the energy

⁶ Ivana Kottasová, "Europe is still addicted to Russian gas," CNN Business, accessed March 19, 2019, <https://money.cnn.com/2018/06/05/news/economy/russia-europe-gas-dependency/index.html>.

⁷ Joseph Yu-sheck Cheng, *China's Foreign Policy: Challenges and Prospects* (Singapore: World Scientific Publishing Company, 2016), 246.

⁸ Richard Youngs, *Energy Security: Europe's new foreign policy challenge* (New York: Routledge, 2009), 2.

security dilemma, the qualitative method supported with empirical evidence should provide a solid background to answer the determined hypotheses and research questions.

The two research questions are; what are the possible ways to achieve energy security of the EU while lowering third parties influence on the domestic affairs of the EU countries? What are the outcomes of the energy security dilemma and what is the best solution for the EU? These questions are crucial and are answered from a critical perspective as the EU's energy security plays an important role in the institution. The thesis is formed around four hypotheses which are either confirmed or disproved in the following practical chapters. The author assumes that the EU will maintain high levels of dependence on Russian gas, and by building new pipelines leading from Russia such as Nord Stream 2 it will increase the Russian influence over the EU member states. Secondly, the author assumes that Russia is more dependent on supplying energy to the EU and therefore it is in its vital interest to build Nord Stream 2 to Germany since Poland has rejected further cooperation and signed a 24-year contract with the United States. Thirdly, since the EU is less dependent on the energy supply, it uses its influence to change Russian foreign policy through sanctions. The last hypothesis is that it is necessary for the EU to diversify its energy supply which can be achieved by the United States of America and Iran in order to remain secured energy-wise.

The first theoretical chapter introduces the reader to the security studies and theories of international relations related to the energy security. The first analytical chapter displays the ways the European Union deals with the energy security complexity while applying the theories of liberalism, realism and neorealism. The second analytical chapter illustrates the strategies and security measures of the EU towards the Russian Federation. Lastly, the third analytical chapter builds on the previous chapters and helps the reader to display the security opportunities of the EU. The chapters are mainly focused on gas as this fossil fuel will very likely be a crucial material in the 21st century energy security.

The thesis called *The Energy Security Dilemma of the European Union in the 21st Century* works with different security concepts and international relations theories in order to display the diverse field of energy security. The works of Barry Buzan and Ole Weaver help to form the structure of international security and this concept is then applied in the practical part of the thesis. This approach is combined with Roland Dannreuther's book on energy security along with a more specifically-oriented work by Richard Youngs, who focuses purely on the EU's energy security. Additionally, the thesis uses the various divergent perceptions and policy challenges described by Kacper Szulecki as well as the legal EU documents, official proclamations of involved actors and respected news sources. This broad theoretical

background combined with the current ongoing energy-related policies and events create a thesis that introduces the reader to the EU's energy issues that the institution is facing and is going to face in decades to come. The unique contribution of the thesis is formed by displaying the connection of energy and environmental policies and by demonstrating their impact on the whole Union. Additionally, the thesis illustrates the various strategies that the Russian Federation uses to increase its influence over the region through energy supplies and ways that the EU tries to diversify its energy supply with the help of the United States of America and the Islamic Republic of Iran.

1. European Energy Security and Its Importance

This theoretical chapter helps one to understand the energy security dilemma. It is important to mention the basic definitions of the terms used like energy security and security dilemma. The whole concept of the aforementioned dilemma is very complex as it reaches out into different levels of the society. Energy can affect one's country in terms of economics, politics as well as the well being of the country's people. One must understand the complexity and interconnection of energy and those three levels in order to fully realize the essential nature of the problem. Scholars from the fields of security studies and international relations have elaborated on the important role that energy plays in today's modern-day world. In order to illustrate and comprehend the strategies of the EU related to energy security it is essential to elaborate on the two main international theories – realism and liberalism. This helps the reader to understand the gist and idea as well as display two different views on security and realpolitik of the European Union. Further, some actors behave and may seem to be a typical representation of one of the two international relations theory but in fact their concrete steps say something else.

The theory that is closely related to the more pragmatic point of view of the realpolitik of a certain actor is the international theory of realism. This theory stresses “the imperatives states face to pursue a power politics of the national interest.”⁹ Other important features when defining realism is that the theory is focused on human selfishness and the absence of international government as countries are in an anarchical structure. Meaning, that countries behave in anarchical way and no one can be categorically trusted as everybody wants to benefit themselves the most. Additionally, realism stresses rational decision-making and state-centrism over the already mentioned international government.¹⁰ This pessimistic and selfish view of the world is how international relations were seen between the two world wars and during the Cold War.

A realist author Michael Klare claims that after the Cold War, the ideological battle between capitalism and communism was replaced by the geopolitical struggle over the control of natural resources. Klare also says “that energy resources are vital ingredients of national power and prosperity and that states inevitably compete for access to these resources and are willing, in the final analysis, to contemplate military action. Dependence on energy resources

⁹ Jack Donnelly, “Realism,” in *Theories of International Relations*, 3rd edition, edited by Scott Burchill and Andrew Linklater (Hampshire, USA: Palgrave Macmillan, 2005), 29.

¹⁰ Donnelly, “Realism,” in *Theories of International Relations*, 30.

is thus perceived as a source of national vulnerability.”¹¹ In today’s modern world, dependency on energy resources is a weakness that is perceived by all the actors in the anarchical structure. Thus, some will take advantage of their position, especially those, that have large supplies of energy resources. A theory that opposes this negative idea of the international system is the international theory of liberalism.

Liberalism stresses limited government and scientific rationality, “believing individuals should be free from arbitrary state power, persecution and superstition. It has advocated political freedom, democracy and constitutionally guaranteed rights, and privileged the liberty of the individual and equality before the law.”¹² This is a total opposite of the realist theory which stresses the idea that state is the main part of a society and that humans are selfish and therefore no one can be trusted even on the international level. Liberalism has had a great impact after the fall of the Soviet Union as the theory promoted a wide variety of values that created societies of the today’s world. As Scott Burchill, one of the authors of the book *Theories of International Relations*, puts it,

Liberalism has also argued for individual competition in civil society and claimed that market capitalism best promotes the welfare of all by most efficiently allocating scarce resources within society. To the extent that its ideas have been realized in recent democratic transitions in both hemispheres and manifested in the globalization of the world economy, liberalism remains a powerful and influential doctrine.¹³

The idea of globalism, economic liberalism, interconnection, cooperation and democratic peace can be used as the main lexicon for this particular theory. In fact, the European Union is a specific example of a liberal institutionalism.¹⁴

According to the book *Energy security*, the theory of liberalism also explains the vital importance of energy security. Unlike the realist theory, liberalism takes into account not only states but also stresses the fact that other actors such as companies, international and regional bodies as well as NGOs are also involved in the energy sector.¹⁵ The author goes on by saying that realism “also crucially ignores the fact that most energy resources are developed, produced and processed by companies operating in a global market, which acts independently from the political realm,”¹⁶ and that “states intervene relatively rarely in these markets.”¹⁷ Liberalism

¹¹ Dannreuther, *Energy Security*, 23.

¹² Scott Burchill, “Liberalism,” in *Theories of International Relations*, 3rd edition, edited by Scott Burchill and Andrew Linklater (Hampshire, USA: Palgrave Macmillan, 2005), 54.

¹³ Burchill, “Liberalism,” in *Theories of International Relations*, 54.

¹⁴ Burchill, “Liberalism,” in *Theories of International Relations*, 64.

¹⁵ Dannreuther, *Energy Security*, 25.

¹⁶ Dannreuther, *Energy Security*, 26.

¹⁷ Dannreuther, *Energy Security*, 26.

stresses the fact that states do more harm than good by intervening into these systems.¹⁸ Further, the author writes that the liberalist theory claims that “energy security is promoted through the expansion and strengthening of market forces, most notably through the deregulation, liberalization and privatization of energy.”¹⁹ States are more likely to regulate and intervene in these markets which destabilizes the market efficiency and thus the energy security. By liberalizing energy markets, countries that hold energy resources are forced to “promote and strengthen regional and international institutions, which can help to mitigate exclusive state sovereignty and support international coordination and cooperation in the international energy sector.”²⁰ This also supports the idea that the EU is a liberal institution as one of its core values is the promotion of human rights through trade and cooperation.²¹

When taking both basic definition into account, one theory may be the key to understanding the behavior of the European Union. The theory of neorealism, also called structural realism, is somewhat of a theoretical attempt to include parts of liberalism and realism.²² For example, “[n]eorealists treat states as self-interested, rational, unitary entities whose tendencies toward conflict and/or cooperation are primarily a function of systemic forces – anarchy, power distributions, and the presence or absence of factors which inhibit or exacerbate the conflictual consequences of anarchy.”²³ In other words, for neorealists, “human nature has little to do with why states want power. Instead, it is the structure or architecture of the international system that forces states to pursue power. In a system where there is no higher authority that sits above the great powers, and where there is no guarantee that one will not attack another, it makes eminently good sense for each state to be powerful enough to protect itself in the event it is attacked.”²⁴ Kenneth Waltz, the founding father of neorealism, actually sees self-interested states as actors that are status maximizers. Simply put, states when “[c]onfronted with opportunities to cooperate, states will ask: will we benefit *more than* others.”²⁵ The idea of self-maximizing by all means can be also seen in many EU’s decisions like EU-US-Iran nuclear deal when the EU did not backup the U.S. and continued to maintain good relations with Iran. Despite the U.S. protests, the EU saw its benefit in trade and preserving

¹⁸ Dannreuther, *Energy Security*, 26.

¹⁹ Dannreuther, *Energy Security*, 26.

²⁰ Dannreuther, *Energy Security*, 27.

²¹ “Human rights and democracy,” European Union, accessed March 25, 2019, https://europa.eu/european-union/topics/human-rights_en.

²² Keith L. Shimko, “Realism, Neorealism, and American Liberalism,” *The Review of Politics* 54, no. 2 (1992): 297.

²³ Shimko, “Realism, Neorealism, and American Liberalism,” 298.

²⁴ John J. Mearsheimer, “Structural Realism,” in *International Relations Theories: Discipline and Diversity*, 3rd edition, edited by Tim Dunne, Milja Kurki and Steve Smith (Oxford, UK: Oxford University Press, 2013), 78.

²⁵ Shimko, “Realism, Neorealism, and American Liberalism,” 298.

the nuclear deal with Iran.²⁶ Therefore, securing deals and selfishness may be seen present in a multi-national institution such as the EU.

To buildup even more on the neorealist theory, the theory itself can be divided among two groups. Offensive and defensive realism. In the article "Security Seeking under Anarchy," the author elaborates on both types of neorealism. The author claims that "[o]ffensive realism holds that anarchy [...] provides strong incentives for expansion. All states strive to maximize their power relative to other states because only the most powerful states can guarantee their survive. They pursue expansionist policies when and where the benefits of doing so outweigh the costs."²⁷ One has to keep in mind that this maximizing-power tendencies through expansionism is caused by the fear of losing the dominant position in the anarchical structure. One can assume that countries within this structure see competition as a threat and they try to gain as much power as possible, while others do the same. This is done through arms buildups, unilateral diplomacy and mercantile economic policies.²⁸ A specific example could be the situation of the Cold War, when both sides were building new nuclear warheads in order to maximize their advantage over the other side. In fact, this arms race meant that by increasing the number of nuclear weapons, the actors only decreased the overall international stability. The more nuclear weapons, the bigger the threat of an error that would cause a total annihilation. Further, offensive realists "maintain that it makes good strategic sense for states to gain as much power as possible and, if the circumstances are right, to pursue hegemony. The argument is not that conquest or domination is good in itself, but instead that having overwhelming power is the best way to ensure one's own survival."²⁹ This is completely different from the second type of neorealism.

The other type is defensive realism. Now, "[d]efensive realism holds that the international system provides incentives for expansion only under certain conditions. Under anarchy, many of the means of state uses to increase its security decrease the security of other states. This security dilemma causes states to worry about one another's future intentions and relative power."³⁰ This may be one of the main premises of this paper. The definition of defensive realism resembles the energy security dilemma of the EU. Additionally, a realist John

²⁶ John Irish and Riham Alkousaa, "Skirting U.S. sanctions, Europeans open new trade channel to Iran," Reuters, accessed March 22, 2019, <https://www.reuters.com/article/us-iran-usa-sanctions-eu/skirting-u-s-sanctions-europeans-open-new-trade-channel-to-iran-idUSKCN1PP0K3>.

²⁷ Jeffrey W. Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," *International Security* 25, no. 3 (2000): 128.

²⁸ Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," 129.

²⁹ Mearsheimer, "Structural Realism," in *International Relations Theories: Discipline and Diversity*, 78.

³⁰ Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," 129.

J. Mearsheimer claims that “[d]efensive realists like Kenneth Waltz (1979), whose book is discussed as a featured text, maintain that it is unwise for states to try to maximize their share of world power. The pursuit of hegemony, they argue, is especially foolhardy.³¹” In general both types of neorealism share one common idea. The idea is survival. Survival is vitally important in the anarchical structure. Offensive realism prefers survival through expansionism, while defensive realism promotes survival through security.

Defining the security aspect of an actor is possible mostly when applying the realist theory. As the international relations theory of realism “emphasizes the unending competition for power and security in the world of states. Sovereignty, anarchy and the security dilemma are crucial terms in its lexicon; in the main, the idea of global progress is absent from its vocabulary.”³² Additionally, a realist scholar John Hertz described the phenomenon of a security dilemma in 1950 as follows,

[g]roups or individuals living in such a constellation must be, and usually are, concerned about their security from being attacked, subjected, dominated, or annihilated by other groups and individuals. Striving to attain security from such attack, they are driven to acquire more and more power in order to escape the impact of the power of others. This, in turn, renders the others more insecure and compels them to prepare for the worst. Since none can ever feel entirely secure in such a world of competing units, power competition ensues, and the vicious circle of security and power accumulation is on.³³

This never-ending story goes on. In terms of energy security one can imagine that one actor (A) wants to be supplied while not being fully dependent on the supplier (B). On the other hand, the supplier (B) wants to supply energy in order to get revenue and tries to find more actors (C) demanding energy to have a stable income from the energy supply. This can be seen also as a threat for actor (A), as the supplied actor can feel more vulnerable because the supplier (B) may not need to supply this actor (A) anymore. Therefore, various security concepts were created and applied. For the sake of this paper the concept of a regional security is used as the EU is considered as a multi-national actor, spreading across Europe.

Some countries have the so-called comparative advantage over other countries in terms of energy resources. For example, “Russia, Iran, Turkmenistan and Qatar, accounted for more than half global gas reserves.”³⁴ Such countries specialize and generate most of their revenue from exporting energy. In other words, “if [...] resources are immobile, a tendency to specialize

³¹ Mearsheimer, “Structural Realism,” in *International Relations Theories: Discipline and Diversity*, 78.

³² Andrew Linklater, “The English School,” in *Theories of International Relations*, 3rd edition. edited by Scott Burchill and Andrew Linklater (Hampshire, USA: Palgrave Macmillan, 2005), 86.

³³ John H. Herz, “Idealist Internationalism and the Security Dilemma,” *World Politics* 2, no. 2 (1950): 157.

³⁴ Youngs, *Europe’s Security*, 9.

in different products or combinations of products exists.”³⁵ As already mentioned, 67% of Russia’s tax revenue comes from exporting energy.³⁶ Therefore, one can assume that countries that specialize and have a concrete comparative advantage of a certain resource, especially energy. Such countries are incentivized to take advantage of this power. That is why energy security of the whole European Union is important.

The regional complex security theory (RCST) “contains a model of regional security that enables one to analyse, and up to a point anticipate and explain, developments within any region.”³⁷ This theory helps the reader of this paper to better understand the security issues that the EU, as a multi-national institution, has to face. The fact that this paper is about a security of a whole region is essential because most security concepts are of national and global level. The concept of a regional security is more appropriate in the EU case.³⁸ In a sense, “[t]he region, in contrast, refers to the level where states or other units link together sufficiently closely that their securities cannot be considered separate from each other. The regional level is where the extremes of national and global security interplay, and where most of the action occurs.”³⁹ The whole region is “made up of the fears and aspirations of the separate units.”⁴⁰ Therefore it can be said that the energy security dilemma should be considered as a security issue of the whole region and not only of a single member state. Szulecki in his books *Energy Security in Europe* claims that “cross-border interconnectors are absolutely vital for regional energy governance and using geographic synergies to maximise the benefits of renewable-based generation.”⁴¹ Regional institutions such as the EU have to find a balance between security and energy supply, especially since cross-border trade is important for its existence.

There are issues concerning the regional security of the EU. As Buzan writes, “[s]maller states will usually find themselves locked into an RSC with their neighbours, great powers will typically penetrate several adjacent regions, and superpowers will range over the whole planet.”⁴² Considering the structure of the EU, greater powers may affect the security of the region in a larger fashion than smaller states. In practice, this can be seen on the Nord Stream 2 pipeline. The German government does not consider building another Russian gas pipeline

³⁵ Charles E. French and Earl W. Kehrberg, "The Comparative Advantage Aspects," *Journal of Farm Economics* 42, no. 5 (1960): 1298.

³⁶ Kottasová, “Europe is still addicted to Russian gas,” CNN Business.

³⁷ Barry Buzan and Ole Waever, *Regions and Powers: The Structure of International Security* (Cambridge University Press: New York, 2003), 40.

³⁸ Buzan and Weaver, *Regions and Powers*, 41.

³⁹ Buzan and Weaver, *Regions and Powers*, 41.

⁴⁰ Buzan and Weaver, *Regions and Powers*, 41.

⁴¹ Kacper Szulecki, *Energy Security in Europe: Divergent Perceptions and Policy Challenges* (Oslo: Palgrave MacMillan, 2018), 118.

⁴² Buzan and Weaver, *Regions and Powers*, 46.

leading to Germany as an energy security threat, whereas other member states like France do.⁴³ This is also mentioned in Buzan's book about the RCST that the regional actors themselves integrate and hierarchise security issues.⁴⁴ The Nord Stream 2 case shows that not all security issues are hierarchised the same for each member.

To understand the hierarchy of the EU in the connection to the energy security it is necessary to mention two ongoing debates of the energy experts which comment on the 1970s change of the international energy systems. Richard Youngs' book *Europe's Security: Europe's New Foreign Policy Challenge* elaborates on the two debates – markets and institutions and regions and empires.⁴⁵ This categorizing began in the 1970s when international markets gained more power in addition to becoming connected with the increased usage of gas.⁴⁶ Scholars argue that those that categorize themselves into one of these two groups see energy security uniquely and try to trade and engage energy-related issues differently. Youngs writes, “while the US had moved to a ‘regions and empires’ approach to energy policy, the EU was wedded to the ‘markets and institutions’ framework.”⁴⁷ Both have different mercantile and geopolitical aspirations. The EU is “seeking to transfer its own rules and legal norms to other countries and organizations as a form of ‘external Europeanization’.”⁴⁸ In contrast to the markets and institutions, the regions-and-empires debate represented by the U.S. defines the change that the energy security was not the international markets but “[t]he ‘regions and empires’ storyline would place greater stress on strategic alliances; the search for ‘exclusive backyards’; military power to protect suppliers; intra-Western rivalry and undercutting; and Western oil companies taking control of production capacity through buy outs and mergers in producer states.”⁴⁹ Both types have their own geopolitical dimension and aspirations to which they adjust their realpolitik.

As it was said, the European Union tries to influence its suppliers by making them regulate their own energy market in order to influence the supplier's behaviour in the long-term. Youngs calls the EU a “liberal superpower.”⁵⁰ The EU is also a customs union (CU) and therefore one can assume that the union as a whole will try to force others to obey the Union's rules. In the article called “Customs Unions and Comparative Advantage” it is said that

⁴³ Anca Gurzu, “France and Germany split over Nord Stream 2 pipeline,” Politico.eu, accessed March 12, 2019, <https://www.politico.eu/article/france-and-germany-split-over-nord-stream-2-pipeline-russian-gas-regulation/>.

⁴⁴ Buzan and Weaver, *Regions and Powers*, 49.

⁴⁵ Youngs, *Europe's Security*, 6.

⁴⁶ Youngs, *Europe's Security*, 7.

⁴⁷ Youngs, *Europe's Security*, 16.

⁴⁸ Youngs, *Europe's Security*, 16.

⁴⁹ Youngs, *Europe's Security*, 8.

⁵⁰ Youngs, *Europe's Security*, 17.

“formation of a CU contains seed both of protectionist and trade liberalizing forces.”⁵¹ This is also mentioned by Lukáš Tichý, a Czech scholar who focuses on energy security. Tichý interprets the liberalization discourse and claims that the main idea is that the EU would create an internal energy market with its own rules and these rules would then be continuously transferred on Russia in order to liberalize its market.⁵²

When talking about security and discourse, Szulecki quotes Buzan’s work from 1998 defines security as follows, “security is considered the out-come of specific social processes in which issues intersubjectively become security issues through speech acts. Thus, security is a social construction, a self-referential social practice produced in discursive interaction.”⁵³ The process of securitisation is described as a mechanism that consists of several steps,

[i]n a first step, a *securitising actor* constructs a *referent object* and *threat narrative* claiming the existence of an *existential threat* to the survival of this referent object. This narrative of existential threat is then presented by the securitising actor via *speech act* to an *audience* recommending extra-ordinary *emergency measures* which would break the ‘normal’ rules of the game [...] for reasons of security. This process so far is called a securitising move.⁵⁴

It is important to identify the threat in the first place and then make necessary steps in order to prevent the threat from having an impact on the actor. The thesis deals with energy dependency which poses a threat to the European Union. At the same time the EU is trying to securitize itself by taking important steps in its energy security. The following practical chapters elaborate on particular energy security issues of the EU.

⁵¹ Constantinos Syropoulos, "Customs Unions and Comparative Advantage," *Oxford Economic Papers* 51, no. 2 (1999): 266.

⁵² Lukáš Tichý, *Diskurz EU a Ruska o energetických vztazích* (Praha: Metropolitan Prague Press, 2017), 96.

⁵³ Szulecki, *Energy Security in Europe*, 34.

⁵⁴ Szulecki, *Energy Security in Europe*, 36.

2. Vision and Goals of the European Union

This practical chapter of the thesis is concerned with the energy strategy of the EU and should answer questions connected to it while applying the international relations theories of realism, liberalism and neorealism. The chapter elaborates on the diversification strategies of the EU while providing empirical evidence that shows the concrete steps of the institution. The outcome of the chapter should be defining the realpolitik of the EU in energy security and should introduce the reader with the ongoing plans and goals. One can then see more clearly the tensions between the EU and Russia which is related to the following chapters.

One of the main strategies of the EU is to diversify its energy supply among many suppliers. In the EU's own words, "diversifying Europe's sources of energy and ensuring energy security through solidarity and cooperation between EU countries."⁵⁵ This is done in order to lower the EU's dependency on just one or two main suppliers. In case one of the suppliers decides not to provide the EU region with energy supply, the EU can then rely on other suppliers. Eurostat states that "[t]he energy available in the European Union comes from energy produced in the EU and from energy imported from third countries. In 2016, the EU produced around 46 % of its own energy, while 54 % was imported."⁵⁶ As displayed, the EU is dependent by more than a half on external energy sources.

Eurostat published a list of countries that are major suppliers to the EU with their share of energy supply in percentage,

[t]he stability of the EU's energy supply may be threatened if a high proportion of imports are concentrated among relatively few external partners. In 2016, almost two thirds of the extra-EU's crude oil imports came from Russia (32 %), Norway (12 %), Nigeria and Saudi Arabia (both 8 %) and Kazakhstan (7 %). A similar analysis shows that more than three quarters of the EU's imports of natural gas came from Russia (40 %), Norway (25 %) and Algeria (12 %), while almost three quarters of solid fuel (mostly coal) imports originated from Russia (30 %), Colombia (23 %) and Australia (15 %).⁵⁷

As the official European Statistical Office presents, the EU is predominantly dependent on Russia. The EU imports around 30% of crude oil and 40% of natural gas from the Russian Federation. This may be one of the main reasons for the energy diversifying strategy of the EU. The European Commission (EC) states that the major suppliers remain Norway, Russia and the members of the Organisation of Petroleum Exporting Countries (OPEC) and in the future also the countries in Central Asia.⁵⁸ The Commission develops on the idea of diversifying by saying,

⁵⁵ "Building the Energy Union," European Commission, accessed March 21, 2019, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/building-energy-union>.

⁵⁶ "2.3 From where do we import energy and how dependent are we?," Eurostat.

⁵⁷ "2.3 From where do we import energy and how dependent are we?," Eurostat.

⁵⁸ "Building the Energy Union," European Commission.

“[t]he EU works actively with these countries as well as with Member States to increasingly diversify its energy sources, and to prevent disruptions to supply.”⁵⁹ By disruptions the EC refers to disruptions caused by the suppliers, extreme weather, industrial hazards, cyberattacks, terrorism and hybrid threats. The EU wants to prevent such disruptions by creating a crisis plan and work closely with the member countries and speak as *one voice* when dealing with suppliers.⁶⁰ The disruptions would affect EU imports that contain 87% of crude oil, 70% of natural gas, 40% of solid fossil fuels and 40% of enriched and manufactured nuclear fuels.⁶¹ Further, the daily total amount of money spent by the EU on energy is 1 billion euro.⁶² The European Commission decided to release an Energy Security Strategy in May 2014.

In the EU the actor responsible for energy is the Climate Action and Energy Commissioner. He or she is supposed to look over the energy security and helps to build a European Energy Union.⁶³ The EU Commission must define possible threats within the concept of the so-called “riskification.”⁶⁴ This term “refers to ‘security’ based on risk; therefore it requires a risk, a referent object at risk, and precautionary measures (i.e., a plan to govern).”⁶⁵ Simply put, one determines the risks that a certain security threat poses and has to come up with a counter-measure.⁶⁶ Thus, the EU Commissioner’s responsibilities are as follows,

[i]ncreasing Europe's energy security by diversifying sources of energy imports and uniting Europe's negotiating power in talks with non-EU countries; Selecting energy infrastructure projects to help establish a European Energy Union; Proposing new EU laws and rules to implement the 2030 climate and energy framework and steering negotiations with the European Parliament and national governments; Further developing an EU policy for renewable energy to make the EU the world leader in the sector; Strengthening and promoting the Emissions Trading System, the flagship of EU climate policy.⁶⁷

The EU appointed a concrete person, who will have to observe and deal with the aforementioned issues.

Further, the appointed person makes sure that all members participate efficiently on a list of “173 projects, of which 110 are electricity and smart grids projects, 53 gas projects, and

⁵⁹ “Building the Energy Union,” European Commission.

⁶⁰ “Building the Energy Union,” European Commission.

⁶¹ “Building the Energy Union,” European Commission.

⁶² “Energy Security Strategy,” European Commission, accessed March 21, 2019, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/energy-security-strategy>.

⁶³ “Miguel Arias Canete,” European Commission, accessed March 19, 2019, https://ec.europa.eu/commission/commissioners/2014-2019/arias-canete_en#team.

⁶⁴ Szulecki, *Energy Security in Europe*, 64.

⁶⁵ Szulecki, *Energy Security in Europe*, 64.

⁶⁶ Szulecki, *Energy Security in Europe*, 65.

⁶⁷ “Miguel Arias Canete,” European Commission.

6 oil projects”⁶⁸ of the Energy Union project. Additionally, the appointed EU-energy Commissioner presented a 2050-long-term strategy. This strategy “shows how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance, or research – while ensuring social fairness for a just transition.”⁶⁹ All of this is also connected to the Paris Climate Change Agreement, which was signed in 2015.

These energy-related projects and strategies are being taken into consideration with the relation to the major EU energy suppliers. The European Statistical Office posted a table of percentage showing the main importers of energy to the EU. The Eurostat office states that Russia, Norway, Nigeria, Saudi Arabia and Kazakhstan are the major suppliers.⁷⁰ As the percentage shows, the European Union is by and large dependent on energy imports like gas and crude oil from the Russian Federation. This leads to the one of the vital tasks of the EU Commissioner for energy, which is to find ways to diversify the energy supply.⁷¹ For example, the Commissioner has to secure the whole EU region from energy shortages which can be perceived by the EU leaders as a way to securitize itself.

In addition to its main energy suppliers, the EU has bilateral energy cooperation with the United States of America since 2009. Both actors created the EU-US Energy Council.⁷² The EU-US Council “is chaired by the EU High Representative/Vice-President, the EU Vice-President for Energy Union, the EU Commissioner for Climate and Energy, the US Secretary of State and the US Secretary of Energy. A representative from the rotating EU Presidency also participates.”⁷³ The EU as well as the U.S. trade of oil and gas are part of one of the EU’s strategies to tackle energy security. Another possible significant EU energy supplier could be Islamic Republic of Iran. The EU has its energy businesses in this country and wants to keep the nuclear deal going despite the U.S. anti-Iran efforts.⁷⁴ Iran could be one of the keys to

⁶⁸ “Energy Union,” European Commission, accessed March 19, 2019, https://ec.europa.eu/commission/news/energy-union-2017-nov-24_en.

⁶⁹ “2050 long-term strategy,” European Commission, accessed March 19, 2019, <https://ec.europa.eu/clima/policies/strategies/2050>.

⁷⁰ “2.3 From where do we import energy and how dependent are we?,” Eurostat.

⁷¹ “Miguel Arias Canete,” European Commission.

⁷² “United States of America,” European Commission, accessed March 20, 2019, <https://ec.europa.eu/energy/en/topics/international-cooperation/eu-cooperation-other-countries/united-states-america>.

⁷³ “United States of America,” European Commission.

⁷⁴ Dave Keating, “EU Vows To Maintain Iran Energy Investment Despite Sanctions,” Forbes.com, accessed March 21, 2019, <https://www.forbes.com/sites/davekeating/2018/08/06/eu-vows-to-maintain-iran-energy-investment-despite-sanctions/#440f98eda6b8>.

diversify the EU's energy supply and thus lower its dependence on Russia which may easily influence the region by disruptions of energy to the EU.

Based on the gas disruptions between Russia and the EU from 2009, the EU decided to simulate an energy disruption in 2014. This helped the EC to come up with short-term and long-term measures. The strategy for energy security was established. The tests found out that disruptions would have a significant impact considering the fact that the EU imports more than a half of its energy.⁷⁵ Yet, in the short-term the report confirmed “that if all countries cooperate with each other, consumers would remain supplied even in the event of a six month gas disruption.”⁷⁶ The long-term measures of the EU would be,

[i]ncreasing energy efficiency and reaching the proposed 2030 energy and climate goals. Priorities in this area should focus on buildings and industry, which use 40% and 25% of total energy respectively in the EU. [...]; Increasing energy production in the EU and diversifying supplier countries and routes. This includes further deployment of renewables, sustainable production of fossil fuels, and safe nuclear energy where this option is chosen [...]; Completing the internal energy market and building missing infrastructure links to respond quickly to supply disruptions and redirect energy across the EU to where it is needed; Speaking with one voice in external energy policy, including ensuring that EU countries inform the European Commission early on about planned agreements with non-EU countries that may affect the EU's security of supply; Strengthening emergency and solidarity mechanisms and protecting critical infrastructure. This includes more coordination between EU countries to use existing storage facilities, develop reverse flows, conduct risk assessments, and put in place security of supply plans at regional and EU level.⁷⁷

These steps are crucial for the EU to secure itself in terms of energy supply and energy usage. The EC stresses cooperation and using more eco-friendly energy options. It is noteworthy, that the EU puts its energy security goals on the same level as its climate action program, which is connected to the Paris Agreement from 2015 concerned lowering the CO₂ gas emissions.⁷⁸

In October 2014, the European Council proposed a 2030 Framework for climate and energy that should meet its targets between 2020 and 2030. Among many policies some stand out from the list. One of them is “[n]ew indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries.”⁷⁹ Some others contain policies connected to coherence and coordination as well as completion of the internal energy market.⁸⁰ The completion of the internal energy market could mean much more efficient and secure energy

⁷⁵ “Energy Security Strategy,” European Commission.

⁷⁶ “Energy Security Strategy,” European Commission.

⁷⁷ “Energy Security Strategy,” European Commission.

⁷⁸ “Paris Agreement,” European Commission, accessed March 21, 2019, https://ec.europa.eu/clima/policies/international/negotiations/paris_en.

⁷⁹ “2030 Energy Strategy,” European Commission, accessed March 21, 2019, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2030-energy-strategy>.

⁸⁰ “2030 Energy Strategy,” European Commission.

supply. This would tackle the significant energy dependency of the Central and Eastern part of the EU.⁸¹

Yet, there are legislative steps that are directly connected to the energy dependency and may make the EU less dependent on oil but more dependent on gas. When taking into account EU's efforts to reduce the greenhouse gas emission by at least 40% by 2030, it is possible that the EU may increase its dependency on natural gas.⁸² The UN's global pact on lowering CO₂ may have a positive impact on the environment. On the other hand, it may have a serious impact on EU's energy security. EU plans to ban sale of new petrol and diesel vehicles by 2040.⁸³ This means that the whole market as well as EU's economy will have to transform from using fossil fuels like crude oil and coal to using perhaps only gas and electricity along with clean energy. This could result in a fundamental shift from the continuous increase of importing coal to an increase in natural gas imports. The fact that the EU would switch from oil to gas would not make the institution less dependent on suppliers like the Russian Federation. According to the CIA, Russia has the largest natural gas reserves in the world. Iran to be the second and Qatar the third, while Qatar having only half of the natural gas resources as Russia.⁸⁴ Therefore, one can see that the EU's careful position when dealing with Iran and the U.S. may have its firm roots in this fact.

⁸¹ Annalisa Girardi, "Growing Dependent On Russia: The Gas Routes In Europe," Forbes.com, accessed March 21, 2019, <https://www.forbes.com/sites/annalisagirardi/2018/12/12/growing-dependent-on-russia-the-gas-routes-in-europe/#1ffcdb62b00>.

⁸² "Paris Agreement," European Commission.

⁸³ Arthur Nelsen, "EU must end new petrol and diesel car sales by 2030 to meet climate targets – report," The Guardian, accessed March 21, 2019, <https://www.theguardian.com/environment/2018/sep/20/eu-must-end-new-petrol-and-diesel-car-sales-by-2030-to-meet-climate-targets-report>.

⁸⁴ CIA, "Natural Gas – Proved Reserves," CIA.gov, accessed March 21, 2019, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2253rank.html>.

The European Statistical Office presented a graph of the share of energy products in the EU-28 imports, trade in value between 2012 and the first semester of 2018.

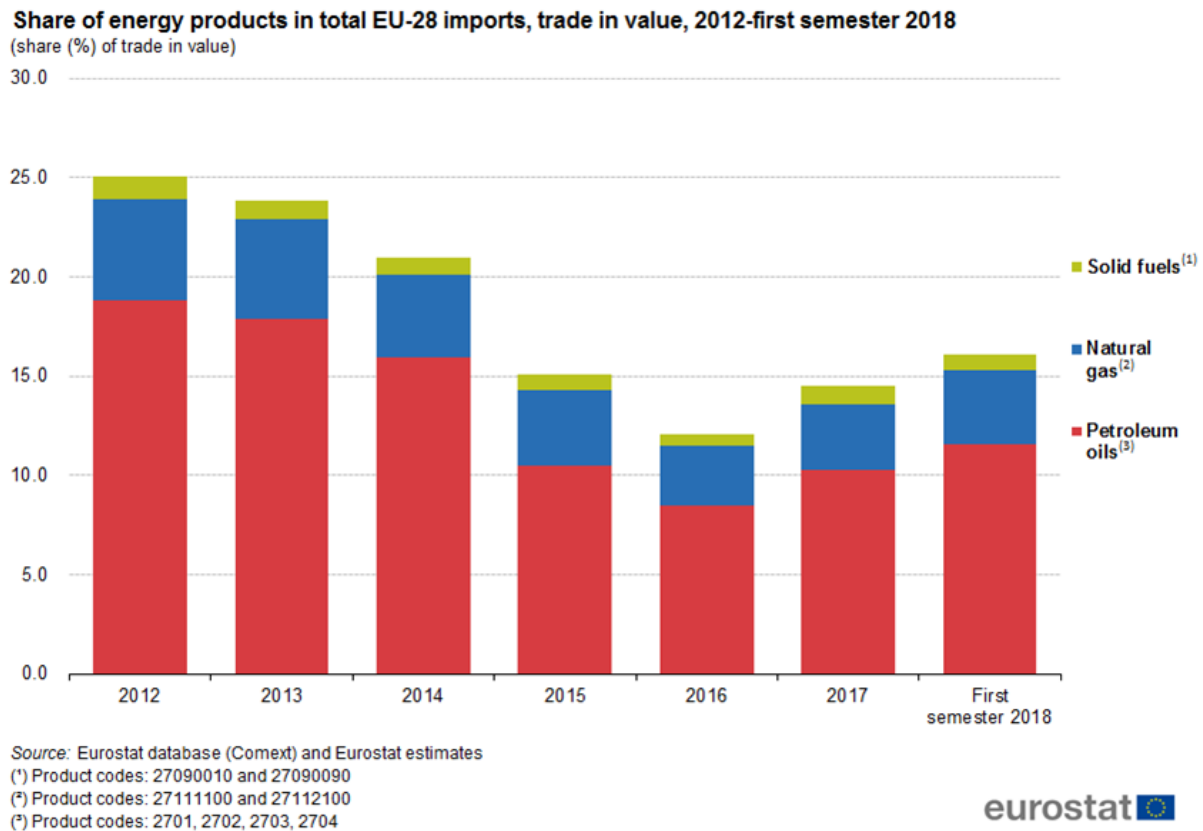


Figure 1: Share of energy products in total EU-28 imports.⁸⁵

The graph shows that there was a decrease in energy shares that reached 25% and then plummeted to 12% in 2016. This may be the result of the sanctions that the EU imposed on the Russian Federation after annexing Crimea in 2014.⁸⁶ Yet, one can see a growing tendency of share of energy products in the EU in 2018, when the products' share rose to 16%. This tendency may be alarming for the EU. The more energy-related products in the EU, the more dependent the Union becomes. It is apparent that the EU wants to maintain its status of being one of the leading actors in terms of economics, technology and development in the near future. To achieve its goals by 2020, 2030 and 2050, the EU will possibly need more energy. The trend of growing dependency on energy is well demonstrated by the graph. Thus, the energy security dilemma is created.

⁸⁵ "Share of energy products in the EU-28 imports, trade in value, 2012-first semester 2018," Eurostat, accessed March 21, 2019, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share_of_energy_products_in_total_EU-28_imports_trade_in_value_2012-first_semester_2018_\(share_\(%25\)_of_trade_in_value\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share_of_energy_products_in_total_EU-28_imports_trade_in_value_2012-first_semester_2018_(share_(%25)_of_trade_in_value).png).

⁸⁶ "EU sanctions against Russia over Ukraine crisis," European Union Newsroom, accessed March 21, 2019, https://europa.eu/newsroom/highlights/special-coverage/eu-sanctions-against-russia-over-ukraine-crisis_en.

Prior to 2007, member states could conclude energy deals without the EU's concerns. However, "in March 2007, in the face of increasing concern regarding Europe's reliance on Russian energy resources, and growing public pressure to address global climate change, the EU member states agreed on a series of policy measures intended to form the foundation of an 'Energy Policy Europe.'"⁸⁷ The strategy aimed at diversification and securitization of energy supplies, "while seeking to reduce EU-wide carbon emissions by promoting alternative and renewable energy sources."⁸⁸ These intragovernmental agreements (IGAs) related to energy were further expanded in 2012. These sets of agreements were revised in 2016 and new adjustments were made.⁸⁹ In the updated version of the agreement it is stated that "[t]he Commission then checks whether they [the energy agreements] are compliant with EU law. However, in the current system, if an IGA is found by the Commission to be not compliant with EU law, it may not be possible to renegotiate the IGA, for both legal and political reasons."⁹⁰ This divides Europe even more as some countries have long-term energy deals with some actors and the energy supply of each and every one of the actors varies a lot. So far there has been no common consent on who should supply the EU as a whole. The energy agreements function on a bilateral basis. The EU's current attempt is to make new deals comply with the EU law and thus systematically diversify the suppliers for different parts of Europe.

Another important part of the EU strategy is the Trans-European Network for Energy (TEN-E). Its focus is on "linking the energy infrastructure of EU countries. As part of the strategy, nine priority corridors and three priority thematic areas have been identified."⁹¹ This is further explained as follows, "[t]he priority corridors, which cover at least two EU countries, require urgent infrastructure development in electricity, gas or oil. This development will connect regions currently isolated from European energy markets, strengthen existing cross-border interconnections, and help integrate renewable energy."⁹² The EU identified main corridors between the Northern and Southern part of the EU which would help the institution to diversify its energy supply. This way the EU tries to control the energy security dilemma.

The energy security dilemma may be best explained and analysed through the international relations theory of neorealism. Specifically, defensive realism. The theoretical

⁸⁷ Paul Belkin, "The European Union's Energy Security Challenges," *Connections* 7, no. 1 (2008): 76.

⁸⁸ Paul Belkin, "The European Union's Energy Security Challenges," 76.

⁸⁹ "EU rules on Intergovernmental Agreements in energy updated," European Commission, accessed March 27, 2019, <https://ec.europa.eu/energy/en/news/eu-rules-intergovernmental-agreements-energy-updated>.

⁹⁰ "EU rules on Intergovernmental Agreements in energy updated," European Commission.

⁹¹ "Trans-European Network for Energy," European Commission, accessed March 31, 2019, <https://ec.europa.eu/energy/en/topics/infrastructure/trans-european-networks-energy>.

⁹² "Trans-European Network for Energy," European Commission.

chapter of this paper gave the reader a sense of this particular theory. To be even more concrete, defensive realism explains the security strategies of an actor within the anarchical structure. States or actors use any possible means to increase their security while decreasing the security measures of other states or actors. This creates a security dilemma where actors have to worry about their own security and the securitizing efforts of others.⁹³ Approaching the year 2020, the EU is currently facing an energy security dilemma, which is reflected on its policies and strategies.

In general, the EU is trying to maximize its energy security by diversifying, while Russia is trying to maximize its secured income by supplying the EU and building new pipelines to ensure the region is even more dependent on them. Therefore, Russia may see the EU's attempt of maximizing its security as a threat. This resembles a valid point that the author of "Security Seeking under Anarchy" wrote,

[p]airs of states may pursue purely security-seeking strategies, but inadvertently generate spirals of mutual hostility or conflict. [...] Defensive realism predicts greater variation in internationally driven expansion and suggests that states ought to generally pursue moderate strategies as the best route to security. Under most circumstances, the stronger states in the international system should pursue military, diplomatic, and foreign economic policies that communicate restraint.⁹⁴

In terms of defensive realism, it is understandable that the EU wants to lower its dependency on Russia. A specific example of the *spirals-of-mutual-hostility-or-conflict* may be seen on the Ukraine and Russian relations.

Ukraine is extremely vulnerable to the gas disruptions from Russia. The former has cut gas to Ukraine many times in 2006, 2008 and 2009. Russia claims that Ukraine did not pay its bills to the supplier.⁹⁵ Most recently, in 2014 Russia cut gas to Ukraine again.⁹⁶ The Russian President Vladimir Putin then annexed Crimea which was denounced by the EU and Russia was sanctioned. From a neorealist perspective it is all about pure survival. Russia wants to receive money in exchange for gas and Ukraine wants to be supplied with energy. Both want to be secured. Additionally, Ukraine want to access the EU and NATO which would be understood as maximizing its security. In February 2019, the Ukrainian president Petro Poroshenko accused Putin that he wants to destroy Ukrainian independence and said, "[o]nly

⁹³ Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," 129.

⁹⁴ Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," 129.

⁹⁵ Paul Kirby, "Russia's gas fight with Ukraine," BBC, accessed March 25, 2019, <https://www.bbc.com/news/world-europe-29521564>.

⁹⁶ Andrew Gardner, "Russia cuts gas to Ukraine," Politico.eu, accessed March 25, 2019, <https://www.politico.eu/article/russia-cuts-gas-to-ukraine/>.

full-fledged membership in the European Union and NATO can decisively and irrevocably guarantee our independence, national security, freedom and well-being.”⁹⁷

The EU sees such scenarios and tries to apply its own security measures that would help the institution to get out of the energy security dilemma. From a defensive neorealist perspective, it is also understandable because the EU tries to diplomatically negotiate fair terms with Russia. On the other hand, the environmental legislative may cause that the EU will slip into another energy insecurity as already mentioned previously. The liberalist theory on energy security fails to explain this case. As written in the theoretical part, liberalists claim that other theories omit the fact that more actors are involved in the energy markets (see Chapter 1, page 4). Now, this may be generally true but not true in the case of Russia. The Russian government controls one of the biggest energy-producing companies such as Gazprom and Rosneft.⁹⁸ Therefore, the state directly controls the flow of energy into another country. Neorealism explains the diversifying attempts of the EU as logical as the EU tries to maximize its energy security.

The first chapter of the practical part highlighted some of the EU's main ideas and strategies concerned with energy security. The EU appears to be a liberal institution mostly relatable to the international theory of liberalism as it stresses cooperation, economic interconnection and human rights. In terms of its realpolitik it is more likely to resemble some major characteristics of the theory of defensive neorealism. In this sense, the EU stresses maximizing of its own energy security and fierce diplomatic negotiations like sanctions and drawing better energy-related deals. The energy policies can be more defined and analysed through the lenses of the aforementioned theory of neorealism. As the EU imports more than a half of its energy, it is very vulnerable. The dependency on third actors poses a serious threat to its energy security which is reflected on the main EU's strategy – diversification of energy suppliers and sources. One of the core findings of this chapter is the EU's similar placement of environmentally-related issues and its energy security ambitions. In this chapter, the thesis shows that the environmental policies of the EU of the climate action program, specifically the Paris Agreement, deepens EU's vulnerability and energy-dependence in the long-term. EU's attempts to reduce the oil-driven market and shift it on gas products will very likely continue with the energy security struggle that the EU is currently facing. The plans to quickly build up

⁹⁷ Yuras Karmanau, “Ukrainian president vows to push for EU, NATO membership,” AP News, accessed March 25, 2019, <https://www.apnews.com/4ed6ce09172e45a6b2b1b371d72278a3>.

⁹⁸ William J. Carpenter, “The 6 Biggest Russian Energy Companies,” Investopedia, accessed March 25, 2019, <https://www.investopedia.com/articles/markets/100715/6-biggest-russian-energy-companies.asp>.

the internal energy market while reducing the CO₂ emissions will have a bitter sweet taste. When finished, the energy internal market will be possibly efficient within the Union, but it will probably not solve the energy dependency of the region. After its completion, the external energy suppliers will have to comply with the EU rules if they want to sell energy on the Single European Market.⁹⁹ This will only make it harder for external suppliers to influence the EU within, but it will not solve the predominant gas dependency of the EU due to the CO₂ emission policies. The current energy diversifying strategy reflects the realpolitik of the EU and is an understandable response to the growing pressure of its suppliers as they keep on increasing their influence over the institution.

⁹⁹ Svein S. Andersen, Andreas Goldthau and Nick Sitter, *Energy Union: Europe's New Liberal Mercantilism?* (London: Palgrave MacMillan, 2017), 2.

3. Analysis of the Energy Relationship Between the European Union and the Russian Federation

“Regardless of how the standoff over Ukraine develops, one lesson is clear: excessive dependence on Russian energy makes Europe weak.”¹⁰⁰

- President of the European Council Donald Tusk, April 21, 2014.

This practical chapter focuses on the mutual energy relationship between the EU and the Russian Federation. Both actors are connected through a web of pipelines leading from the Russian energy resources to the main areas of the EU. Further, Russia plans to increase its energy supply by building new pipelines leading to the EU. Both actors need each other in order to survive. The EU needs energy supply, while Russia needs EU's funds to maintain the country stable in the long-term. As already mentioned in the previous practical chapter, the EU's strategy is to diversify its energy supply in order to be secured energy-wise. On the other hand, Russia feels that the only way to achieve energy security in Europe is to build more pipelines to the EU. The Russian Energy Minister Alexander Novak declared that “[w]e are not a monopolist on the Russian market and we do not want to be a monopoly in the European market.”¹⁰¹ Additionally, Russia sees this as a threat and is currently building a pipeline to China in order to diversify its energy export.¹⁰² The United States also sees it in a different way. The U.S. President Donald Trump criticised Germany for being a captive due to its reliance on Russian gas.¹⁰³ As one can see, the EU energy dilemma is a security issue involving other external actors such as the United States. Under President Trump, the EU's closest ally has brought up concerns over the EU's energy dependency on Russia and slightly distorted its relations with the Europeans over the Iranian Nuclear Deal. This chapter tries to determine and answer the question; who is the one that is more dependent on Russian energy supply? This may be possible by explaining the ongoing collective action problem which includes the bilateral agreements between the EU members and Russia and by analysis of both actors' relations in the past.

¹⁰⁰ Donald Tusk, “A united Europe can end Russia's energy stranglehold,” The Financial Times, accessed March 27, 2019, <https://www.ft.com/content/91508464-c661-11e3-ba0e-00144feabdc0>.

¹⁰¹ Sam Meredith, “Russia does ‘not want to be a monopoly’ over gas supplies to Europe, energy minister says,” CNBC, accessed March 26, 2019, <https://www.cnbc.com/2018/10/03/russia-do-not-want-to-be-a-monopoly-with-gas-supplies-to-europe-novak.html>.

¹⁰² “Power of Siberia,” Gazprom, accessed March 26, 2019, <http://www.gazprom.com/projects/power-of-siberia/>.

¹⁰³ Paul Carrel, “Tough to stop Nord Stream 2 now it's being built – EU's Oettinger,” Reuters, accessed March 26, 2019, <https://www.reuters.com/article/us-germany-russia-pipeline/tough-to-stop-nord-stream-2-now-its-being-built-eus-oettinger-idUSKCN1OR0YF>.

The crucial years of the EU-Russian energy relations started in the early 2000s. As Richard Youngs writes, “[f]rom the early 2000s the EU sought to deepen technical cooperation on energy matters with Moscow, even while high politics tensions intensified.”¹⁰⁴ This tends to be the already mentioned neorealist approach of the EU which stresses the diplomatic and economic policies that communicate restraint and try to ease the situation.¹⁰⁵ The beginning of the new millennium meant a shift of Russian focus on energy. Roland Dannreuther writes, “[t]he 2003 Russian energy strategy stated that Russia’s energy sector ‘forms the basis for its economic development and an instrument for its internal and foreign policy’. In 2005, Putin clearly articulated that Russia needed to be a leader in global energy and thus indirectly supported the widespread and popular conceptualization of Russia as an energy superpower.”¹⁰⁶ This shift was caused by the Russian President Vladimir Putin’s state purchase of one of the most successful private oil companies Yukos in 2003. Its CEO Mikhail Khodorkovsky was sentenced to a long period in prison.¹⁰⁷ The oligarch was allegedly a strong opposition to Putin in his early stages.¹⁰⁸

The Russian Federation then used energy as a tool of threat towards its neighbouring countries who were tempted to be closer to the U.S., EU, or NATO. Energy was used as a tool in a number of forms such as, “threats of suspension of supplies of gas, changes in the pricing for those gas supplies, and aggressive attempts to gain control over energy assets in these countries.”¹⁰⁹ This may be one of the reasons why the EU is sceptical towards Russia and knows from experience that Russia is not afraid of coercive force as demonstrated in Chechnya, Georgia and Ukraine.

The Russian-Ukrainian energy relations are also of high importance. The EU may see how Russia uses energy to influence this country. On the other hand, Russia also needs Ukraine for now. The different energy disputes between Russia and Ukraine creates an important task for the Russian government. The Russian policymakers had to find “a way to respond to Ukraine’s consistent failure to pay for the gas that it has used and, when supplies are as a consequence suspended, to appropriate the gas destined for European markets.”¹¹⁰ In other words, Russia needs the gas to flow through the Ukrainian territory since the EU pays 1 billion

¹⁰⁴ Youngs, *Europe’s Security*, 79.

¹⁰⁵ Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," 129.

¹⁰⁶ Dannreuther, *Energy Security*, 76.

¹⁰⁷ Dannreuther, *Energy Security*, 76.

¹⁰⁸ Shaun Walker, “Exiled oligarch Mikhail Khodorkovsky: I have no obligations to Putin,” *The Guardian*, accessed March 26, 2019, <https://www.theguardian.com/world/2016/feb/19/russia-oligarch-mikhail-khodorkovsky-no-obligations-vladimir-putin-pardon>.

¹⁰⁹ Dannreuther, *Energy Security*, 77.

¹¹⁰ Dannreuther, *Energy Security*, 77.

a day for Russian energy.¹¹¹ One can perhaps speculate, that the Ukrainian side takes advantage of its position and tries to see what Russia will do. Perhaps, was it not for the Ukrainian government's rising debt for not paying for the energy, the Russian gas could have flown to the EU without any disruption. Yet, often gas disruptions that the EU experienced in 2006, 2007, 2009 and most recently in 2014 warned the EU that it needs to diversify its energy supply even more.¹¹²

The EU tries to find as many different suppliers in order to prevent the whole region from a disaster. As many scholars think,

[t]he trends driving Europe's increased dependence on natural gas imports are likely to be long lasting. Indigenous gas production is reaching a plateau, and widespread concerns about climate change are leading to the retirement of coal-fired power plants and an increase in the share of power coming from renewables. With nuclear power controversial in many countries, the EU's reliance on natural gas, especially for power generation, is expected to grow substantially in coming years.¹¹³

Thus, a dilemma is created that has to be dealt with in the upcoming years. Another concern that should force the EU to find more reliable suppliers is the fact that Russia is starting to focus more on China. As the author of *Energy Security* puts it, "[t]he finalization in 2014 of a major gas deal between China and Russia was a significant indicator of this Russian 'pivot to the East.'"¹¹⁴ Gazprom is building a three-thousand-kilometres-long gas pipeline which should be able to export around 38 billion cubic meters of gas per year. In comparison to the current gas supply from Russia to the EU it is less than a fifth as the Russian Federation energy giant Gazprom exported 194.4 billion cubic meters (bcm) of gas in 2017.¹¹⁵ This may not seem much in comparison but according to the Russian News Agency TASS, the Russian government is planning on supplying China with more than 80 bcm in the near future.¹¹⁶ If their talks are going to go well, Russia may lose its supplier dependency on the EU. For now, the EU remains Russia's biggest trading partner.¹¹⁷ One may assume that exports to China are going to grow in the upcoming years as China intends to become the leading power by 2049. Based on Xi

¹¹¹ "Energy Security Strategy," European Commission.

¹¹² Irena Dimitrova, "EU-Russia Energy Diplomacy: 2010 and Beyond?," *Connections* 9, no. 4 (2010): 8.

¹¹³ Andrew S. Weiss, F. Stephen Larrabee, James T. Bartis, and Camille A. Sawak, "Key Energy Security Challenges," in *Promoting International Energy Security: Volume 2, Turkey and the Caspian*, 19. Santa Monica, CA; Arlington, VA; Pittsburgh, PA: RAND Corporation, 2012.

¹¹⁴ Dannreuther, *Energy Security*, 77.

¹¹⁵ "Delivery statistics," Gazprom, accessed March 26, 2019, <http://www.gazpromexport.ru/en/statistics/>.

¹¹⁶ "Russia might supply 80 bln cubic meters of gas to China per year," TASS, accessed March 26, 2019, <http://tass.com/economy/1021946>.

¹¹⁷ Youngs, *Europe's Security*, 80.

Jinping's plans, this will be the centennial year of the founding of the People's Republic of China, and therefore China must become the great power it once was.¹¹⁸

Gazprom's gas energy exports have a growing tendency. In 2000, Gazprom exported around 130 bcm and in 2010 the export was already around 139 bcm.¹¹⁹ In 2018, the Russian officials expected the gas supply to exceed all-time high of 200 bcm.¹²⁰ For the EU, this should be alarming considering the fact that the EU imports around 54% of its energy.¹²¹ Yet, Russian-Chinese energy relations might not be as a big threat as it appears. As the author of *Energy Security* writes, "[b]oth China and Russia also ultimately cannot afford to, nor wish to, risk their key economic partners in the West; Sino-Russian trade dropped from \$90bn in 2014 to \$64.2bn in 2015 and this bilateral trade remains a fraction of China's trade with the US or Japan or Russia's trade with Europe."¹²² The author then continues that "most of the gas that will flow to China will come from gas fields in East Siberia and not from fields in West Siberia, which supply the European markets."¹²³ It appears as if the EU-Russian relation is as of the one between the U.S. and China. Both the United States and China are connected by trade while China being the U.S. creditor and the U.S. the biggest debtor to China.¹²⁴ The EU is also the main exporting market for Russia, while Russia is the biggest energy supplier for the EU. Further, the EU investments make for more than three quarters of the Russian economy.¹²⁵ There may be a resemblance between the US-China relation in the one of EU-Russia. A question arises, who is more dependent on each other? Is Russia or the EU more dependent on the energy exports?

Before elaborating on who out of the aforementioned actors is more dependent on each other, it is necessary to elaborate on the diversity of energy agreements within Europe. One of the main issues and weaknesses in one's opinion might be that each and every member has a right to negotiate an oil or gas agreement by themselves. The EC states, "[w]hen individual EU

¹¹⁸ Rush Doshi, "Xi Jinping just made it clear where China's foreign policy is headed," The Washington Post, accessed March 26, 2019, https://www.washingtonpost.com/news/monkey-cage/wp/2017/10/25/xi-jinping-just-made-it-clear-where-chinas-foreign-policy-is-headed/?noredirect=on&utm_term=.a3f0550d2c3a.

¹¹⁹ "Delivery statistics," Gazprom.

¹²⁰ Dmitry Zhdannikov, Olesya Astakhova and Oksana Kobzeva, "Russian gas exports to boom despite U.S. pressure and rivalry," Reuters, accessed March 26, 2019, <https://www.reuters.com/article/us-oil-opec-russia-gas/russian-gas-exports-to-boom-despite-u-s-pressure-and-rivalry-idUSKCN1MD0JC>.

¹²¹ "Energy production and imports," Eurostat, accessed March 26, 2019, https://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports.

¹²² Dannreuther, *Energy Security*, 78.

¹²³ Dannreuther, *Energy Security*, 78.

¹²⁴ Daniel Shane, "China is America's biggest foreign creditor. Could it turn off the tap?," CNN, accessed March 26, 2019, <https://money.cnn.com/2018/01/11/investing/china-us-treasury-purchases/index.html>.

¹²⁵ "Russia," European Commission, accessed March 28, 2019, <http://ec.europa.eu/trade/policy/countries-and-regions/countries/russia/>.

countries negotiate energy agreements with non-EU countries, they must ensure that these agreements comply with EU law. This helps ensure the smooth functioning of the EU's internal energy market.”¹²⁶ This may not seem as an issue to some since the agreements must comply with the EU law. On the other hand, if the Eastern part of the EU takes energy from one supplier while the Western part takes energy from more suppliers, this may pose an energy security threat to the whole Union. One can imagine, that if the Eastern part loses energy supply, the Western part has to provide the Eastern part with energy supplies. This causes a long-term disadvantage for the EU. Since the EU does not work as one in the energy deals, dependency problems occur. For example, much of the Eastern part of the EU as well as the V4 Group is predominantly dependent on energy imports from the Russian Federation.¹²⁷ Richard Youngs supports this fact by stating that Finland, Latvia, Lithuania and Slovakia are obtaining 100% of their energy from Russia.¹²⁸

To show “the extent of much of the EU's reliance on Russian gas, the Commission noted that 11 member states (Bulgaria, Czech Republic, Estonia, Latvia, Hungary, Austria, Poland, Romania, Slovenia, Slovakia and Finland) imported more than 75 percent of total national imports of natural gas from Russia in 2018, largely due to their proximity to the country.”¹²⁹ Stats from 2018 also show, that Germany remains the biggest importer of Russian gas with 47,7 bcm, Italy to be the second with 18,3 bcm.¹³⁰ Youngs supports these facts and writes, “[i]n absolute terms the largest importers of Russian gas were Germany, Italy, Turkey and France.”¹³¹ As displayed, the EU's energy supply among its members differs a lot. The EC itself admits that relying on one supplier is a security threat, “[m]any countries are also heavily reliant on a single supplier, including some that rely entirely on Russia for their natural gas. This dependence leaves them vulnerable to supply disruptions, whether caused by political or commercial disputes, or infrastructure failure. For instance, a 2009 gas dispute between Russia and transit country Ukraine left many EU countries with severe shortages.”¹³² It is possible to assume a growing dependency on the Russian gas if the premise that lowering greenhouse gas

¹²⁶ “Intergovernmental energy agreements,” European Commission, accessed March 27, 2019, <https://ec.europa.eu/energy/en/topics/international-cooperation/intergovernmental-agreements>.

¹²⁷ Rick Noack, “Eastern Europe is trying to break its dependence on Russian gas. Western Europe is doing the opposite,” The Washington Post, accessed March 27, 2019, https://www.washingtonpost.com/world/2018/10/17/eastern-europe-is-trying-break-its-dependence-russian-gas-western-europe-is-doing-opposite/?noredirect=on&utm_term=.28698615a8e7.

¹²⁸ Youngs, *Europe's Security*, 80.

¹²⁹ “Russian gas in the European market for energy,” Newsletter for the European Union, accessed March 27, 2019, <http://www.newslettereuropean.eu/russian-gas-european-market-energy/>.

¹³⁰ Annalisa Girardi, “Growing Dependent On Russia: The Gas Routes In Europe,” Forbes.com.

¹³¹ Youngs, *Europe's Security*, 80.

¹³² “Energy Security Strategy,” European Commission.

emissions results in increase of imported gas becomes a reality. Due to the 2016 revision of the Intergovernmental Agreement law, EU may focus on finding suppliers for the whole region, which could reduce the diversity created by the energy bilateral agreements.

In terms of influencing the EU, Russia may use energy and the aforementioned bilateral agreements to separate Europe. Similar tactic is perhaps used by China. This actor negotiates with the EU as a whole but also with every member separately. Some countries put higher emphasis on some issues and therefore for China it is much easier for them to talk one-on-one. This poses a threat to the EU again as it is not discussing trade deals and investments as one. In the joint strategy towards China, the European Commission states,

[t]he EU must project a strong, clear and unified voice in its approach to China. When Member States conduct their bilateral relations with China – whether one-on-one or as groups of countries such as the 16+1 format – they should cooperate with the Commission, the EEAS and other Member States to help ensure that aspects relevant to the EU are in line with EU law, rules and policies, and that the overall outcome is beneficial for the EU as a whole.¹³³

When the EU works as a one it is seen as a tough business partner in concluding deals than when dealing on a bilateral basis. Both actors Russia and China know this and may use the bilateral agreements to split the EU from within.

This poses a big problem for the EU in its pursuit to diversify its suppliers, as it cannot speak for the Union as a whole for now. This concern was stressed by the President of the European Council Donald Tusk in 2014. He claimed, “Russia does not sell its resources cheap – at least, not to everyone. [...] A dominant supplier has the power to raise prices and reduce supply. The way to correct this market distortion is simple. Europe should confront Russia’s monopolistic position with a single European body charged with buying gas.”¹³⁴ The internal energy market should deal with this issue when built. The author of “Patterns of Energy Transition” states,

[t]he concentration of oil and gas reserves in a small group of countries, particularly in Russia and the countries of the Middle East members of OPEC, determines their market dominance. The greater the increase in the demand for oil and gas in these regions, the greater the likelihood of rising prices. In Europe, the problem of secure energy supplies has become an issue as a result of increasing energy dependence.¹³⁵

¹³³ “Elements for a new EU strategy on China,” *Joint Communication to the European Parliament and the Council*, (2016): 1-19, accessed March 27, http://eeas.europa.eu/archives/docs/china/docs/joint_communication_to_the_european_parliament_and_the_council_-_elements_for_a_new_eu_strategy_on_china.pdf, 3.

¹³⁴ Donald Tusk, “A united Europe can end Russia’s energy stranglehold,” *Financial Times*.

¹³⁵ Silvana Bartoletto, “Patterns of Energy Transitions: The Long-Term Role of Energy in the Economic Growth of Europe,” in *Past and Present Energy Societies: How Energy Connects Politics, Technologies and Cultures*, edited by Möllers Nina and Zachmann Karin, 324.

Yet, some claim that the EU is not as dependent as it may seem. Roland Dannreuther claims, “[i]t is unlikely that Russia will ever be in a position to be able truly to balance its gas exports between China and Europe and, thus, its dependence on Europe will remain structurally embedded.”¹³⁶ This argument is also shared by a former advisor on energy and environment for the European Commission Jørgen Henningsen.

In 2018, Mr. Henningsen wrote an article in the Financial Times that the EC is falling for the traditional trap “of believing that energy dependence can be measure by energy imports data.”¹³⁷ He then argues that despite an increase in gas imports from Russia to the EU, the EU has “a much larger and largely under-utilised capacity for import of liquefied natural gas, which could be activated in the case of a disruption of gas supplies from Russia.”¹³⁸ Henningsen continues that the gas used for electric generation could be used for domestic heating and industry “and the conclusion is that Russia, with no alternative outlets for the gas presently being piped into the EU, would be the big loser in a disruption scenario.”¹³⁹ This may be true since 67% of Russia’s revenue comes from energy exports.¹⁴⁰

According to the Russia’s news site RT, oil revenues grew over 21% and the sales of natural gas doubled in March 2018. This trend is rising for three years consistently. Additionally, the Russian President Vladimir Putin signed a decree which should make Russia less dependent on energy exports. The plans include building new machinery, agriculture and other services.¹⁴¹ Putin’s attempts to lower the Russian economy on energy exports are totally rational. The EU members are trying to find new suppliers and being trapped in this security dilemma is not acceptable for both actors. Russia experienced a plummet in oil prices in 2014. This was the result of the dropping prices for oil and the economic sanctions imposed by the West. This can be displayed on a graph released in the Financial Times in February 2018.

¹³⁶ Dannreuther, *Energy Security*, 78.

¹³⁷ Jorgen Henningsen, “Europe is not so dependent on Russian gas,” Financial Times, accessed March 27, 2019, <https://www.ft.com/content/a5540290-3f3b-11e8-b9f9-de94fa33a81e>.

¹³⁸ Jorgen Henningsen, “Europe is not so dependent on Russian gas,” Financial Times.

¹³⁹ Jorgen Henningsen, “Europe is not so dependent on Russian gas,” Financial Times.

¹⁴⁰ Kottasová, “Europe is still addicted to Russian gas,” CNN Business.

¹⁴¹ “Russia oil & gas revenues surge through March,” RT, accessed March 28, 2019, <https://www.rt.com/business/426126-russia-energy-exports-revenues/>.



Figure 2: Russian Rouble and oil price.¹⁴²

One can see that the Russian oil prices dropped from 108 dollars in 2013 to 30 dollars in February 2016. This demonstrates the strong Russian dependency on their energy exports. The fact that Russia's economy is vulnerable due to its energy dependency which can also be seen on Russia's GDP growth in that time period.

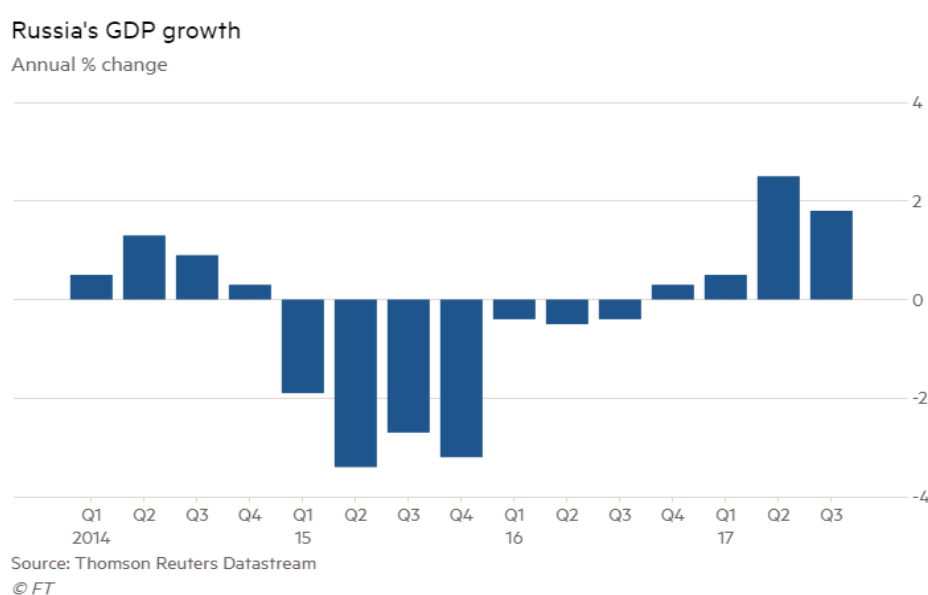


Figure 3: Russia's GDP growth.¹⁴³

One can see the direct influence of oil prices on the economy's growth. The sanctions had a two-year-long-lasting effect. This had a serious impact on Russia's middle class because the

¹⁴² Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times, accessed March 28, 2019, <https://www.ft.com/content/3aac3faa-1bb6-11e8-aaca-4574d7dabfb6>.

¹⁴³ Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times.

inflation rate increased from around 6% in 2013 to around 16 % in 2015.¹⁴⁴ The total GDP production of Russia is not totally influenced by the drop of energy prices, but it had a serious impact on the economy. For example, the rouble, the Russian currency has experienced serious drops in 2014 and 2018. Many experts claim that it may be the effect of sanctions imposed by the West, as the currency experienced the worst ratios since the 1990s.¹⁴⁵

Kathrin Hill, the author of the Financial Times article about Russia's economy states, "[b]y some measures, the economy is coming out of recession stronger and more stable than before. Forced by western financial sanctions, Russian banks and companies drastically reduced their dependence on foreign debt."¹⁴⁶ She then continues that "under a new rule, all revenue from oil priced above \$40 a barrel is off-limits for ordinary budget spending and must be saved in the National Welfare Fund for long-term investment. The measure is aimed at reducing oil dependency."¹⁴⁷ She also states that Russia lacked investment even before the recession. In order to save money and help the economy President Putin's former finance minister Alexei Kudrin told Putin to increase the retirement age.¹⁴⁸ In September 2018, this change sparked protests in Russia when the retirement age was increased for women from 55 to 63, and for men from 60 to 65. This was not welcomed by the public since the life expectancy of a male in Russia is 66 years of age and 77 for women. Interestingly, 43% of Russian men would not live to the retirement.¹⁴⁹ Based on these numbers one can see the high dependency on energy exports as well as how energy can affect one's country and possibly slightly destabilize one's government regime.

According to the EC, the EU "is the biggest investor in Russia. Three quarters of Foreign Direct Investment stocks in Russia come from EU Member States, 30% from Cyprus alone"¹⁵⁰ Therefore, one can see that the Russian economy is highly dependent on the EU. This is also highlighted by the fact that the EU ran a continuing budget deficit of almost 59 billion euro in 2016.¹⁵¹ One can see that in terms of trade, economic dependency and energy export, the Russian Federation is more dependent on the EU than the EU on Russia. Yet, many fear that

¹⁴⁴ Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times.

¹⁴⁵ Adam Samson, "Russia rouble under fire again in worst week since 1999," The Financial Times, accessed March 29, 2019, <https://www.ft.com/content/9db65450-3d4e-11e8-b9f9-de94fa33a81e>.

¹⁴⁶ Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times.

¹⁴⁷ Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times.

¹⁴⁸ Kathrin Hille, "Russia's economy challenges facing Vladimir Putin," The Financial Times.

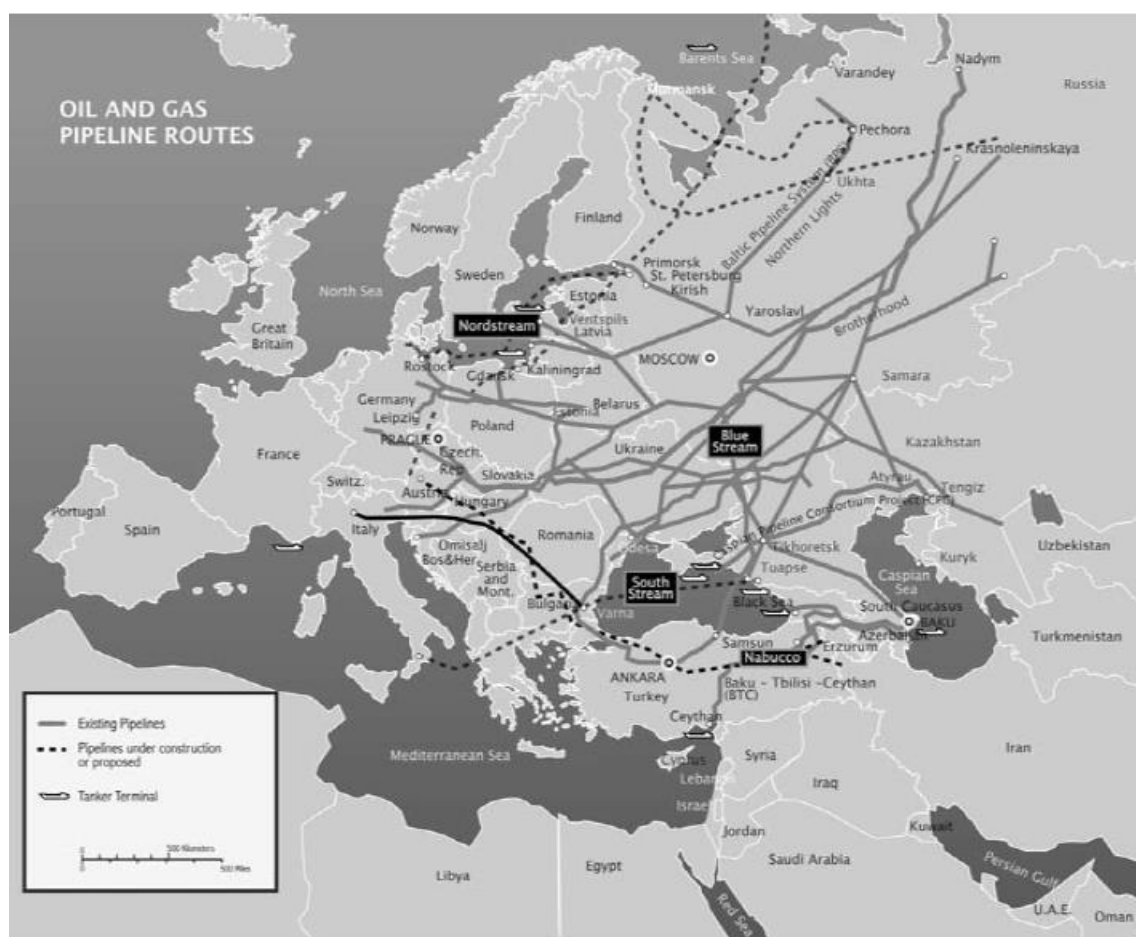
¹⁴⁹ "Russia pension protests: Fresh anti-reform rallies held," BBC, accessed March 28, 2019, <https://www.bbc.com/news/world-europe-45389797>.

¹⁵⁰ "Russia," European Commission.

¹⁵¹ "Russia-EU – international trade in goods statistics," Eurostat, accessed March 28, 2019, https://ec.europa.eu/eurostat/statistics-explained/index.php/Russia-EU_%E2%80%93_international_trade_in_goods_statistics.

the energy pipelines that Russia built and is currently building will make the EU disproportionately more dependent.

Over the last two decades Russia has built major gas pipelines which were connected to the already existing ones from the Soviet Union. The main gas pipelines are Nord Stream, Yamal Europe, Blue Stream and the Brotherhood, which splits into other smaller gas pipelines like Transgas.¹⁵² This map shows EU's oil and gas pipeline routes.



Map 1: Oil and gas pipeline routes leading to Europe.¹⁵³

One can see that all the existing interconnected gas routes are leading from the East. Russia plans to build few new pipelines in the near future. These are called Nord Stream 2, Yamal 2, South Stream along with the Turkstream.¹⁵⁴

To start off, the Yamal-Europe pipeline “runs across Russia, Belarus and Poland reaching Germany. [...] Upon commissioning of the last compressor station in 2006, Yamal —

¹⁵² “Projects,” Gazprom, accessed March 28, 2019, <http://www.gazprom.com/projects/>.

¹⁵³ Youngs, *Europe's Security*, 103.

¹⁵⁴ “Projects,” Gazprom.

Europe reached full capacity — 33 billion m3 per annum.”¹⁵⁵ This is a 2000-kilometer-long gas pipeline and Russia may lose influence in Poland with it, as Poland signed a 24-year-long deal with the U.S. supplier Cheniere with the assist of the U.S. Energy Secretary Rick Perry in November 2018. The Secretary stated, “[t]his is a sign across Europe that this is how your energy security will be developed, your energy sources diversified.”¹⁵⁶ That may be also one of the main reasons for Russia to build Nord Stream 2.

Speaking of Nord Stream 2, its predecessor Nord Stream was opened in 2012. According to the Trans-European Network for Energy (TEN-E), this pipeline is considered as a top priority project. As Gazprom puts it, “[t]his means that Nord Stream is key for Europe’s sustainable development and energy security.”¹⁵⁷ Nordstream was connected to some controversy as Youngs writes, “Merkel had criticized the Nordstream deal in opposition but refused now to revoke it; her Russia policy was influenced strongly by her foreign minister, Frank-Walter Steinmeier, a notable ‘Russia dove’ of the Schröder administration.”¹⁵⁸ One can see that building new gas pipelines from Russia has always stirred up controversy among the European politicians. A similar fuss is also connected to the Blue Stream pipeline.

In the South the 1213-km-long pipeline called the Blue Stream leads to Turkey through the Black Sea and was supposed to connect with Southern Europe.¹⁵⁹ The project that the Blue Stream pipeline was supposed to support was called South Stream. The pipeline called South Stream was supposed to connect Southern part of Europe and make these countries supplied with gas. Some opposed this idea as South Stream was supposed to oppose the Nabucco Pipeline leading from Azerbaijan and Iran.¹⁶⁰ In 2016, the Russian President Vladimir Putin said that Russia had not cancelled South Stream nor Turkstream yet.¹⁶¹ On November 19, 2018, Gazprom finished Turkstream.¹⁶²

In 2015 the Russian News Agency TASS stated that Gazprom intended to complete Turkstream in order to “completely abandon gas supplies to Europe through Ukraine after 2018

¹⁵⁵ “Transportation,” Gazprom, accessed March 29, 2019, <http://www.gazpromexport.ru/en/projects/transportation/>.

¹⁵⁶ Monika Scislowska, “Poland signs deal for long-term deliveries of US gas,” AP News, accessed March 30, 2019, <https://www.apnews.com/72568e5c41bd49d0a3515926311ebc7b>.

¹⁵⁷ “NordStream,” Gazprom, accessed March 30, 2019, <http://www.gazprom.com/projects/nord-stream/>.

¹⁵⁸ Youngs, *Europe’s Security*, 84.

¹⁵⁹ Gazprom, “Transportation,” Gazprom.

¹⁶⁰ “TIMELINE-Key dates for Nabucco and South Stream pipelines,” Reuters, accessed March 29, 2019, <https://www.reuters.com/article/gas-nabucco-timeline/timeline-key-dates-for-nabucco-and-south-stream-pipelines-idUSL77647320090807>.

¹⁶¹ Denis Dyomkin, “Putin says Russia hasn’t cancelled South Stream, Turkstream gas projects,” Reuters, accessed March 29, 2019 <https://www.reuters.com/article/us-russia-gas-exports-idUSKCN0YT228>.

¹⁶² “TurkStream,” Gazprom, accessed March 30, 2019, <http://www.gazprom.com/projects/turk-stream/>.

with the help of pipeline to Turkey. [...] Gazprom is going to build a pipeline through Turkey to the border with Greece, then the EU should construct pipes to Europe itself.”¹⁶³ This has not been the case yet, but many think that the completion of Nord Stream 2 would allow the Russian government to cut Ukraine off from gas supply.

Nord Stream 2 has stirred up a lot of controversy in late 2018 and the beginning of 2019. A New York Times’ author wrote an article on Nord Stream 2 and said, “[t]he pipeline is fraught with geopolitical significance. United States officials had gone so far as to threaten sanctions against the companies building it, saying it would make Germany even more dependent on Russian energy. Countries including France and Poland shared American concerns.”¹⁶⁴ Such concerns are shared also by Poland, Slovakia and the Baltic States.¹⁶⁵ In February 2019, France backed and supported the pipeline as it reached a compromise with Germany. Therefore, it will not try to make pressure on the EC to make the construction more difficult.¹⁶⁶ Interestingly, Gazprom addressed some of the concerns. Gazprom claims that “[t]he country that is most dependent on Russian gas is Russia itself.”¹⁶⁷ The Russian side also commented on EU’s diversification strategy as follows, “[i]n light of the EU’s strong diversification, it appears that it is the West that is using a simple pipeline project for political purposes. [...] Focusing on diversification for diversification’s sake is no solution and creates expensive results.”¹⁶⁸ Basically, the Russian side stresses the fact that it offers a cheaper option of diversification which is to increase the supply from different pipelines leading from Russia. One can see that from the Russian perspective, EU’s energy security means that Russia would be the main supplier as it should be the most reliable one. This is also stated on the official Gazprom webpage about Nord Stream 2, “[t]he new pipeline, similar to the one in operation, will establish a direct link between Gazprom and the European consumers. It will also ensure a highly reliable supply of Russian gas to Europe.”¹⁶⁹ On the other hand, the EU sees energy security as diversification of sources.

Critics of the Nord Stream 2 pipeline stress the fact that the pipeline omits Ukraine. Ukraine would use its transit role. This means that Ukraine would lose from 2 to 3 billion dollars

¹⁶³ “Gas pipelines to Europe by 2018,” TASS, accessed March 30, 2019, <http://tass.com/infographics/7275>.

¹⁶⁴ Melissa Eddy and Jack Ewing, “U.S. and Germany Defuse an Energy Dispute, Easing Tensions,” The New York Times, accessed March 30, 2019, <https://www.nytimes.com/2019/02/12/business/us-germany-energy-dispute.html>.

¹⁶⁵ Eddy, “U.S. and Germany Defuse an Energy Dispute, Easing Tensions,” The New York Times.

¹⁶⁶ Dave Keating, “Why Did France Just Save Nord Stream 2?,” Forbes, accessed March 30, 2019, <https://www.forbes.com/sites/davekeating/2019/02/08/why-did-france-just-save-nord-stream-2/#39156e306055>.

¹⁶⁷ “Fact-Checking Myths,” NordStream2, accessed March 30, 2019, <https://www.nord-stream2.com/project/facts-myths/>.

¹⁶⁸ “Fact-Checking Myths,” NordStream2.

¹⁶⁹ “Nord Stream 2,” Gazprom, accessed March 30, 2019, <http://www.gazprom.com/projects/nord-stream2/>.

annually which is approximately 3% of the Ukrainian GDP.¹⁷⁰ Considering this fact, Nord Stream 2 could be a major blow to the Ukrainian economy. Since Turkstream was finished in late 2018, Russia can totally cut off Ukraine from the energy. This could mean that since Ukraine would not be involved in the energy transit, the country would not be able to not pay the energy bills as it did in the recent years. Therefore, Russia would not be forced to stop the gas supply to Europe, which predominantly went through Ukraine. Thus, Europe could be possibly better off since it would not have disrupted gas supplies. This raises another question raised by the deputy U.S. energy secretary Dan Brouillette, “[w]hat price freedom?”¹⁷¹

So far it may appear that one country that would lose the most would be Ukraine. The country aspires to become one of the EU members despite its current unstable Eastern region.¹⁷² Additionally, “the EU has pledged a €12.8 billion support package for the next few years to support the reform process.”¹⁷³ The EU has to ask itself a question, whether it is worth to build a pipeline that would very likely harm Ukraine? Since the EU is investing almost 13 billion euro into the country and sanctioned the Russian Federation over the annexation of Crimea, it could be seen logical that the EU would try to support Ukraine by not building the pipeline. Was it for Ukraine to be left-out in terms of energy transit, one can assume that the country would fall under the Russian sphere of influence. In 2013, before people began protesting in the streets of Kiev, the country slid into Russia’s sphere of influence even more when Viktor Yanukovich rejected to sign a trade pact with the EU which would help the country to integrate more with the rest of the EU. The opposition lawmaker Vitali Klitschko called such move “high treason.”¹⁷⁴ With the finished Nord Stream 2 gas pipeline planned to leave Ukraine out of the transit route, that country could likely slip back to Russian dominance, which may spark even more violence in the already divided country.

There is one country in particular that is very pro-Nord Stream 2 and needs the Russian gas. That country is Germany. Germany wants to close all its nuclear plans by 2022 and stop

¹⁷⁰ Ariel Cohen, “Russia’s Nord Stream II Pipeline Is Ukraine’s Worst Nightmare,” *Forbes*, accessed March 30, 2019, <https://www.forbes.com/sites/arielcohen/2018/06/18/russias-nord-stream-ii-pipeline-is-ukraines-worst-nightmare/#559a56c53524>.

¹⁷¹ Anna Shiryayevskaya and Ewa Krukowska, “Russia Tightens Grip on Europe’s Gas With Gazprom Deal,” *Bloomberg*, accessed March 30, 2019, <https://www.bloomberg.com/news/articles/2018-05-24/russia-tightens-grip-on-europe-s-gas-supply-with-gazprom-deal>.

¹⁷² Yuras Karmanau, “Ukrainian president vows to push for EU, NATO membership,” *AP News*.

¹⁷³ “Ukraine and the EU,” *European Union External Action*, accessed March 30, 2019, https://eeas.europa.eu/headquarters/headquarters-homepage/1937/ukraine-and-eu_en.

¹⁷⁴ Sergei Loiko, “Ukraine protesters denounce rejection of EU pact,” *The Los Angeles Times*, accessed March 31, 2019, <https://www.latimes.com/world/la-fg-ukraine-eu-20131130-story.html>.

using coal by 2038.¹⁷⁵ This is one of the reasons why Germany needs to import more gas from Russia.¹⁷⁶ In the first half of 2018, Russian gas exports increased by 12,2% compared to the first half of the year 2017.¹⁷⁷ The overall consumption of gas in Germany was 47,7 bcm in 2018.¹⁷⁸ This is almost a quarter of the total gas exports to the EU as Russia exported around 200 bcm to the EU in 2018.¹⁷⁹ This highlights the fact that for the Russian Federation, Germany is a very important actor. As Gazprom themselves put it, “[t]oday, Germany is the biggest buyer of Russian gas in the world, while German companies implement numerous projects jointly with Gazprom Group.”¹⁸⁰ In 2017, the German gas import accounted for almost 30% of Gazprom’s exports which was around 54 bcm.¹⁸¹ Again, one can see a clear resemblance of the environmental policies and the EU’s environmental policies. This clearly makes both, Germany and the whole EU more dependent on Russian gas in the long run. Nord Stream 2 aims to import double the amount of gas imported by Nord Stream 1 into Germany.¹⁸²

The realpolitik of Germany is clear. One may see it selfish, as Germany is the one country that predominantly needs more gas due to its environmental ambitions despite other countries’ concerns. In late 2018, Russia captured 24 sailors and Ukrainian ships at the Kerch strait which connects the Black Sea and the Sea of Azov. This increased the already existing tensions between Ukraine and Russia. Even despite EU’s and Germany’s promotion of democracy and freedom visions, “Merkel called on Russia to release the Ukrainian sailors and allow shipping access through the Kerch Strait to the Sea of Azov. But she did not endorse further sanctions against Moscow.”¹⁸³ This highlights the fact that Germany fears to lose Russia’s gas export as it would directly and greatly affect its export-driven economy. This attitude could be even seen after the alleged attack of Russian spies on a former Russian spy

¹⁷⁵ Tobias Buck, “Germany: Angela Merkel’s tarnished legacy on the environment,” *The Financial Times*, accessed March 31, 2019, <https://www.ft.com/content/887637e8-2085-11e9-b126-46fc3ad87c65>.

¹⁷⁶ “Germany needs more Russian gas because of energy transition away from nuclear and coal,” *Deutsche Welle*, accessed March 31, 2019, <https://www.dw.com/en/germany-needs-more-russian-gas-because-of-energy-transition-away-from-nuclear-and-coal/av-46226433>.

¹⁷⁷ Dave Keating, “How Dependent Is Germany On Russian Gas,” *Forbes*, accessed March 31, 2019, <https://www.forbes.com/sites/davekeating/2018/07/19/how-dependent-is-germany-on-russian-gas/#75eed91c3b48>.

¹⁷⁸ Annalisa Girardi, “Growing Dependent On Russia: The Gas Routes In Europe,” *Forbes.com*.

¹⁷⁹ Zhdannikov, “Russian gas exports to boom despite U.S. pressure and rivalry,” *Reuters*.

¹⁸⁰ “Germany,” *Gazprom*, accessed March 31, 2019, <http://www.gazprom.com/projects/germany/>.

¹⁸¹ Dave Keating, “How Dependent Is Germany On Russian Gas,” *Forbes*.

¹⁸² Andrea Shalal and Sabine Siebold, “Germany to back Russian gas link despite Ukraine tensions,” *Reuters*, accessed March 31, 2019, <https://www.reuters.com/article/us-ukraine-crisis-russia-germany/germany-to-back-russian-gas-link-despite-ukraine-tensions-idUSKBN1O20VP>.

¹⁸³ Julian Borger, “Putin refuses to release Ukrainian sailors and ships,” *The Guardian*, accessed March 31, 2019, <https://www.theguardian.com/world/2018/dec/02/putin-refuses-to-release-ukrainian-sailors-and-ships>.

Skripal and his daughter.¹⁸⁴ Heiko Maas, the German Foreign Minister admitted that there is no other explanation than that the Russian spies did the attack and added, “[w]e assume that Russia will remain a difficult partner. [...] Russia is... needed when it comes to solving major international conflicts. That is why we want to stay in dialogue, but we expect constructive contributions from Russia”¹⁸⁵

The U.S. President Donald Trump stated, ““Germany is a captive of Russia.””¹⁸⁶ In certain terms this may be true. Germany imports 94% of its natural gas based on the official government data. Further it imports around 35% of gas from Russia and is about to increase its import value by connecting to Nord Stream 2.¹⁸⁷ This may pose a huge threat to the whole European Union as Germany is one of the leading countries of the EU and one of the current top economies in the world. It may be considered as the heart of the European economy as Germany’s industries create millions of jobs around Europe. The fact that Germany focuses only on itself in terms of energy is due to the EU’s failure to pass legislatures that would allow to conclude energy-related deals on a multilateral basis. The current EU legislative allows the EU members to conclude energy deals on a bilateral basis. Poland is aware of the fact that Germany focuses predominantly on its own interests as Szulecki quoted the former Foreign Minister Radoslaw Sikorski. The former Foreign Minister compared the Nord Stream 1 pipeline construction to the Ribbentrop-Molotov pact as it would lower Poland’s transit fees.¹⁸⁸ This was one of the reasons why Poland signed the aforementioned 24-year-long gas deal with the United States (see Chapter 3, page 31). Szulecki quotes Deputy Elzbieta Kurk from PiS who said this,

I want to remind you that the gas pact between Moscow and Berlin is not the first agreement in the history of these capitals that ignored Poland and that was against Polish interests. The Baltic Sea pipeline which connects Russia directly with Germany bypassing Poland is a political decision with strategic consequences for Poland. [...] Has the minister not heard of the economization of Russia’s foreign policy, reaching its political goals by utilizing resource dependence? The Russians admit openly that gas transit has a political dimension, even a strategic one.¹⁸⁹

One may see the resemblance between the construction of Nord Stream 1 and the Polish case and the construction of Nord Stream 2 and the Ukrainian case.

¹⁸⁴ “Russian spy poisoning: What we know so far,” BBC, accessed March 31, 2019, <https://www.bbc.com/news/uk-43315636>.

¹⁸⁵ Andrew Rettman, “Germany: Russia is ‘partner’ despite UK attack,” Euobserver, accessed March 31, 2019, <https://euobserver.com/foreign/141362>.

¹⁸⁶ Ivana Kottasová, “Germany isn’t the only country that still needs cheap Russian gas,” CNN, accessed March 31, 2019, <https://money.cnn.com/2018/07/11/news/economy/russian-gas-germany-trump/index.html>.

¹⁸⁷ Ivana Kottasová, “Germany isn’t the only country that still needs cheap Russian gas,” CNN.

¹⁸⁸ Szulecki, *Energy Security in Europe*, 66.

¹⁸⁹ Szulecki, *Energy Security in Europe*, 66.

This practical chapter analysed the energy relations of the European Union and the Russian Federation. The chapter was mainly focused on the energy dependency of both actors. Russia's entry into the new millennium was in the spirit of making Russia an energy superpower. This was stressed by the Russian President Vladimir Putin in 2005 and can be seen on the Russian energy strategy from 2003. The strategy was created in order to develop a strong economy which would use energy as a tool for controlling the internal and foreign policy. One can see that Russia has managed to achieve this goal as Russia used energy, gas in particular, as a tool of influencing the policies of its neighbouring countries. This could be demonstrated on Ukraine and on the fact that the EU members are allowed to conclude energy-related deals on a bilateral basis. This gives Russia an advantage as it can place different price for gas to different countries and make itself a monopoly supplier. This then helps Russia to influence the country.

The fact that Russia based its economic development almost solely on energy made Russia more dependent on exporting oil and gas into Europe. The attempt to make the EU more dependent on Russian gas deflected on Russia itself as the country relies predominantly on EU's payments. This fact was depicted on the two graphs representing the oil prices and GDP (see Chapter 3, page 28). The Russian economy growth plummeted in 2014, the same year when the Western sanctions began and the oil prices dropped. Therefore, Russia decided to do the so-called pivot to the East which involves building a gas pipeline to China. Despite this attempt, some scholars do not see it as a threat as the EU's FDI in Russia counts for around three quarters. Further, majority of the Russia's tax revenue is coming from energy. The energy tax revenue accounts for 67%. Vladimir Putin is aware of the fact that Russia's energy dependency is structurally embedded in his style of government. Some may claim that the Russian energy-driven economy is connected to the legitimacy and stability of the authoritarian regime in the Russian Federation.

The analysis also showed that despite Russia's higher dependency on its energy exports, the EU can be easily affected by energy disruptions. On the other hand, as experts point out the Eastern part of the EU could use gas reserves and then potentially switch from using gas to using electricity. Yet, the EU would still be affected. This was demonstrated during the gas disruptions in Ukraine in the years 2006, 2007, 2009 and most recently 2014. Possibly up to this year of 2019, the Russian Federation needed Ukraine. The latter was used as a transitory country to Europe and gas disruptions targeting Ukraine's inability to pay its gas bills directly affected the European market. Further, 3% of the Ukraine's GDP came purely from gas transaction costs which Russia had to pay to Ukraine. Now, with the construction of Nord

Stream 2 leading to Germany and with the current realpolitik of Germany, Russia may abandon Ukraine as a transitory country. This is also supported by the fact that Russia built Turkstream in late 2018, which was supposed to decrease the level of transitory costs that would have to be paid to Ukraine.

The controversial gas pipeline Nord Stream 2 stirs controversy among the EU members and its allies such as the United States. Ukraine would become more vulnerable to Russia. This could be possibly a chance for a new actor stepping into Ukraine. A chance for China for its business and infrastructure investment into the country which could lure Ukraine into the *debt trap diplomacy*. A concept describing China's cheap loans to desperate countries, which benefit China in the long term.¹⁹⁰ This can be seen on the Montenegro highway case. China offered Montenegro to build a highway and the country is expected to approach a debt big as 80% of its GDP.¹⁹¹ China should not be ruled out as a new actor since the relations between Ukraine and Russia are cold due to the Crimean annexation in 2014. From its current second place, China may replace Russia as the largest single trading partner in the near future.¹⁹²

EU's dependency on Russia is not as big as Russian dependency on the EU. Yet, this may change in some time. This is due to the fact that the EU, as demonstrated on the German case, tends to reduce the amount of coal usage in the attempt to pursue its environmental policies. This is one of the reasons why Russia is building Nord Stream 2 and why Germany needs it so much. The EU's attempt to be more environmentally friendly will very likely make them increasingly more dependent on the import of the Russian gas. This is supported by the fact that Russian gas export to the EU has a growing tendency every year. In 2010 Russia exported 130 billion cubic meters of gas to the EU, while it was around 200 bcm in 2018. Perhaps, the EU should slow down in energy transition as China, also a Paris Agreement signatory, has planned to build or is building around 700 new coal plants.¹⁹³ The EU should make the biggest polluting countries like China, the United States, India and Russia to change

¹⁹⁰ "The perils of China's 'debt-trap diplomacy'," The Economist, accessed March 31, 2019, <https://www.economist.com/asia/2018/09/06/the-perils-of-chinas-debt-trap-diplomacy>.

¹⁹¹ Noah Barkin and Aleksandar Vasovic, "Chinese 'highway to nowhere' haunts Montenegro," Reuters, accessed March 31, 2019, <https://www.reuters.com/article/us-china-silkroad-europe-montenegro-insi/chinese-highway-to-nowhere-haunts-montenegro-idUSKBN1K60QX>.

¹⁹² Jack Laurenson, "China is on track to replace Russia as Ukraine's biggest trading partner," Kyiv Post, accessed March 31, 2019, <https://www.kyivpost.com/business/china-is-on-track-to-replace-russia-as-ukraines-biggest-trading-partner.html?cn-reloaded=1>.

¹⁹³ Hiroko Tabuchi, "As Beijing Joins Climate Fight, Chinese Companies Build Coal Plants," The New York Times, accessed March 31, 2019, <https://www.nytimes.com/2017/07/01/climate/china-energy-companies-coal-plants-climate-change.html>.

their means of production instead of suffering energy-security-wise from its environmentally-friendly attempts.¹⁹⁴

Overall, the practical chapter displayed the simultaneous growing dependence on each other. Possibly, the EU and Russia can be even more connected due to the growing energy dependence of both actors. Their future relation may resemble the one of China and the United States. For now, the Russian-export-driven economy is more dependent on the export of energy to the EU than the EU on Russian energy. This was illustrated by the usage of empirical data in the form of GDP and oil price changes as well as inflation and other data based on energy export in relation to the political changes. It is possible to assume that the EU will continue increasing its dependency on the Russian gas up to a level where there will be no way to retreat from this strange relationship. This analysis showed the complexity of energy security and its influence on world politics. Therefore, it is understandable to call such situation an energy security dilemma.

¹⁹⁴ “Who are the world’s biggest polluters,” Reuters, accessed March 31, 2019, <https://www.reuters.com/news/picture/who-are-the-worlds-biggest-polluters-idUSRTXRKSI>.

4. The European Union, Iran and the United States as New Actors Gaining Power in the Energy Security Dilemma

The energy security dilemma presented in the previous analytical chapters displayed the complexity of the topic. The elaborated dilemma is mainly focused on the relationship between the European Union and the Russian Federation. This chapter uses EU's strategy of energy supply diversification as a framework for further elaboration. The EU tries to attract other potential suppliers that have a big amount of oil and gas reserves and are willing to trade with the EU. Also, such actors are interested in influencing the EU region through trade. Among such suppliers, countries like the United States and the Islamic Republic of Iran are placed. Recently, Iran has created a debate in the field of energy security by stressing the importance of the concluded Nuclear Deal with the EU and the United States. The Trump administration opposed the Iranian deal while the EU decided to remain part of the deal as it benefited its realpolitik. The EU wants to maintain good relations with various countries including Iran as such countries are considered as key actors in the energy sector. These key players have not been in the spotlight of the EU's energy supply but are considered a top priority for the European continent. The United States sees the EU's increasing dependency on Russian gas a threat to its global dominance and therefore tries to help the EU members to diversify their energy supply. On the other hand, countries like Iran are being in the middle of a different quarrel. The EU is trying to influence Iran over China.¹⁹⁵ One can see the complex situation of the energy security dilemma of the EU as the institution has to balance between its allies and its business interests. This chapter answers the question whether the United States and the Islamic Republic of Iran can ensure energy security of the EU.

The United States has recently got involved into many energy projects in Europe. This has been a result of an increased level of Russian influence over the Balkans, Baltics and Central Europe.¹⁹⁶ Such countries include, Austria, the Czech Republic, Hungary, Estonia, Latvia, Lithuania, etc. Therefore, the United States and the EU decided to start a cooperation project which is focused on bilateral energy cooperation called "the U.S.-EU Energy Council, a high-level body launched in 2009 to deepen coordination on strategic energy issues of mutual interest and R&D cooperation. [...] The U.S.-EU Energy Council is supported by three working groups:

¹⁹⁵ Mahmoud Pargoo, "What Does Iran Really Think of China," *The Diplomat*, accessed April 1, 2019, <https://thediplomat.com/2018/11/what-does-iran-really-think-of-china/>.

¹⁹⁶ Dusan Stojanovic, "Russian influence rising in Balkans, Baltics, Central Europe," *AP News*, accessed April 2, 2019, <https://www.apnews.com/05da1f1eabeb428db5b8e40f1ca28bdb>.

Energy Technology Working Group, Energy Policy Working Group, and Energy Security Working Group.”¹⁹⁷ The last 8th meeting was in July 2018 and the two parties focused on energy issues like diversification of energy sources, its suppliers and routes.¹⁹⁸ In terms of diversification, the member countries of the EU conclude energy-related deals on a bilateral basis. Just like the Russian Federation, the United States approach different EU members and offer them their energy supplies and try to conclude energy partnerships. This can be done due to the EU members’ bilateral agreements based on the IGAs, mentioned in the previous chapters (see Chapter 2, page 17).

The U.S. is mainly focused on the countries of the Central Europe and Eastern Europe. Mainly the Baltic countries and the countries of the V4. This is due to the fact that Austria, Finland, Estonia, Latvia, Lithuania and all countries of the Visegrad Group are predominantly dependent on the Russian gas.¹⁹⁹ Further, as Washington Post’s reporter focusing on European security writes, “[n]ow the Baltic and Nordic states are trying to break free of their dependence on Russian gas imports. Finland and Estonia are building the Balticconnector, a major new pipeline between the two countries that could bring natural gas from the United States and other nations to Finland. It will be the first pipeline into Finland that does not originate in Russia.”²⁰⁰ This is supported by Simon Hoellerbauer, a scholar in the U.S. think tank called Foreign Policy Research Institute who writes that Lithuania, Estonia and Latvia have improved their relations with the rest of Europe. Hoellerbauer goes on by saying, “[u]nder the auspices of the Baltic Energy Market Interconnection Plan (BEMIP), an EU initiative intended to facilitate the integration of the Baltic energy market into Europe, the EU granted significant funding for two projects, the Balticconnector pipeline between Estonia and Finland and the Gas Interconnection Poland Lithuania (GIPL).”²⁰¹ In other words, the EU is aware of the security threat that a complete reliance on one energy source poses. Therefore, the two pipelines should help to ease the Russian pressure.

One of the reasons why the Baltic countries are in favour of the U.S. competing with Gazprom is the fact that the gas prices differed for a long amount of time on a country-to-

¹⁹⁷ Office of International Affairs, “U.S.-EU Energy Council,” Energy.gov, accessed April 2, 2019, <https://www.energy.gov/ia/international-affairs-initiatives/us-eu-energy-council>.

¹⁹⁸ “8th EU-US Energy Council in Brussels,” European Commission, accessed April 2, 2019, https://ec.europa.eu/info/news/8th-eu-us-energy-council-brussels-2018-jul-12_en.

¹⁹⁹ Rick Noack, “Eastern Europe is trying to break its dependence on Russian gas. Western Europe is doing the opposite,” The Washington Post.

²⁰⁰ Rick Noack, “Eastern Europe is trying to break its dependence on Russian gas. Western Europe is doing the opposite,” The Washington Post.

²⁰¹ Simon Hoellerbauer, “Baltic Energy Sources: Diversifying Away from Russia,” Foreign Policy Research Institute, accessed April 2, 2019, <https://www.fpri.org/article/2017/06/baltic-energy-sources-diversifying-away-russia/>.

country basis. This is also due to the EU's inability to create a single energy market in the whole region. In May 2018, the EC imposed binding obligations on Gazprom "to enable free flow of gas at competitive prices in Central and Eastern European gas markets."²⁰² One of the main reasons for imposing binding obligations is explained in the report as follows, "[t]he Commission was concerned that Gazprom may have been able to charge higher prices in five Member States (*Bulgaria, Estonia, Latvia, Lithuania and Poland*)."²⁰³ In other words, countries that were close to Russia were charged more for gas than countries in the rest of the EU. This means that the Russian government knew that the Baltic countries have no other option, so the Russians deliberately strained their state budget. According to the Guardian, a report says that a Danish European Commissioner Margrethe Vestager accused Gazprom of charging eight EU member states in Eastern Europe with up to 40% more for gas than in other countries.²⁰⁴

In response to such claims, the Trump administration launched an initiative named The Partnership for Transatlantic Energy Cooperation (P-TEC) at the Three Seas Summit in Romania. This initiative should help to build an advanced energy infrastructure in Central and Eastern Europe.²⁰⁵ This new initiative helps projects like the Trans Adriatic Pipeline (TAP) to become a reality. The construction of this pipeline started in 2015 and is expected to be finished in 2020.²⁰⁶ The pipeline leads from Azerbaijan and Turkey to Greece and should connect the Southern Gas Corridor. This non-Russian project is important as stated on the TAP website, "[n]atural gas is expected to play an increasingly important role in the European energy mix for decades to come. As the cleanest fossil fuel, it has clear environmental advantages over other energy sources."²⁰⁷ The pipeline should connect on through the South Caucasus Pipeline and the Trans Anatolian Natural Gas Pipeline Project which itself is around 1850 km long.²⁰⁸ This places a spotlight on Turkey as another country that is vital in the EU's diversification strategy. As it was already mentioned in the previous chapters, Turkey plays an interesting role as it is a

²⁰² "European Commission – Press release," European Commission, accessed April 2, 2019, http://europa.eu/rapid/press-release_IP-18-3921_en.htm.

²⁰³ "European Commission – Press release," European Commission.

²⁰⁴ Ian Traynor, "Brussels accuses Gazprom of unfair pricing of gas in eastern Europe," The Guardian, accessed April 2, 2019, <https://www.theguardian.com/business/2015/apr/22/brussels-accuses-gazprom-unfair-pricing-gas-eastern-europe>.

²⁰⁵ "U.S. Secretary of Energy Rick Perry at the Three Seas Initiative Business Forum," U.S. Embassy in Romania, accessed April 2, 2019, <https://ro.usembassy.gov/secretary-of-energy-rickperry-at-the-three-seas-initiative-business-forum/>.

²⁰⁶ "TAP project schedule," Trans Adriatic Pipeline, accessed April 3, 2019, <https://www.tap-ag.com/the-pipeline/project-timeline#16>.

²⁰⁷ "The big picture," Trans Adriatic Pipeline, accessed April 3, 2019, <https://www.tap-ag.com/the-pipeline/project-timeline#16>.

²⁰⁸ "Why TANAP," Trans Anatolian Natural Gas Pipeline Project, accessed April 3, 2019, <https://www.tanap.com/tanap-project/why-tanap/>.

gateway for Gazprom to reach the EU's Southern Corridor as well as for the EU and the U.S. to connect to the Middle Eastern countries. TAP as being one of the main aspects of the P-TEC initiative would also help to supply other regions of the EU.

The U.S. puts stress on diversification of sources in the Visegrad countries. In November 2018, the Secretary of Energy Rick Perry visited the leaders of the V4 countries which highlights the U.S. efforts to support these countries under the Trump administration in terms of diversification. For example, when meeting the Czech President Milos Zeman, Perry proclaimed, “[b]y any measure, energy security requires diversity, a diversity of supply, of countries providing that supply, and of routes to deliver that supply. ... As NATO allies, your national security is our national security.”²⁰⁹ It seems as the U.S. places more stress on diversification than the EU itself. In comparison to Germany, the U.S. is actively looking for new suppliers for these countries and offers its gas supplies for them.

The U.S. Secretary for Energy went to Poland to be present at the signing of the 24-year-long gas supply agreement between Polish Oil and gas Company (PGNiG) and the Cheniere Energy coming from the U.S. The U.S. administration commented as follows, “[t]his contract is one of several that builds on the desire of Poland to diversify their sources of energy, and the effort of the Trump Administration to expand U.S. LNG abroad as an alternative to Russian gas.”²¹⁰ A think tank called the Warsaw Institute Foundation commented on this contract,

even Russian gas experts seem to admit that the amount of gas contracted so far (it is noteworthy that Polish authorities intend to seal yet another deal with Sempra Energy), the state's own extraction and gas deliveries through the Baltic Pipe may altogether allow Poland to quit Russian gas. The current deal with Gazprom is bound to expire in 2022 while such Poland's recent activities in this respect seem particularly worrying for the Russians.²¹¹

As mentioned previously in Chapter 3, Poland was worried that it would lose the transaction costs from the Yamal pipeline, as Russia built Nord Stream 1 and is currently building Nord Stream 2, which is about to finish in 2019 (see Chapter 3, page 36).

Poland seems to focus more on the U.S. than on its neighbour Russia. This may be due to the fact that “the Polish leader Jaroslaw Kaczinski is an ‘ideologue’ obsessed with Russia

²⁰⁹ “Secretary of Energy Rick Perry Emphasizes Energy Security in Prague,” U.S. Embassy in the Czech Republic, accessed April 3, 2019, <https://cz.usembassy.gov/u-s-secretary-of-defense-mattishonors-czech-soldiers-contributions/>.

²¹⁰ “Readout of Secretary Perry’s Visit to Warsaw, Poland,” Energy.gov, accessed April 3, 2019, <https://www.energy.gov/articles/readout-secretary-perry-s-visit-warsaw-poland>.

²¹¹ Russian Monitor, “U.S. Energy Secretary Rick Perry Visits Poland: Bad News for Russia’s Gazprom,” The Warsaw Institute Foundation, accessed April 3, 2019, <https://warsawinstitute.org/u-s-energy-secretary-rickperry-visits-poland-bad-news-russias-gazprom/>.

and the death of his twin brother”²¹² and perhaps historical reasons. The same day that the U.S. company Cheniere signed the deal with the Polish side, the two concluded the meeting by signing of the U.S. Poland Joint Declaration of Energy Security, “which emphasized the expansion of cooperation between Poland and the United States in a variety of areas including: Civil Nuclear Energy, Cybersecurity, Natural Gas, Clean Coal, Grid Resilience, and Fuel Storage and Transportation.”²¹³ Such efforts can be also seen in Hungary.

The Hungarian government of the Prime Minister Viktor Orban is aware of the U.S. importance in the diversification strategy. In March 2018, Orban’s Minister for Foreign Affairs and Trade Peter Szijjarto said, “[t]he United States will be playing a major role in securing Hungary’s energy supply in view of the fact that we have been given a promise that the American administration also supports the shipping of the American natural gas to be extracted in Romania to Hungary.”²¹⁴ During Perry’s visit in Hungary in November 2018, the Secretary stated, “Russia is using a pipeline project Nord stream 2 and a multi-line Turkish stream to try to solidify its control over the security and the stability of Central and eastern Europe.”²¹⁵ The U.S. strong criticism of Nord Stream 2 can be displayed by the fact that the Trump administration threatened to sanction German companies that build the pipeline.

In January 2019, the German Foreign Minister told the U.S. that the decision should be made by the Europeans and not the U.S. The fact is that the European Parliament condemned Nord Stream 2 and yet the German and the Russian side are building it.²¹⁶ This again reflects how Germany relentlessly pursues its own interests above others in terms of energy security. The German *realpolitik* does not reflect the *speak-as-one-voice* concept which is being promoted by the EU.²¹⁷ This poses a threat to the rest of Europe as the U.S. are trying to help the member countries in their supply diversification. In February 2019, the U.S. agreed to back down on the sanctions. As a New York Times’ article states, “[o]fficials in Berlin agreed to help finance a port to import liquefied natural gas from America, a key United States demand. In return, the United States government is toning down its opposition to an underwater pipeline

²¹² Steven Erlanger, “In Eastern Europe, Populism Lives, Widening a Split in the E.U.,” The New York Times, accessed April 3, 2019, <https://www.nytimes.com/2017/11/28/world/europe/populism-eastern-europe.html>.

²¹³ Energy.gov, “Readout of Secretary Perry’s Visit to Warsaw, Poland,” Energy.gov.

²¹⁴ Ministry of Foreign Affairs and Trade, “Hungary and the United States have confirmed their strategic alliance,” Website of the Hungarian Government, accessed March 21, 2019, <http://www.kormany.hu/en/ministry-of-foreign-affairs-and-trade/news/hungary-and-the-united-states-have-confirmed-their-strategic-alliance>.

²¹⁵ Krisztina Than, “U.S. calls on Hungary and neighbors to shun Russian gas pipelines,” Reuters, accessed April 3, 2019, <https://www.reuters.com/article/us-hungary-us-energy-idUSKCN1N1Y5>.

²¹⁶ “U.S. sanctions against Nord Stream 2 wrong solution: Germany’s Maas,” Reuters, accessed April 3, 2019, <https://www.reuters.com/article/us-germany-russia-pipeline/us-sanctions-against-nord-stream-2-wrong-solution-germanys-maas-idUSKCN1P42IH>.

²¹⁷ “Building the Energy Union,” European Commission.

being built to Germany from Russia. [...] While the gas could come from anywhere, the project is seen as a way to open Germany to gas producers in Texas and other states.”²¹⁸ This reflects the U.S. efforts to help the EU to diversify its supply as well as the U.S. President Trump’s effort to create more jobs in his country.

In 2014, David Goldwyn wrote an article for the Brookings Institute in which he said, “[t]he U.S. shale gas boom, [...] has had the greatest impact on the competitiveness of the European gas market by creating a glut of LNG supply that has opened a spot market and driven down long-term contract prices”²¹⁹ Another commentator explained Germany’s position towards the U.S. by saying,

[s]imply put, Russian pipeline gas is already a cheaper commodity for EU end users than imported U.S.-sourced LNG since liquefaction and transportation charges have to be added. However, U.S. LNG since is indexed to Henry Hub gas prices on the NYMEX it’s considerably lower than other LNG producers that want to enter Europe since most other LNG cargoes have a higher cost oil-price indexation formula.²²⁰

The U.S. has a tough position as it does not offer cheaper prices for gas like Russia. Further, it has to find suppliers around Europe or try transporting them from the U.S which adds on overall costs. That is one of the reasons why the EU is trying to find energy suppliers in Central Asia or in the Middle Eastern countries such as Iran.

The Islamic Republic of Iran has a geopolitical and strategic importance for the major powers. As Mahmoud Pargoo writes for the magazine *The Diplomat*, “European countries are attempting to save the deal through the so-called Special Purpose Vehicle (SPV). Given that China is the biggest customer of Iran’s oil, no attempt to save the deal will be successful without its cooperation. This is a mutual dependence as China also needs to secure Iran as a reliable energy partner with its ever-increasing thirst for oil.”²²¹ Having good relations with Iran is crucial for the EU. According to the British Petroleum’s Statistical Review of World Energy 2018, Iran holds around 17,2% of total proven global gas reserves.²²² According to the CIA report, Iran has the second largest gas reserves right after Russia.²²³ With the current environmental policies of the EU, Iran is a major player in the diversification strategy. The

²¹⁸ Eddy, “U.S. and Germany Defuse an Energy Dispute, Easing Tensions,” *The New York Times*.

²¹⁹ David L. Goldwyn, “Refreshing European Energy Security Policy: How the U.S. Can Help,” Brookings Institute, accessed April 3, 2019, <https://www.brookings.edu/articles/refreshing-european-energy-security-policyhow-the-u-s-can-help/>.

²²⁰ Tim Daiss, “Russia Just Won Big In The European Gas War,” OilPrice.com, accessed April 3, 2019, <https://oilprice.com/Energy/Natural-Gas/Russia-Just-Won-Big-In-The-European-Gas-War.html>.

²²¹ Mahmoud Pargoo, “What Does Iran Really Think of China,” *The Diplomat*.

²²² British Petroleum, “BP Statistical Review of World Energy 2018,” 67th edition (2018 June): 26, accessed April 3, 2019, <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2018-full-report.pdf>.

²²³ CIA, “Natural Gas – Proved Reserves,” CIA.gov.

author of “Iran’s Role in Europe’s Energy Security: An Assessment,” supports this fact and argues that “energy partnership between Iran and the EU is a win – win strategy. It would enhance Europe’s energy security, further integrate Tehran into the international economic system, and contribute to confidence-building between the two sides.”²²⁴ Attempts have been made in the past. For example, a 3000-kilometres-long pipeline called Nabucco was supposed to connect Central Europe, specifically Austria. The pipeline was supposed to be fed with gas by Turkmenistan, Azerbaijan and Iran and then transported through Turkey and the Balkans to Europe.²²⁵ Based on a report from the European Parliament, Nabucco was cancelled in 2013, as it was 500 kilometres longer than the TAP pipeline and thus more expensive.²²⁶

The biggest issue for the EU is that Iran seeks to enrich its uranium since 2002 and create an Iranian nuclear programme. Youngs writes that the EU started to prioritize the Nuclear deal over the issue of energy security.²²⁷ In the early 2000s it was a possible strategy of the EU that they wanted to change the Iranian government and make it more liberal through energy investments.²²⁸ Smaller EU members complained that the UK, France and Germany prioritized human rights in Iran over the EU’s own energy security.²²⁹ Youngs writes, “[b]ut all member states acknowledged that, despite concerns over political developments within Iran, energy cooperation would be dependent on a nuclear deal and not on human rights improvements.”²³⁰ This is true even today in 2019. In fact, close allies like the U.S. and the EU split over the Iranian Nuclear Deal. As the vital years 2020 and 2030 of the energy transition approach, the EU needs to secure a gas deal with some major suppliers.

In February 2019, there was a meeting in Warsaw. Germany, France and the UK wanted the rest of the EU to back their pro-Iranian stance while some European Ministers thought that the Warsaw meeting is a Washington’s attempt towards a more hawkish line on the Iranian Republic.²³¹ The EU did not recognize U.S. sanctions towards the Iranian government and consequently denounced them as illegal.²³² At a competing summit in Sochi, where Putin,

²²⁴ Gawdat Bahgat, “Iran’s Role in Europe’s Energy Security: An Assessment,” *Iranian Studies* 43, no. 3 (2010): 334.

²²⁵ Gawdat, “Iran’s Role in Europe’s Energy Security: An Assessment,” 337.

²²⁶ Pasquale de Micco, “Changing pipelines, shifting strategies: Gas in south-eastern Europe, and the implications for Ukraine,” Directorate-general for external policies (2015): 7, accessed April 3, 2019, [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/549053/EXPO_IDA\(2015\)549053_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/549053/EXPO_IDA(2015)549053_EN.pdf).

²²⁷ Youngs, *Europe’s Security*, 70.

²²⁸ Youngs, *Europe’s Security*, 72.

²²⁹ Youngs, *Europe’s Security*, 73.

²³⁰ Youngs, *Europe’s Security*, 74.

²³¹ Michael Peel, “EU seeks to keep Iran nuclear deal alive despite US pressure,” *The Financial Times*, accessed April 3, 2019, <https://www.ft.com/content/a9397224-1c9d-11e9-b126-46fc3ad87c65>.

²³² David M. Herszenhorn, “Pence demands EU powers abandon Iran nuclear deal,” *Politico.eu*, accessed April 3, 2019, <https://www.politico.eu/article/mike-pence-iran-nuclear-deal-demands-eu-powers-abandon/>.

Erdogan and Rohani met, the Turkish President stated that “Turkey is willing to join the special purpose vehicle and also take additional bilateral steps to preserve economic ties with Iran.”²³³ The U.S. Vice President Mike Pence addressed the Special Purpose Vehicle concept that is used by the EU and Turkey,

‘Germany, France, and the United Kingdom announced a creation of a special financial mechanism designed to oversee mirror-image transactions that would replace sanctionable international payments between EU businesses and Iran. They call this scheme Special Purpose Vehicle. [...] We call it an effort to break American sanctions against Iran’s murderous revolutionary regime. It’s an ill-advised step that will only strengthen Iran, weaken the EU and create still more distance between Europe and the United States.’²³⁴

As one can see, the EU have different approaches with its closest ally the United States on the matter of how to treat Iran. Despite this split the U.S. still tries to diversify single EU members’ gas supply. Pre-EU-U.S. split, the EU-Iran energy relation could be summed up as follows, “EU unity was notable in relation to Iran’s nuclear programme, but differences predominated over the prospect of energy cooperation with the Islamic Republic.”²³⁵ As of today, some EU countries are in favour of doing business with Iran while others aren’t. Since the EU’s inability to act as one in the matters of energy, one actor gained the most out of Iran as Youngs writes, “[i]n both the Arabian Peninsula and Iran the different ‘blockages’ to EU policy enabled China to begin making in-roads and win new energy contracts at Europe’s expense.”²³⁶ As one can see China might be winning two geopolitically important countries. As previous chapter showed, Ukraine will very likely become more dependent on China than on Russia. There is a resemblance between this scenario and the one happening in Iran where EU countries are losing again.

Iran’s top trading partner is China as Iran exports rose by 25% in 2017. Further, China is also the biggest exporters and investors in Iran.²³⁷ Additionally, “After the nuclear deal was signed in 2015, Chinese president Xi Jinping agreed on a wide-ranging 25-year plan to broaden relations. This included increasing bilateral trade by tenfold, to \$600 billion, in the next decade.”²³⁸ On the other hand, Iran has also an energy-export-dependent economy. A graph of Iran’s exports during the course of the time.

²³³ David M. Herszenhorn, “Pence demands EU powers abandon Iran nuclear deal,” Politico.eu.

²³⁴ David M. Herszenhorn, “Pence demands EU powers abandon Iran nuclear deal,” Politico.eu.

²³⁵ Youngs, *Europe’s Security*, 173.

²³⁶ Youngs, *Europe’s Security*, 177.

²³⁷ Financial Tribune, “Iran Exports to China Rise 25% in 2017,” Financial Tribune, accessed April 4, 2019, <https://financialtribune.com/articles/economy-business-and-markets/81519/iran-exports-to-china-rise-25-in-2017>.

²³⁸ Geneive Abdo, “Sorry, Iran, China Isn’t Going to Save You,” Bloomberg, accessed April 4, 2019, <https://www.bloomberg.com/opinion/articles/2018-06-27/china-isn-t-going-to-save-iran-s-economy>.

Pinching the Gas Pump

Obama's sanctions cut Iran's oil output by over a million barrels a day. Trump's may do less, but could hurt more.

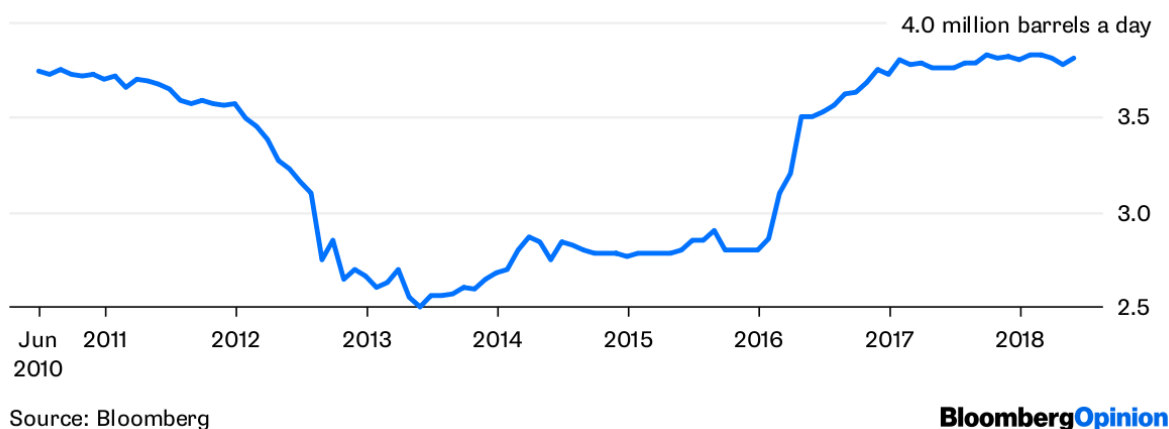


Figure 4: The effect of President Obama's sanctions on Iranian oil output.²³⁹

As one can see, the Iranian economy suffered greatly. From 2012 to 2016, the Western sanctions on oil output cost Iran 160 billion dollars in revenue.²⁴⁰ Interestingly, countries like Russia and Iran have an authoritarian government. This suggests that an energy-driven economy supports the legitimacy of a ruling elite that governs in an authoritarian style. Roland Dannreuther comments on this fact and states that with the increased energy resource, countries can “adopt revisionist, anti-Western and authoritarian policies, such as Russia, Iran and Venezuela.”²⁴¹ As proven, the sanctions did not destroy the Iranian determination in their pursue for nuclear means. In 2015 the former U.S. President Barack Obama signed the Nuclear Deal, which was then heavily criticised by President Donald Trump. The EU maintained the same position on the Nuclear Deal while the U.S. withdrew from it and pushed for more sanctions against the Islamic Republic of Iran.

The diversification efforts with these two energy actors is a tough challenge for the EU. The EU has to balance between its realpolitik and securitization of businesses and its ally's priorities. So far, the United States helped the European Union members with their diversification. It has successfully persuaded some of its members to participate in the diversifying efforts by signing joint agreements. Further, the U.S. supported mainly the Central European and Eastern European countries as these countries are predominantly dependent on one supplier – Russia. The external energy policy of the United States helped the Baltic EU

²³⁹ Genevieve Abdo, “Sorry, Iran, China Isn’t Going to Save You,” Bloomberg.

²⁴⁰ “Iran nuclear deal: International sanctions lifted,” BBC.com, accessed April 4, 2019, <https://www.bbc.com/news/world-middle-east-35335078>.

²⁴¹ Dannreuther, *Energy Security*, 24.

members to start building the Balticconnector which will bring gas from the U.S. Additionally, the EU and the U.S. supported the Gas Interconnection Poland Lithuania (GIPL) which also helps the Baltic countries to diversify its gas supply since these countries had to pay 40% more for the Russian gas than the other European countries. The U.S. managed to conclude a 24-year-long deal with the Polish government which will be able to rely purely on the U.S. by 2022 when the Polish-Gazprom gas deal expires. It is possible to assume that the Polish side will sign a new deal with Gazprom as it brings cheaper gas to the country and the Polish government receives gas transit payments from the Russian government. Further, the purpose of diversification is to have more than one source of gas supply, therefore Poland will be able to bring gas from two different suppliers – Russia and the U.S. Also, it is unlikely that Russia would stop supplying gas to Poland and perhaps to Ukraine as it needs the revenue from the gas deals.

Furthermore, the U.S. also supported the Trans Adriatic Pipeline (TAP) which will be finished by 2020. This pipeline and the Partnership for Transatlantic Energy Cooperation will increase the energy securitization efforts of the Southern Corridor as well as the Central European EU members. Interestingly, TAP highlights the importance that Turkey plays in the EU's diversifying efforts. The EU wishes to transport gas from Central Asia as well as the Middle East and it is much easier to do so through Turkey. Other pipeline projects may not end up well. The Nabucco pipeline is a concrete example of that. The pipeline was cancelled due to its length which would cost the EU more. Dannreuther comments, "[t]he failure of the EU to secure the funding and support for the development of an alternative Nabucco gas pipeline from the Middle East and the Caucasus illustrates well the difficulties of diversifying away from Russia."²⁴² The inability of the EU to conclude deals with countries like Iran only deepens its energy dependence on the Russian Federation.

The Islamic Republic of Iran has become one of the key players in the diversifying strategy of the EU. As it was previously mentioned, the EU's energy transition from fossil fuels to more environmentally friendly means of energy will increase its dependence on gas. As gas produces one of the lower overall greenhouse gas emissions.²⁴³ Based on the British Petroleum Statistical Report of 2018, Iran has around 17,2% of gas resources. This makes Iran a very attractive and important country for the EU as it holds the second largest supplies of gas. The EU could conclude a gas deal with Iran and connect a pipeline leading from Iranian gas field to

²⁴² Dannreuther, *Energy Security*, 24.

²⁴³ "Natural Gas Explained," U.S. Energy Information Administration, accessed April 4, 2019, https://www.eia.gov/energyexplained/index.php?page=natural_gas_environment.

Turkey. In Turkey the Iranian pipeline could connect on the Trans Anatolian Natural Gas Pipeline which is planned to be connected to TAP by the end of the year 2020.

Iran plays an interesting role in the EU-U.S. relationship. The country is a sort of a test to this alliance. Since the signature of the Nuclear Deal in 2015, the EU remained part of it while the U.S. withdrew from it. This created a restraint between the two actors. The Trump administration imposed new sanctions on Iran, while the EU used the Special Purpose Vehicle to continue doing business with Iran. As some analytics claim, the energy partnership between the EU and Iran would be a win-win scenario for both. Iran would get more revenue to help its economy, while the EU would decrease its gas-dependency on Russia. Yet, the main issue with Iran is that the Republic wants to have a nuclear deal with the West. This creates a moral dilemma for the EU as its policies are aimed at promoting human rights and freedom. For now, this cannot be achieved in the authoritarian Iran. Additionally, the energy cooperation is dependent on the nuclear deal and the U.S. reluctance to support it may harm the EU in the long term. All involved actors have to balance the pros and cons between energy security and the nuclear deal. The United States as well as the Islamic Republic of Iran can decrease the EU's dependency on the Russian gas and help the energy security of the region.

Conclusion

The paper focused on the energy security dilemma of the EU in the 21st century. The framework of the paper reflected the current energy security issues of the whole Union. Based on these security threats, hypotheses and research questions were phrased. The author of the thesis made four main assumptions which formed the structure of the paper. The first and second analytical chapter answers the hypotheses; since the EU is less dependent on the energy supply, it uses its influence to change Russian foreign policy through sanctions. The second analytical chapter answers two hypotheses; first, the EU will maintain more dependent on Russian gas, and by building new pipelines leading from Russia such as Nord Stream 2 it will increase the Russian influence over the EU member states; second, Russia is more dependent on supplying energy to the EU and therefore it is in its vital interest to build Nord Stream 2 to Germany since Poland has rejected further cooperation and signed a 24-year contract with the United States. The third analytical chapter focused on answering the assumption that it is necessary for the EU to diversify its energy supply which can be achieved by the United States of America and Iran in order to remain secured energy-wise. The author worked with the assumptions and tried to answer two determined research questions; what are the possible ways to achieve energy security of the EU, while lowering third parties influence on the domestic affairs of the EU countries? What are the outcomes of the energy security dilemma and what is the best solution for the EU?

The first chapter is purely devoted to theory, which provides the context for the analysis. The theoretical background is formed by the regional complex security theory (RCST) which helps the reader to better understand the securitization of a region. The author defines the concept of a security dilemma in this chapter and elaborates on the international relations theories of realism, neorealism and liberalism. The theory of neorealism, specifically defensive realism is being stressed in this chapter. Especially, because the liberalist theory stresses the importance of non-state actors and companies in the field of energy. Yet, it fails to explain the fact that Russia has state-owned companies such as Gazprom and Rosneft in this particular field. This is better explained by the theory of realism which claims that states still have the most important role in the field of energy. Interestingly, the wealthiest countries in terms of energy resources are less democratic. Further, the author uses the concept of the comparative advantage and explains its importance in the field of energy. The theoretical chapter provides the reader with a theoretical background necessary for comprehending the complexity of the energy security.

The first analytical chapter determined and then elaborated on the main energy-related strategies of the EU. One of the outcomes of this chapter was defining the realpolitik of the EU in energy security, while applying the international relations theories of liberalism, realism and neorealism. The theory of realism was considered obsolete, as the EU is an actor that is more representing the liberalist approach. The EU is presented as a liberal superpower which tries to influence other energy suppliers with its external Europeanization strategy. This strategy involves stressing cooperation, human rights, market competition and obeying the EU laws. The practical chapter analysed EU's strategies and approaches. It turned out that despite the fact that the European Union is a liberal institution, its member states act more or less in their own interest. It can be said that the EU members act rationally in order to maximize their own benefits even in terms of security. For example, Germany is mostly presented as a liberal country which promotes the core values of the EU. In fact, Germany pushed for the pipeline Nord Stream 2 despite protests of other member states in the European Parliament. Further, Germany used the Special Purpose Vehicle in order to pass the U.S. sanctions imposed on Iran. Therefore, one can say that the EU's behaviour can be explained by the defensive neorealist approach promoted by Kenneth Waltz.

In the first practical chapter, the author found out that the EU places energy security on the same level as its climate action program. Despite the Paris Agreement being non-binding, the EU members determined two dates by which their transition from coal and oil to gas and clean energy must be started. Between the years 2020 and 2030, the EU plans to reduce the amount of produced gas emissions while using the eco-friendlier option which is natural gas. At the same time the EU wants to reduce its dependency on the Russian Federation in terms of energy exports. The EU's determination to transform its means of production will very likely deepen its dependence on Russia as the EU will need more natural gas. The thesis displayed, that the gas imports from Russia are increasing every year and by building new pipelines from Russia it only increases its dependency even more. Further, the thesis showed that the main problem of the EU is the inability to build an internal energy market. This, along with the climate action plan is one of the biggest problems that the EU's energy security will have to face. As of 2019, the energy internal market is not completed, and the energy deals are done via Intragovernmental Agreements (IGAs). This means that the EU members can conclude their own deals on a bilateral basis with their suppliers. This preserves the government's sovereignty over the country's decisions but helps Russia to influence the region. The IGAs allowed Russia to give gas prices on a country-to-country basis. Allegedly, eight countries paid 40% more than the rest of Europe. Those countries were mainly from the Eastern and Central Europe.

Predominantly, the Baltic states. This is the result of the incomplete internal energy market which is the Achilles' heel of the EU in terms of energy security.

The second analytical chapter was focused on analysing the energy relations between the European Union and the Russian Federation. This chapter formed a backbone to the thesis as the EU's energy security is mainly focused on Russia. These two actors have a strange relationship because both need each other in order to survive in the international system. Both are interconnected and interdependent at the same time. The premise of the chapter was to discover, who is more dependent on the other in terms of energy. This finding would answer the hypotheses. The first hypothesis was that the author assumes that the EU will maintain more dependent on Russian gas, and that by building new pipelines leading from Russia such as Nord Stream 2 it would increase the Russian influence among the EU member states. The Second hypothesis was that the author assumes that Russia is more dependent on supplying energy to the EU. Lastly the third hypothesis was that the EU is less dependent on the energy supply and that it uses sanctions in order to change the Russian foreign policy. These three hypotheses were partly confirmed in the first analytical chapter. The EU-Russian gas trade has been growing every year. Further, the EU's incomplete internal energy market along with the environmental legislations will very likely make the EU more dependent on the Russian gas production in the future. This is due to the fact that the EU will need to import bigger volumes of gas in order to fulfil its milestones in between 2020 and 2030 as well as the 2050 goal. The institution is already around 54% dependent on energy imports of which the majority comes from Russia. The EU fails to address its growing dependency on Russian gas through diversification as demonstrated in the German case. Germany increases its gas dependency on Russia by building another gas pipeline Nord Stream 2. The German economy is already from around one third dependent on Russian gas and by connecting to Nord Stream 2 the pipeline will supposedly double the gas income and thus increase the direct dependence on Russia.

On the other hand, the analytical chapter displayed that the Russian economy is predominantly dependent on exporting energy to the EU. In other words, the Russian economy is energy-export driven. This makes Russia more vulnerable to EU's laws and sanctions and it harms its economy more when gas disruptions occur. The Russian government uses the state-owned company Gazprom to conclude deals with its European partners and new pipelines like Turkstream and Nord Stream 2 are vitally important for sustaining the Russian economy. The chapter also showed the direct impact of energy prices on the economy which makes the country more vulnerable and thus dependent. It is possible to say that the EU's sanctions change the Russian foreign policy. The chapter elaborated on this matter and the author discovered that the

EU's diversification attempts made the Russian President Vladimir Putin change some of the Russian policies. This include lowering the Russian economy's dependence on energy export and finding new energy export destinations in the East. This change is called the pivot to the East by scholars. China is a very attractive business partner for many and that's one of the reasons why Russia is building a gas pipeline to the country called the Eastern Siberia-Pacific Oil pipeline (ESPO) and should supply China with around 42% of gas by 2035.

The third analytical chapter focused on two gas suppliers that are seen as key players in the energy security. The Islamic Republic of Iran and the United States of America create a balanced opposition to the Russian Federation. Due to the IGAs, the Central European as well as the Eastern European countries are being approached by the U.S. and new gas deals are being concluded. For example, the Baltic countries are able to lose its 100% gas dependency on Russia thanks to pipeline projects such as Balticconnector and the Gas Interconnection Poland Lithuania (GIPL). They enable the Eastern EU members to diversify its gas supply and import gas from the United States. Further, the U.S. managed to conclude vital gas deals in Hungary and Poland which help secure both countries energy-wise. Additionally, the U.S.-backed Trans Adriatic Pipeline (TAP) is going to be built by 2020 and will connect the Southern Corridor with the Central Asian countries. The U.S. is presented as an important actor that helps individual EU members to diversify its energy supply.

The last practical chapter also analysed the EU-Iran relation. As displayed, the Iranian government is also dependent on energy exports and many scholars claim that creating a direct gas link between the EU and Iran will result in a win-win scenario. An attempt has already been made in the form of the Nabucco Pipeline, which was cancelled due to its length and financing issues in 2013. Iran is a country which is the second largest holder of gas reserves on the planet right after Russia. Thus, the EU should focus its attention to this country if it wants to succeed in the energy diversification. The problems that the EU faces with Iran is mainly the Iranian Nuclear Deal. By now, many top EU leaders know that the authoritarian government of Iran cannot be changed in terms of human rights abuse but can be a crucial trading partner. The EU faces a dilemma; it has to choose whether to continue supporting the Nuclear Deal or to support its closest ally, the U.S. in sanctioning the Iranian government. This chapter confirms the hypothesis that it is possible to ensure efficient energy diversity by concluding energy deals with the U.S. and Iran.

Further, the author discovered some interesting side outcomes of the energy security. For example, by building Nord Stream 2 and the Turk Stream, Ukraine will be almost completely vulnerable towards the Russian influence as Russia will not be needing the

transitory routes leading through Ukraine. The transitory costs form 3% of Ukraine's GDP and will be devastating for its economy. Further, the thesis displayed the vital importance of Turkey in the energy security dilemma. Turkey is perceived as a gateway for Russia to the Southern Corridor of the EU and as a gateway to the Central Asian countries and Iran by the EU. Therefore, the thesis displayed that it is essential for both actors, the EU and Russia, to maintain good relations with the Republic of Turkey. Additionally, Turkey has already an established system of pipelines like the Trans Anatolian Natural Gas Pipeline Project, which crosses Turkey from East to West.

Lastly, the thesis illustrated an emerging actor that will very likely play an important role in the European affairs. That actor is China. China was not in the spotlight in Ukraine nor in Iran. Yet, when one sees the trade balance of China and these two countries it is very likely that they will be strongly influenced by China. China is a dominant trade partner with Iran and the second largest trading partner with Ukraine after Russia. It is predicted that China will become a dominant player in Ukrainian affairs by becoming the biggest trading partner for this country. The thesis illustrated the complexity of the energy security with interesting outcomes. It is possible to see a future struggle of the EU to secure the region. Gas will very likely become the most important energy import that will maintain the EU dependent for decades to come. Further, energy security will become more important as the dependency of the region increases. Perhaps, the EU should work as a more selfish actor. From the neorealist perspective, the most important aspect is the survival in the anarchical structure. The EU will not survive if the member states will not work as one in terms of energy security. It is necessary to complete the internal energy market and be more pragmatic and less naive. Overall, the thesis managed to confirm all hypotheses and answer all research questions with additional outcomes.

The point of the thesis was to introduce the reader with the complexity of energy security and the current dilemma that the EU is facing. With the EU's energy transition plans that will take place between 2020 and 2030, one can expect a *realpolitik* resembling the international relations theory of neorealism. The concept of the security dilemma illustrates the constant competitive nature of actors which strive to securitize themselves and prepare themselves for the worst. Everyone tries to be better prepared than the others through security-seeking strategies which may eventually bind all involved actors together and create a spiral of mutual hostility or perhaps a conflict. The security dilemma is the most appropriate concept that explains the on-going behavioural trend of today's great powers which do not fight ideological wars anymore but try to ensure the energy supply for decades to come.

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