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MARMARA ÜNİVERSİTESİ

AVRUPA BİRLİĞİ ENSTİTÜSÜ

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ENERGY SECURITY: ITS PLACE IN THE RELATIONS BETWEEN THE EUROPEAN UNION AND RUSSIA

YÜKSEK LİSANS TEZİ

Venera YAKUPOVA

İstanbul – 2013

To my Mother, my Father, and my Sister…

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Danışman: Yard. Doç. Dr. Armağan Emre Çakır

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ONAY SAYFASI

Enstitümüz AB Siyaseti ve Uluslararası İlişkiler Anabilim Dalı Türkçe / İngilizce Yüksek Lisans Programı öğrencisi Venera YAKUPOVA'nın ***"ENERGY SECURITY: ITS PLACE IN THE RELATIONS BETWEEN THE EU AND RUSSIA"*** konulu tez çalışması 27.11.2013 tarihinde yapılan tez savunma sınavında aşağıda isimleri yazılı jüri üyeleri tarafından OYBİRLİĞİ / ~~OYÇOKLUĞU~~ ile BAŞARILI bulunmuştur.

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ABSTRACT

This thesis aims at analysing the relations between the European Union and Russia from the perspective of ‘energy security’ concept by applying the two international relations theories, namely, neorealism and neoliberal institutionalism. In order to accomplish this task, the study targets the following questions: “What does the concept of energy security stand for in the relations between the EU and Russia?”, and “Which theory of the international relations explains the relations between the actors in the light of ‘energy security’ better?” At the end of the thorough analysis, this study reaches three main conclusions. Firstly, energy security is a phenomenon, which can be reached under the condition of the integration and close cooperation between consumers, suppliers and transit countries. If any of the participants is neglected, ‘energy security’ is almost impossible to achieve. Secondly, there is no energy policy of the European Union with external dimension, mainly, due to the lack of single voice between the member states over energy issues, the absence of the European Commission competence in this sphere. Finally, the relations between the two actors in the light of ‘energy security’ concept are better explained by neorealism theory.

ÖZET

Bu çalışma, Avrupa Birliği ve Rusya arasındaki ilişkileri ‘enerji güvenliği’ konsepti ışığında iki uluslararası ilişkiler teorisi aracıyla analiz etmektedir. Bunu gerçekleştirebilmek için, bu tez şu soruları cevaplamayı hedefler: “Avrupa Birliği ve Rusya ilişkilerinde enerji güvenliği konsepti ne anlama gelir?”, “İki uluslararası ilişkiler teorilerinden hangisi iki aktör arasındaki ilişkileri enerji güvenliği açısından daha iyi ifade ediyor?” Ayrıntılı analiz üç sonuca ulaşmaktadır. İlk olarak, enerji güvenliği enerji tüketicileri, tedarikçiler ve transit ülkelerin arasında entegrasyon ve yakın işbirliği koşulu ile gerçekleşebilir. Çünkü, üç katılımcıdan birinin ihmal edilmesi enerji güvenliğinin gerçekleşmesini engeller. İkinci olarak, Avrupa Komisyon’unun enerji konusunda tam yetkisi bulunmadığından, ve üye ülkelerin ‘birlik ses’inin eksik olması nedeniyle, Avrupa Birliği’nin esas dış enerji politikası söz konusu değildir. Son olarak, tezde gerçekleştiren analiz, enerji güvenliği bakış açısından, bu iki aktörün arasındaki ilişkilerin neorealism ile daha başarılı açıklandığını göstermektedir.

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ABBREVIATIONS

the ACER the Agency for the Cooperation of Energy Regulators

bbl/d barrels per day

bcm billion cubic meters

BEMIP the Baltic Energy Market Interconnection Plan

CCS Carbon Capture Storage

CEE Central and Eastern Europe

CESSA project the Compositional Evolution of Source Services project

the CFSP EU Common Foreign and Security Policy

the CIS the Commonwealth of Independent States

Comecon the Council for Mutual Economic Assistance

the CS the Common Strategy on Russia

the ECSC the European Coal and Steel Community

the ECT the Energy Charter Treaty

the EEC the European Economic Community

ENTSO-E the European Network of Transmission System Operators for Electricity

ENTSO-G the European Network of Transmission System Operators for Gas

ESPO the East Siberian/ Pacific Ocean oil pipeline

ETS EU Emission Trading System

the EU the European Union

EURATOM the European Atomic Energy Community

the FSU the former Soviet Union States

GasPEC or OGEG Organization of Gas Exporting Countries

the IEA the International Energy Agency

the IEM the Internal Integrated Market

the IES the State Institute of Energy Studies

IIAs International Investment Agreements

the ISO Independent System Operator

the IPCC Intergovernmental Panel on Climate Change

the ITO Independent Transmission Operator

JHA Justice and Home Affairs

mb/d millions of barrels per day

mcm million cubic meters

NATO the North Atlantic Treaty Organization

NEEAP National Energy Efficiency Action Plan

the NRA the National Regulatory Authorities

the OECD the Organisation for Economic Cooperation and Development

the OAPEC the Organization of Arab Petroleum Exporting Countries

OPEC Organization of Petroleum Exporting Countries

OU Ownership Unbundling

the PCA the Partnership and Cooperation Agreement

the RES the renewable energy resources

the SCO Shanghai Cooperation Organization

the SET-plan the Strategy Energy Technology Plan

the TACIS Technical Assistance to the Commonwealth of Independent States

TAP Trans Adriatic Pipeline

TCA the Agreement on trade, commerce and economic cooperation

TCF trillion cubic feet

TSOs Transmission System Operators

the USSR the Union of Soviet Socialist Republics

the WTO the World Trade Organization

the WWII the Second World War

INTRODUCTION

Nowadays there are seven billion people living on Earth. According to the most recent United Nations estimates, the human population of the world will reach eight billion people in the spring of 2024.[1] With population, economic growth, and standards of living expected to increase throughout the world and in densely populated developing countries, in particular, society will require more basic resources such as food, water, land, and, especially, energy to sustain this expansion.

Given the fact that energy resources are distributed quite unevenly on the earth with only several countries being blessed with them, and taking in consideration the increase in energy consumption, it becomes clear that energy is not only basic but also strategic and, therefore, necessary for the human survival element. The significance of the availability of energy resources and the link between this availability and economic growth has been acknowledged by policy-makers worldwide.

To understand the importance of energy security for world politics, one should commence with significance of energy in people's everyday lives. From the moment we wake up in the morning to the moment we go to sleep different forms of energy control our lives. Energy's influence reaches far into politics, international affairs, global economies, human rights, and the environmental health of the planet. The American writer Yeomans, who specializes in social media editorial strategy and sustainability communications, describes a little experiment, which he has devised in order to better understand oil's impact on people's lives. He tried to spend a day without oil by refusing from using shampoo, shaving cream, deodorant, toothpaste, shower curtain in the morning; wearing sneakers and waterproof outerwear; walking on the asphalt (failed to do so), paying by credit and debit cards during the day; and, finally, using a telephone or a computer in the evening, because all those things

[1] Current World Population, Real Time World Statistics, http://www.worldometers.info/world-population/ accessed September 27, 2012

were products of the petrochemical industry. In addition, he wasn't able to take several aspirins due to them being another product legacy of oil.[1]

This experiment proves the fact that energy in any of its numerous forms has the lion's share of physiological human needs, according to Maslow's hierarchy of needs.[2] It means that whatever happens in the global energy market, in terms of disruptions or price, will affect political and economic situation around the world. Moreover, it will have an impact on the economic and political position of every country. Consequently, it is of pivotal importance to understand what should be done to secure and use energy resources sufficiently.

Consequently, energy policies constitute strategies of states. It is obvious that the access to energy resources and their safe transportation, reduction of dependency on any source of energy imported are fundamentals for well-functioning and prospering economies. Taking into account the facts presented above, it can be concluded that energy issues are essential elements of foreign policies of states.

The subject of this thesis is the popular in a political discourse concept of energy security. The debate over what constitutes energy security is one of the most controversial topics among politicians and energy scholars. Some argue that energy security deals with reliance and high dependency on imported energy. When there are enough supplies, there is development and prosperity, when there is lack of them, there is regress and panic. The others believe that energy security should ensure stable energy markets and ongoing demand.

The energy sector inhibits great uncertainties rooted in its very nature. In times of increasing competition for world natural energy resources accompanied by intensification of import dependency, the European Union (hereafter the EU) has to take a stance in the world energy market and develop a strategy for future energy policy. The rise in world energy prices, political instability in several regions, certain environmental challenges, the spread of "energy nationalism"[3] in producer countries like the Russian Federation (hereafter Russia), have made the member states to include energy security in their agenda. It is well-known fact

[1] Matthew Yeomans, **Oil**, The New Press, New York, 2004, p. 2
[2]The National Agency for Innovation and Research in Luxemburg, "Maslow's Hierarchy of Needs", Luxinnovation G.I.E. 2008, http://www.innovation.public.lu/en/ir-entreprise/techniques-gestion-innovation/outils-gestion-strategique/090205-Pyramide-de-Maslow-vers-eng.pdf accessed December 10, 2012
[3] Javier Morales, "Russia as an Energy Great Power: Consequences for EU Energy Security" in Antonio Marquina (Ed.) **Energy Security**, Palgrave MacMillan, 2008 (pp. 24-33, p. 24)

that the EU, being a resource-poor region, is the largest energy importer and the second largest energy consumer in the world, which makes it dependent on foreign energy supplies, first of all on Russian natural gas and oil. The Russia, in its turn, holds the world's largest natural gas reserves and it is the second-largest producer of petroleum liquids after the Saudi Arabia.[4] The majority of its energy exports are destined for European market. The study highlights the existence of certain interdependence between these two actors in energy issues, especially if one takes into consideration their geographical proximity. Further, this work seeks to define its meaning, which will be devised from the energy policies of the EU and Russia. Under such circumstances it is obvious that energy security depends on much on how countries manage their relations with one another.

Based on the facts mentioned above, this thesis poses its research questions as follows: "What does the concept of energy security stand for in the relations between the EU and Russia?", and "Which theory of the international relations explains the relations between the actors in the light of energy security better?" One of the essential questions this thesis asks is whether energy issues are about trade and markets or they concern strategies and geopolitics. The hypothesis of this study is as follows: the EU's internal energy market is not pure liberal, and judging by the official documents it seems that there is no common policy of the EU with external dimension; consequently, the relations between the EU and Russia with regard to energy security are explained by neorealist approach better than by neoliberal institutionalism.

As far as methodology is concerned, the thesis will rely mainly on the textual analysis. To understand actors' understanding of the concept, one would start with the analysis of energy policies. That is why official documents as papers, communications, strategies and reports will be used to make a true picture of energy policies of the actors. The study will also utilize descriptive statistical data when analyzing energy policies of the actors and interdependence factor. Critical review of the literature in English and in Russian will allow to integrate separate comments, interpretations and opinions on Union and Russian energy policies in order to devise a common meaning of the energy security concept for both actors.

This thesis comprises three Chapters apart from the Introduction and the Conclusion sections. Chapter 1 presents historical outlook of the concept of energy security, further, tries

[4] The US Energy Administration website, http://www.eia.gov/countries/cab.cfm?fips=RS accessed September 13, 2012

to define this phenomenon referring to the current political discourse, and, finally, identifies two international relations theories, namely neorealism and neoliberal institutionalism to be applied while analyzing the energy dialogue between the EU and Russia.

Chapter 2 begins with an analysis of EU official documents on energy issues, such as Green Papers, White Papers, the Action Plan, and Communications from the beginning of the integration process up to the present time to understand if there exists European energy policy *per se* or not. The EU's attempts to create an integrated energy policy will be discussed, especially, the last energy package.

Chapter 3 proceeds with the analysis of the energy policy of another actor, Russia. It explains why Russia was chosen as a case study for this thesis. It also reviews the timeline of the EU and Russia relations and points out main cornerstones of the relations. This chapter highlights the fact of mutual interdependence between these two actors. It takes the first serious gas crisis happened in 2006 as the example to demonstrate the existing dependence of the EU on Russian hydrocarbons, and also to evaluate the quality of measures taken by the EU during time of crisis. Besides, Chapter 3 specifies and then studies one by one the main obstacles for the EU to reach energy security in the relations with its major energy partner.

Finally, the Conclusion section sums up the results of the inquiry and, thus, will answer the main research questions posed in the beginning of the thesis.

CHAPTER 1

CONCEPTUAL, HISTORICAL AND THEORETICAL FOUNDATIONS OF ENERGY SECURITY

This chapter reveals conceptual, historical, and theoretical foundations of 'energy security' notion. The first part of this chapter analyses *energy security* concept and highlights the importance not only of security of supply but also security of demand, due to them being two sides of the same coin. The peculiarities in definitions and understanding of energy security by consumers and suppliers, major difficulties in realisation of energy security are presented in the first part.

The second part of this chapter studies the historical background of the concept of energy security, its development in the relations between the parties for better understanding of the concept.

The final part of this chapter makes a brief analysis of two theories belonging to positivist schools of thought, namely, neorealism and neoliberal institutionalism, which are selected to analyse energy security in the case of the EU and Russia relations. This section also highlights fundamental tenets of the two theories.

Generally, this chapter puts forward that in order to achieve energy security, interests and needs of all parties concerned – consumers, suppliers and transit countries – should be integrated.

1.1. THE CONCEPT OF ENERGY SECURITY

Energy and its prices are of interest to a politician, an energy economist, an energy trader, or an energy consumer, because "energy is a strategically vital commodity, and access to it is a necessary element of a state's security"[5].

[5] Daniel Yergin, **The Quest: Energy Security, and the Remarking of the Modern World**, Penguin Books, 2011, 2012, p.266

Science tells us that the most cataclysmic energy event was the big bang of the universe and the following inflation of it some thirteen billion years ago. More than five billion years ago, the sun formed, which is still directly or indirectly the source of energy for the planet. Life was formed in the oceans during the Precambrian period, more than half a billion years ago, and petroleum is known to have formed as early as this as well. From the Precambrian up through the Devonian period, marine organisms mostly plants and bacteria probably served as the source for petroleum. The organisms were deposited in the absence of oxygen, which prevented their decay. Heat and pressure eventually formed oil and natural gas.[6] The world's largest oilfields and the time of their formation are shown in Table 1.

The first crude oil used by humans was found in pools that seeped from the earth or was gathered with sponges from the sea.[7] One of the noteworthy things about the history of energy is the consistency of fuel and energy use even from the earliest times. They provided heat, light, lubrication, transportation, mechanical power, and materials for war.

Table 1

The World's Largest Oilfields

Field	Country	Estimated Recoverable Reserves (Billion Barrels)
1.Ghawar	Saudi Arabia	83
2.Burgan	Kuwait	72
3.Bolivar Coastal	Venezuela	32
4.Safaniya-Khafji	Saudi Arabia/ neutral zone	30
5.Rumaila	Iraq	20
6.Ahwaz	Iran	17.5
7.Kirkuk	Iraq	16

[6] Carol A. Dahl, International Energy Markets, Pennwell Corporation, 2004, p.9-10
[7] Ibid., p.18

8.Marun	Iran	16
9.Gach Saran	Iran	15.5
10.Agha Jari	Iran	14
11.Samotlor	The USSR	16

Source: Eric Neshan Tiratsoo, "Oilfields of the World", Third Edition, 1984, cited in Carol A. Dahl, **International Energy Markets: Understanding Pricing, Policies, and Profits**, Pennwell Corporation, 2004, p. 13.

Six forms of energy are differentiated: mechanical, chemical, thermal, radiant, nuclear and electrical. In any system we can change energy from one form into another, according to the laws of thermodynamics. Any form of energy is produced in a technically complex industry. Uranium, for example, requires sophisticated processing; coal is gagged out of the earth with huge equipment. Refineries use complicated processes utilizing catalysts to break down oil and reshape it into the products taken for granted. Natural gas is transported through complicated pipeline networks with systems to monitor and measure its location.[8] Overall, energy is a global business with many large national, multinational, and transnational companies involved in its production and distribution.

1.1.1. Many Faces of Energy Security

As it has been proved in Introduction, every country is dependent on energy in its different forms. It must be mentioned that concerns over energy security are not limited to oil; they also include natural gas, nuclear energy, hydrocarbons, renewable energy sources, etc.[9] Since the greatest part of the European Union energy imports are oil and natural gas, in this study those energy resources will be dealt with.

There is also a slight difference between the definition of oil and natural gas security rooted in energy security distinction for oil and natural gas. Unlike oil, gas is difficult to store and transportation is fixed, i.e. pipelines. Unlike the global oil market, the gas market is regional. The costs of gas transportation are higher and delivery systems are inflexibly. And, finally, oil disruptions are rare in comparison with gas shortages. Consequently, gas security

[8] Dahl, op. cit. p. 7-8
[9] European Commission, "Strategic Partnership", 2009, http://eeas.europa.eu/library/publications/2009_russia_leaflet_en.pdf accessed September 13, 2012

necessitates the satisfaction of demand without necessarily emphasising the adequacy of gas supplies in all sectors.[10] If gas is not obtained, it could be substituted by other fuels. The same cannot be applied to oil.

It would not be odd to add that the EU will be treated as "a unique single monolithic actor"[11], though in reality the energy policies among the member states of the union differ vigorously. Nevertheless, this study does not analyses national energy policies of the member states, because viewing the EU simply and purely as a bunch of states would be *a priori* a mistake. The EU is characterised as "a genuine international entity, which is less than a state, but more than a conventional intergovernmental organization".[12] Thus, it is perceived to be an actor with "variable and multidimensional presence" in international affairs, it possesses certain capabilities such as the conventional instruments of foreign policy – the use of force, diplomacy, economic carrots and sticks, cultural influence – also the underlying resources of population, wealth, technology, human capital and political stability, cohesiveness, and finally capacity to reach a decision and to stick to it.[13]

As far as the majority of studies on energy security is concerned, a political discourse on this concept is different of those who produce energy and those who consume it. Energy importing countries think in terms of security of supply, while energy exporting ones turn the question around. They want consumers to be there in order to plan their budgets and justify future levels of investment.[14]

All of the participants seek for the benefits from co-operation trying to avoid their responsibilities. For example, in response to the 1970s oil crisis the International Energy Agency (IEA)[15] in the framework of the Organisation for Economic Co-operation and Development (OECD)[16] was founded. The IEA's initial role was to co-ordinate a collective response amongst its members to major disruptions in oil supply through the release of

[10] Sanam Salem Haghighi, **Energy Security**, Hart Publishing, 2007, p.13-15
[11] Asst. Prof. Dr. Munniver Cebeci, **International Politics of the EU**, Lectures, Marmara University, Fall 2010
[12] Christopher Hill, "The capability – expectations gap, or conceptualizing Europe's international role", *Journal of Common Market Studies*, Vol. 31, No. 3, 1993, p. 306
[13] Ibid.
[14] Yergin, op. cit. p.266
[15] International Energy Agency webpage http://www.iea.org/ accessed September 13, 2013
[16] Established in 1961, the main aim of the OECD is to promote policies that will improve the economic and social well-being of people around the world, the OECD webpage http://www.oecd.org/ accessed September 13, 2013

emergency oil stocks.[17] The overwhelming members of the agency are consumer countries. It is not surprising that its basic goals are responding to physical disruptions in the supply of energy, and serving as an information source on statistics about the international energy market. In other words, they work to ensure reliable, affordable and clean energy for its twenty-eight members. Moreover, one of its new ambitions is to promote the usage of renewable energy resources, obviously aiming at decreasing existing energy dependence on suppliers. It is clear that the members of the IEA pursue, first of all their interests, consumers' interests.

Another example could be the Compositional Evolution of Secure Services using Aspects[18] (the CESSA) project. Several conferences were held concerning 'natural gas supply security', 'nuclear supply security', 'supply security' at large, 'investment in infrastructure'. The names of the titles are more than suggestive.

As far as supplier countries are concerned, they naturally tend to care about themselves as well. A good example could be the Organization of the Petroleum Exporting Countries[19] (OPEC) created in 1960. The principle goals of the OPEC are to determine the best means for safeguarding the interests of the organisation on the world energy markets, to ensure the stabilization of prices in international oil markets, and, finally, to secure a steady income to the producing countries. A very similar picture could be observed within a group of natural gas producing and exporting countries, sometimes called GasPEC[20], and, such as the Organization of Arab Petroleum Exporting Countries, i.e. OAPEC[21]. These instances are useful while defining a clash of interests in the energy security notion.

Energy security is a very popular and appealing term with deep political resonance, because energy itself is the life blood of any society. The well-being of people, industry and economy depends on safe, secure, sustainable and affordable energy.[22]

[17] The IEA webpage www.iea.org accessed November 11, 2012
[18] The CESSA project is supported by the French national research organization. http://cessa.gforge.inria.fr/doku.php?id=start, accessed November 11, 2012
[19] OPEC http://www.opec.org/opec_web/en/ accessed November 11, 2012
[20] Ibid.
[21] Ibid.
[22] The European Commission, Communication: Energy Strategy 2020, http://ec.europa.eu/energy/publications/doc/2011_energy2020_en.pdf accessed November 11, 2012

Nowadays, the new world order has been based on economic interests, which are subjects of struggle between the states.[23] The concept of energy security lies between geopolitics and market economy. It borders on price determination of a market, energy supply and demand on the one side, and a deep dependence and threat scenarios.[24]

There is no such thing as a "one-size-fits-all"[25] definition of energy security. There exist two opposite views on the concept. On the one hand, there is a 'Western view', the proponents of which aim at eliminating political barriers on the way to free energy access, appearing new markets. On the other hand, there are countries, who regard their energy resources as a part of national sovereignty and targets at controlling energy prices in the chain: production – transportation – selling – consumption.[26] This phenomenon is called "energy sovereignty"[27]. In other words, the two opponents could be called as 'consumer countries' and 'supply countries'.

Nevertheless, it does not mean that energy security is an essentially contested concept, because it has many common aspects agreed on in political discourse. In this section, the viewpoints of several political scientists concerning this term are revealed. They basically point out how the actor can be secure in energy issues. Thus, the definitions indirectly propose policies.

What can be stressed is that most Western and European policy-makers and scholars analyse energy security in a very restricted manner as security of supply, referring to the same classical definitions, such as "access to sufficient energy resources at reasonable prices for the foreseeable future free from serious risk of major disruption of service"[28]. Probably, it can be explained by the fact that the concept of energy security appeared in consumer countries, which, naturally, were guided by their own interests and concerns.

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[23] Johnson Debra, "EU-Russian Energy Links" in Debra Johnson , Paul Robinson (Eds.) **Perspectives on EU-Russia Relations**, Routledge, 2005, (175-193), p.171

[24] Malcolm Dunn, Dimo Böhme, "Energobezopastnost - no kak?", *the University of Potsdam*, http://www.uni-potsdam.de/fileadmin/projects/wirtschaftspolitik/assets/Publikationen_Malcolm/Energiesicherheit__aber_wie_Russisch.pdf accessed September 13, 2012

[25] *Hirschhausen* Christian von, *Holz* Franziska, *Rüster* Sophia, 'Security of Energy Supply in Europe', in François Lévêque (Ed.) **Security of Energy Supply in Europe: Natural Gas, Nuclear and Hydrogen**, Cheltenhem, Elgar, 2010, p.5

[26] Dunn, Böhme., op cit. p. 1

[27] Ibid.

[28] Barry Barton, Catherine Redgwell, Anita Rønne, Donald N. Zilman (Eds.). **Energy Security: Managing Risk in a Dynamic Legal and Regulatory Environment,** Oxford University Press, 2004, p. 5

For instance, Bahgat defines energy security as "the sustainable and reliable supplies at reasonable prices" and tries to convince the reader of energy security being about distinctions of geological and geopolitical threats, affordable prices, sufficient level of investment, spare capacity, diversification of energy mix and routes.[29] He also mentions that demand security also merits attention, saying that none of countries or regions can alone achieve a state of energy security.

Nevertheless, the importance of diversification of *energy mix*[30] in energy security is accentuated. This is not a new way of thinking about energy security. On the eve of World War I, Winston Churchill decided to shift the British navy's ships from coal to oil. His intention was to make the fleet faster than its German counterpart. It meant that the Royal Navy would rely not on coal from Wales but on insecure oil supplies from what was then Persia. Energy security became a question of national strategy. Churchill's answer was then: "Safety… in oil lies in variety and variety alone".[31]

Haghighi, who links energy with politics, claims that a triangle of economics-politics-development should be the building block of a policy framework to guarantee energy security along with the acknowledgement of the mutual interdependence between consumers and producers. Moreover, to guarantee energy supply, risks should be determined and how they should be responded to.[32] For example, the author classified all possible risks into two categories: the risks that endanger short-term supply availability, such as bad weather conditions, seasonal stress, technical and operational problems; the second category includes long-term supply objectives, transit and facility. He slightly mentions the equality of internal and external security for analysing security, as energy demand and supply are strongly intertwined. Notwithstanding the classification of the risks and broader view of the concept, his study again places greater emphasis on the consumer side and touches upon the demander side of energy security infrequently.

[29] Gawdat Bahgat, "Europe's energy security: challenges and opportunities", *International Affairs* , Vol.82, No.: 5, p.956 http://www.chathamhouse.org/sites/default/files/public/International%20Affairs/2006/inta_580.pdf accessed September 13, 2012
[30] Ibid.
[31] Daniel Yergin, "Ensuring Energy Security", *Foreign Affairs*, Volume 85, No.:2 2006, p. 69 http://www.un.org/ga/61/second/daniel_yergin_energysecurity.pdf accessed September 27, 2012
[32] Haghighi, op. cit. p.15-17

According to Shaffer, energy security includes three main components: reliability of supply, meaning regular, non-interrupted access to energy in the quantity and forms it requires; affordability of supply, suggesting an access to energy supplies at an economically sustained price; and friendliness to the environment, when the prevailing form of energy provides for environmental sustainability and does not damage health of residents. She emphasizes that energy security should not be confused with 'energy autarchy' (interdependence), because achieving adequate energy security does not require an actor to provide all its energy needs domestically.[33] Shaffer is a strong proponent of energy security being an integrated element of foreign and national security policies.

Basically, these authors emphasize the importance of uninterrupted security of supply at low prices being in harmony with environment for consumers.

However, there are also those, who believe that to ensure energy security all actors participating in energy production, transportation and consuming, are to share the burdens and to take responsibilities.

For example, Yergin does not deny that in the developed world the usual definition of energy security is usually the availability of sufficient supplies at affordable prices.[34] He agrees that the key element of energy security has been diversification.

But Yergin also believes that nowadays a wider approach is required, which takes into account the rapid evolution of the global energy trade, supply-chain vulnerabilities, threat of terrorism, geopolitical rivalries, instability in some exporting nations as well as the integration of major new economies into world market.[35] He claims that energy security is also about the relations among nations, the way they interact with each other, and the way energy impacts their national security.

Further, he believes that there are several dimensions of energy security: physical (protecting the assets, infrastructure), contractual (ensuring supply chains, trade routes), institutional (conducting national and international policies), and, finally, commercial

[33] Brenda Shaffer, **Energy Politics**, University of Pennsylvania Press Philadelphia 2009 , p. 91-92
[34] Yergin, *Ensuring Energy Security*, p. 69
[35] Ibid. p.71

including investment.[36] All these dimensions suggest policies that will ensure energy security. Thus, the significance for collaboration between consumers and suppliers is highlighted.

Kaveshnikov claims that today energy is a highly politicised topic. He strongly believes that energy is primarily about business: prices, profits and recoupment of projects. He also perceives that analysing security of supply separately from security of demand "not only makes vulnerable the methodology of academic studies but also enhances risks for consumers in energy planning".[37] Given the fact that energy security is a common target, Kaveshnikov defines it as the elimination of a threat that in a long run will become a potential obstacle to economic development of the actors.[38] For energy importers, thus, energy security means guaranteed sufficient energy supplies to maintain the required rate of economic development. In their turn, energy exporters would like are interested in guaranteed demand and sufficient profit to maintain reproduction of the energy sector.

Further, the work of Dunn on energy security states that energy security is the complex interplay of geopolitics and economics. Abundance in energy resources, according to him, classifies 'weak' and 'strong' states in terms of power. In addition, the historical ties based on 'friendship' or 'hostility' are of grave importance. Some energy exporters, as Dunn believes, regard their energy resources and infrastructure as means to strengthen their geostrategic position.[39]

To sum it up, the assumption of energy security being uninterrupted and easy access for low prices with minimization of risks prevails. It is worth mentioning that the vast majority of scholars admit that energy is linked to politics, while politicians, as it will be understood further, tend to talk about energy in the light of economy and markets, in other words, they try to de-politicise this topic. Overall, such a complex and difficult process as ensuring energy security requires the contribution to this process of not only consumers but also suppliers and other participants of energy exploration, production, transportation, transition, and consumption. Given the fact that consumption of energy resources is the last

[36] Yergin, **The Quest**, p.268
[37] Nikolay Kaveshnikov, "The issue of energy security in the relations between Russia and the EU", *European Security*, 19: 4, 2010, p. 586-587 http://ru.scribd.com/doc/88726450/The-Issue-of-Energy-Security-in-Relations-Between-Russia-and-the-European-Union accessed April 17, 2011
[38] Ibid. P.587
[39] Dunn, Böhme, op. cit., p. 4

element in the chain, the expectations of suppliers as well as transit countries should be justified.

1.1.2. Global Energy Trends

In order to ensure energy security certain policies are required. Energy security policies are dictated, first of all, by implications of the changing energy landscape, which is, according to the Center for Strategic and International Studies, characterized by five trends or dynamics.[40] The first one is shifting demand partners, which means that in the past the members of the OECD were the largest energy consumers. Nowadays the overwhelming majority of new fuel growth will be determined by the choices developing countries led by China, India, and Japan make.[41] Within the last twenty years energy share of Asia increased from 21% in 1990 to 28% in 2001, it approached 31% in 2009.[42]

Second trend is changing supply choices. Both conventional and unconventional resources are becoming increasingly challenging and expensive to access, produce, convert and deliver, moreover, they are geographically concentrated in a relatively few areas of the Middle East, North Africa, and Eurasia. In addition, the enormity of global demand needs, the cost for new transmission infrastructure along with renewable sources suggests that the transmission to lower-carbon energy sources will take decades. The share of alternative energy up to 2030 is expected to be only 5-6% out of energy mix.[43] Due to high cost characteristics and lack of political decisions worldwide concerning renewable energy resources, conventional hydrocarbon sources will keep dominating world energy market.

Third, persistent demand has caused rising costs for equipment, which, in its turn, have resulted in price volatility and investment lags. The recent tragedy at Fukushima[44] in

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[40] Daniel Yergin, Special Report "The Fundamentals of Energy Security", **Foreign Policy and National Security Implications of Oil Dependence**, Committee on Foreign Affairs US House of Representatives, March 22, 2007 p. 1-2, http://democrats.foreignaffairs.house.gov/110/yer032207.htm accessed May 20, 2011

[41] Varnavskiy Vladimir, "Razvitiye mirovoi energetiki v postkrizisnii period i v perspective", V.G. Baranovskiy (Ed.). *God Planeti*, vipusk 2011, IMEMO RAN, Idea-Press, M.: 2011, p. 63 (my translation)

[42] BP Statistical Review of World Energy, June 2010, http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2008/STAGING/local_assets/2010_downloads/statistical_review_of_world_energy_full_report_2010.pdf accessed April 20, 2011

[43] Ibid.

[44] The Fukushima disaster was an energy accident at the Fukushima I Nuclear Power Plant on March 11, 2011 caused by the tsunami, Fukushima keeps leaking radioactive tritium into the Pacific Ocean, according to the numerous newspapers worldwide.

Japan is likely to stall the nuclear renaissance, while the Keystone pipeline[45] or large transmission projects remain under renewed environmental and safety challenges even as energy demand continues to grow. Many countries around the world favour putting moratorium on nuclear energy, for example Germany officially declared that up to 2020 it will close all its nuclear plants. However, it will probably lead to another energy crisis with prices rising, because halting the work of nuclear plant requires huge investment. Besides, the countries will be forced to shift to conventional sources, which affects dramatically environment causing climate change.

Fourth, the role of geopolitical alliances in forming energy deals, political stability issues, threats to facilities and infrastructure, focus on human rights, environmental degradation has changed.

And finally, of all the trends identified above, climate change and efforts to de-carbonize the energy mix have the greatest potential to fundamentally transform of energy system. As a result of those dynamics, governments are increasingly concerned not only about their short-term but also about their long-terms energy security. There is again a kind of tension between energy importers and exporters, due to the well-known fact that the first ones are interested in short-term contracts because of the will to decrease the existing dependence, whereas the last ones are apt to sign long-term agreements for them to stabilize their income and benefits.

To sum it up, in a world of increasing interdependence, energy security will depend much on how countries manage their relations with one another, whether bilaterally or within multilateral frameworks. In terms of price or disruptions what happens in the global energy market can have major political and economic reverberations around the world. Even with a clear strategy it would be very difficult to cope with all those challenges and changes in the everyday world. Therefore, a really balanced energy policy is needed for an actor, which encompasses main preferences of all the parts in energy issues, and pays attention to all the developments happening worldwide to guarantee high life standards not only for its citizens, but also for future generations.

[45] The Keystone XL Pipeline Project is argued to have a harmful impact on the environment. http://keystone-xl.com/ accessed November 15, 2012

1.1.3. Difficulties in Achieving Energy Security

To begin with, dealing with energy security implies facing certain threats or risks. Jonathan Stern offers a useful categorization of the risks[46] associated with gas security and to some extent relevant for oil, which will be analysed further.

The first risk is *reserve depletion*, due to the number of years the existed reserves can be used is determined. Certainly, hydrocarbon deposits are finite. To make it worse, the world's remaining oil and gas reserves are unequally distributed. For example, oil remains overwhelmingly located in the Middle East (30.8%), Russia (12.6%) and the United States (8 %). As for natural gas, there is a similar story of distribution: Russia with significant exports of 25.2 %, Nigeria accounts for 3 % and Algeria contains 2.5 % in addition to various Middle Eastern (41.3%) and North American producers (4.5 %).[47]

Rooted in this assumption so-called *Peak Oil Theory*[48] pioneered by the geologist Marion King Hubbert was devised. It is not necessarily concerned with the world running out of oil. Rather, it looks to predict the lifecycle of local oil deposits. The proponents of this theory claim that taking the ultimate recovery value and past oil production date, they can model when that deposit will peak, though they wrongly predicted the coming of peak oil in the 1980s, 2000 and 2005. Simply, after discovery production increases and more wells are drilled. When half of the oil has been extracted, the supply hits the peak, and production begins to decline as it becomes harder and less profitable to extract the oil.[49]

However, even if *Peak Oil Theory* falls down, because it does not consider resource growth, application of new technology, or the impact of geopolitics on production, humanity is destined to run out of hydrocarbon energy one day. People will have to search for new sources of energy as solar wind energy or keep in mind untapped resources of the Arctic, for instance.

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[46] Stern, Jonathan 'Gas Security' cited in Sanam Sinem Haghighi, **Energy Security**, Hart Publishing, 2007, p. 18-19
[47] IEA Key World Energy Statistics 2008, http://www.iea.org/statistics/ accessed July 20, 2012
[48] Some geologists and engineers argue that oil is finite and is running out. They claim that global production of conventional oil will begin to decline within ten years from 1998. Collin J. Campbell, Jean H. Laherrère, "The End of Cheap Oil", 1998 at http://www.oilcrisis.com/campbell/endofcheapoil.pdf accessed July 20, 2012
[49] Peter Truscott, **European Energy Security: Facing a Future of Increasing Dependency**, Whitehall Paper, 2011, p. 16-18

According to the US Geological Survey CARA (Circum-Arctic Resource Appraisal), the Arctic continental shelves "may constitute the geographically largest unexplored prospective area for petroleum remaining on Earth"[50]. Nowadays, there has been a scramble for control and territory by Canada, Norway, Sweden, the US and Russia. Russia's Security Strategy of 2009[51] specifically singled-out the Barents Sea shelf and other Arctic regions as potential military battlegrounds in the world's growing struggle for energy reserves. The challenge seen by Truscott is, thus, not peak oil, but rather getting the remaining oil and gas out of the ground. The policies of the actors then can be reactive, as they scramble for hydrocarbons to meet the oil and gas gap, or proactive, i.e. finding clean energy alternatives, excluding nuclear power the reliance on which was quite popular until Fukushima accident of 2011.

Overall, the reserve depletion highlights the need to use alternative renewable sources of energy such as hydroelectric power, geothermal, wind, photovoltaic, and solar thermal energy, but the costs of gas, for example, is cheaper than generation costs of solar power plants. Furthermore, the shift from one source energy to another is not solely due to depletion factor. Geopolitics, competition between gas and oil, and technological factors also matter.

The second risk factor is the *structure of supply contracts*. European law does not prohibit long-term contracts outright, but a pure application of them leads to anti-competitive characteristics rooted mainly in so-called 'destination clauses' or 'territorial restriction clauses'[52]. These clauses can restrict the buyer to purchase from other producers or to sell the residual amount or the whole amount of energy to another wholesaler, i.e. even if one EU state receives more gas than it needs, it is not allowed to sell it. For example, these clauses allow Gazprom to sell gas to different EU countries at different prices and prevent the EU from developing a functioning internal gas market. Obviously, the existence of such clauses has created legal problems on the part of energy companies. The final solution is the

[50] Michael Asher, "Geologists find 90 Billion New Barrels of Oil in Arctic", July 24, 2008, **Guardian**, http://www.dailytech.com/Geologists+Find+90+Billion+New+Barrels+of+Oil+in+Arctic/article12481.htm accessed July 20, 2013

[51] Ministerstvo Energetiki RF, Energostrategiya Rossii na 2009, http://minenergo.gov.ru/aboutminen/energostrategy/ accessed September 13, 2013

[52] Katinka Barysch, "EU-Russia Economic Relations" in Oksana Antonenko, Kathryn Pinnik (Eds.). **Russia and the European Union**, Routledge, 2005, (115-129), p. 125

maintenance of long-term contracts as the best means to guarantee security of interdependence with reducing its duration to avoid overdependence.

The next risky factor is the regime of *investment* in the exploration and production of energy. No doubt that the best investment regime is an 'open investment', where investors invest in the exploration and production of energy in the third country with reserves found without any restrictions imposed by the host state. However, host countries practically tend to limit free access and make it conditional.

As far as difficulties in achieving energy security in Europe are concerned, two aspects have to be differentiated: there are short-term and long-term effects on energy security.[53] The short-term effects are mainly of physical supply of energy resources that may be threatened by supply disruption caused by technical or political reasons, such as shortfall of infrastructure or exhaustion and armed conflicts. They are often of malevolent nature. It should be mentioned that no energy system can be entirely secure in a short term, because the disruptions or shortages can arise unexpectedly, whether through sabotage, political intervention, strikes, technical failures, accidents, or natural disasters.[54]

The long-term effects correspond to the adequacy of investments in infrastructure, for instance, terminals receiving LNG, transmission pipelines and storage capacities. They are related to deliberate or unintentional under-investment of capacity. Therefore, long-term energy security is *à priori* linked to timely investments in line with economic developments and environmental needs. While short-term energy security is the ability of the system, in our case the ability of the EU, to react promptly to sudden changes in supply and demand.[55]

Therefore, short-term supply security can be based on administrative measures, such as increasing in public transit usage, car-pooling, telecommuting, driving bans and restrictions, as recommended by the IEA[56]. For example, to meet emergency disruption a country has to increase supply by stock draws and production surge and to reduce demand by fuel switching, administrative compulsory measures such as speed reductions, driving

[53] Haghighi. op. cit., p. 5-7
[54] World Energy Outlook, the IEA, 2010 http://www.worldenergyoutlook.org/media/weo2010.pdf accessed July 20, 2012
[55] The IEA www.iea.org accessed April 4, 2013
[56] Ibid.

restrictions.[57] As for long-term security, it deals with contracts, investment, and diversification. As for long-term supply security, it is linked to foreign policy decisions of an actor concerning investment regimes, contracts and energy strategies. So, it is more about diplomacy and geopolitics.

1.1.4. Measures to Ensure Energy Security

Another way of underpinning energy security is to study different energy resources (oil, natural gas, renewables), intermediate means (electricity, refineries), and transportation modes (grids, pipelines, ships, ports).[58] All of these elements hide potential risks of *interruptions*, or *failures* for consumers, challenging the security of undisturbed energy supply.

The reliance on complex information-technology systems the huge role of the Internet in those systems has caused a new set of vulnerabilities for energy security. For example, in 2005 hurricanes Katrina[59] and Rita[60] struck the Gulf of Mexico's energy complex creating an integrated energy shock: oil and natural gas production as well as undersea pipelines were down at the same time. To make it worse, the huge earthquake in Japan in 2011, in addition to mass death and destruction took down the region's energy power system paralyzing efforts to respond to the disaster.[61]

In general, there are well-known proactive means as diversification of energy sources and supplies, stockpiling of fuel, creation of redundant infrastructure, and promotion of flexibility in fuel use.[62] Several measures could be listed here aiming at prevention of interruptions in energy supply or at least to decrease negative effects.[63]

The first one is diversification of energy sources and export routes. To multiply one's supply sources means to reduce the impact of a disruption in supply from one source by

[57] IEA Response System for Oil Supply Emergencies, 2011 http://www.iea.org/publications/freepublications/publication/EPPD_Brochure_English_2012_02.pdf accessed April 4, 2013
[58] Ibid.
[59] BBC News, "Hurricane Katrina Hits New Orleans", August 29, 2005 http://news.bbc.co.uk/onthisday/hi/dates/stories/august/29/newsid_4947000/4947378.stm accessed September 13, 2013
[60] National Geographic News "Hurricane Rita: Complete Coverage", September 24, 2005 http://news.nationalgeographic.com/news/2005/09/0923_050923_hurricanerita.html accessed September 13, 2013
[61] Greenpeace webpage, Fukushima Nuclear Disaster http://www.greenpeace.org/international/en/campaigns/nuclear/safety/accidents/Fukushima-nuclear-disaster/ accessed September 13, 2013
[62] Shaffer, op. cit., p. 91
[63] Yuriy Borovokiy, **Sovremennie Problemi Mirovoi Energetiki**, Moskva, Navona, 2011, p. 9 (my translation)

providing alternatives, serving the interests of both consumers and producers, because a stable market is a prime concern. For instance, after the collapse of the USSR, Russia initiated the realization of two ambitious projects, namely North Stream[64] and South Stream[65] to avoid transit countries, Ukraine in particular, while exporting natural gas for European consumers. Besides, the USA has found an alternative way of obtaining conventional energy resources; it extracts offshore oil and gas.[66]

A second principle is *resilience*, i.e. 'security margin'[67]. Resilience comes from many factors, including sufficient spare production capacity, strategic reserves, adequate storage capacity along with the supply chain, as well as carefully conceived plans for responding to disruptions.

For instance, the IEA members are required to hold oil stocks equivalent to at least 90 days of net imports and to maintain emergency measures for responding collectively to oil supply. Emergency stocks can be held either kept by governments, or by companies, or by stock-holding agencies.[68] In 1968 the Directive 68/414/EC[69] was adopted by the European Council, which obliged the member states to maintain a level of stocks equivalent to 65 days of consumption. This obligation was increased in 1972 to 90 days.[70]

The next component is *security of energy transit*. Indeed, sometimes raw energy products cannot reach the importer due to unexpected accidents or deliberate intention of a transit country. In this case, the consumer countries must pursue proactive energy policy to prevent possible immense negative impact on their citizens. Thus, transit issues are interwoven with geopolitics.

Another component is *physical energy security* or sustainability of technology. If a country possesses a dilapidated energy grid or power lines, or unsafe easily-accessed or old-fashioned key objects of energy grid, it will inevitably face to insecurity of energy power

[64]Nord Stream http://www.nord-stream.com/ru/ accessed March 3, 2013
[65]South Stream http://www.south-stream.info/ accessed March 13, 2012
[66] Stuart Harris, 'Global and Regional Orders and the Changing Geopolitics of Energy', *Journal of International Affairs,* Vol.64 No.: 2 , 2010, p. 167
[67] The term indicates the ability of an importer to continue living in a usual way even if major disruptions of supply happen.
[68] Haghighi, op. cit., p. 128
[69] Council Directive 68/414/EC of 1968 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31968L0414:EN:HTML accessed April 4, 2013
[70] Council Directive 72/425/EEC of 1972 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31972L0425:en:NOT accessed April 4, 2013

supply. A good illustration of this could be the great Northern America blackout in 2003[71], when 50 million people lost power for up to two days.

The fifth element is *energy efficiency* joint with alternative renewable or non-renewable energy resources could overcome the dependence of the country on imported deficit hydrocarbon fuel. Bringing this principle to life not only decreases significantly dependence on the exporters, but also minimizes greenhouse gas emissions, to say it differently, combats climate change. A good example can be Kyoto Protocol of 1997, which set obligations on industrialized countries to reduce greenhouse gas emissions. Thus, this aspect is interconnected with sustainable economic development and environmental protection.

Last but not least, the final component is the importance of *transparent information*. Obviously, high-quality information offered in a transparent way results in well-functioning markets and helps to avoid major risks of energy issues.

There also exist reactive short-term policies, aimed at overall significant reduction in energy consumption. Good decisions answering the energy shortages could be transport demand restrictions, pricing and taxation, non-motorised travelling and land use, vehicle speed reduction, 'eco-driving', car-pooling, telecommuting or working at home, change in work schedules related policies.[72]

To be precise, the recognition of the globalization of the energy security system is required as well as the acknowledgment that the entire energy supply chain needs to be protected.

To conclude, there exists a worldwide dominant stereotype of understanding energy security through the prism of consumer preferences. As for the exporters, diversification of routes and reliable transit along with the control over national energy sources, stable affordable energy prices, and receiving international investment are top priorities for suppliers. It does not mean that energy security is a simple egoistic preference of the actors.

[71] JR Minkel, "The 2003 Northeast Blackout – five years later", *Scientific America*, http://www.scientificamerican.com/article.cfm?id=2003-blackout-five-years-later accessed July 27, 2013
[72] The IEA "Saving Oil in Hurry", 2005, p. 16-20 http://www.iea.org/publications/freepublications/publication/savingoil.pdf accessed September 13, 2013

However, one should bear in mind that energy security matters because energy is essential to economic growth and human development. Every actor or every country has its own vision of how energy security should be to fulfill its need. For Europe, energy security discourse is concentrated on controlling the growing dependence on imported natural gas and oil, and strengthening European energy security by switching to alternative energy resources. Basically, European energy security is a synthesis of diversification of energy resources and routes, sustainable economic development, and, ultimately, affordable, reliable, clean, uninterrupted supplies of energy in time. Achieving this goal is seen far from being simple.

1.2. HISTORICAL OUTLOOK

To reflect on energy security concept it is worth keeping a sense of historical perspective. There have been three distinct periods in the oil supply/ demand situation in the world. Given the fact that oil was critical and most important commodity in international trade, those periods were singled out through changes of oil supply. It should be mentioned that in the world as a whole and in Europe, in particular, international export and import of oil as well as natural gas began to spread aftermath of the WWII, in the end of the 1940s.[73] The first period from 1960 to the oil crisis of late 1973 was one of rapid economic growth and, as a consequence, increasing oil demand. Oil demand rose from somewhat more than 20 million barrels per day (mb/d) to approach 60 mb/d. Europe became heavily dependent on oil imports.

The 1973 crisis initiated a second major period of oil market development, which lasted up to the mid-1980s. The oil price shock reinforced by the Iran-Iraq war of the late 1970s had profoundly damaging effects on the global economy and caused high inflation, trade and payments imbalances, high unemployment and weak business worldwide. This period can be characterised by vigorous efforts to reduce dependence on oil by applying oil-saving measures including replacing oil by nuclear energy, natural gas and coal where possible.

[73] Andrei Beliy, "New dimensions of energy security of the enlarging EU and their impact on relations with Russia", *Journal of European Integration*, Vol.25, No.: 4, p. 351

The mid-1980s brought an end to the falling trend of oil imports. Dramatic savings were made by switching to alternative fuels for power generation, domestic and industry use except for transport sector, where oil was still predominant.[74]

1.2.1. The Development of the Concept

Many experts, political scholars claim that energy security term appeared in consumer countries. Therefore, first the European attempts to drill its way to energy security will be represented, followed by the development of energy-conscienceless in Russia

1.2.1.1. Energy Issues in Europe

The history of European integration is primarily rooted in energy. The Second World War (WWII) caused great economic and social dislocation and created a mood for political change. In Europe that change was the Schuman Plan announced in 1950 by the French Foreign Minister Robert Schuman, the aim of which was to pool coal and steel production of Europe, i.e. involving a considerable surrender of sovereign control over these industries for France, Germany, Italy and the Benelux states (the Six).[75] The plan was welcomed by all the six participating states and further devised by Jean Monnet[76]. An agreement was reached on what became the European Coal and Steel Community (ECSC) being the first supranational European institution.

Eventually, the Six signed the Treaty of Paris in 1952. There were no provisions, articles or sentences devoted exclusively to energy security, because the paramount aim of the establishment of the community was to make the war in Europe "not merely unthinkable, but materially impossible"[77].

Following the collapse of the European Defense Community and the European Political Community, it became clear that the attempts to integrate in one sector could not be successful unless integration was extended to other sectors. Monnet launched initiatives based

[74] The IEA, "Oil Supply Security", 2007 p. 13-15 http://www.iea.org/publications/freepublications/publication/oil_security.pdf
[75]The Schuman Declaration, May 25, 1950 http://europa.eu/about-eu/basic-information/symbols/europe-day/schuman-declaration/ accessed September 13, 2013
[76] Jean Monnet devised both the Schuman Plan and the Pleven Plan for a European Defense Community. He is regarded as one of the founding fathers of the EU.
[77] The Schuman Declaration of 1950 May 25, 1950 http://europa.eu/about-eu/basic-information/symbols/europe-day/schuman-declaration/ accessed September 13, 2013

on the spillover of the ECSC model to other forms of energy, especially atomic energy. The European Economic Community (EEC)[78] and the European Atomic Energy Community (EURATOM)[79] were created by the Treaties of Rome in 1957 by the six founding member states: France, Germany, Italy and the Benelux states. These treaties had a significant effect on the employment and the industrial relations in the member states creating a common market, eliminating obstacles to the free movement of goods, persons, services and capital, but had no significance for united energy policy of the Community.[80]

This pooling together of energy commodities was a new phenomenon, though attention was centered on internal security issues. The discussion of external security of supply with energy producing countries was not a top priority of that time.

The most striking aspect was that the economy of Europe in that time changed from an energy-exporting economy to an energy-importing one. The "doctrine of mutual interdependence of Europe and the Middle East"[81] is considered as an essential element of security of energy supply in Europe. This doctrine was based on the fact that the Middle East was as much dependent on oil revenues, as Western Europe on the imported oil. Up to 1958 the oil became cheaper and readily available, but no concrete framework for oil dependence was established in that period.

Changes in energy markets ensued in the 1960s. In 1967 during so-called the Arab-Israeli six-day war, the Middle East countries (the United Arab Emirates, Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, Lebanon and Syria) halted the export of oil to those countries including European ones, whose policies were supportive of Israel or hostile to the Arab side. Due to several factors, such as existing stockpiled supplies in Western Europe, Iran and Venezuela carrying on their shipments, the embargo was rather symbolic.[82]

However, the Community took the first step in guaranteeing security of energy supply through the adoption of Directive 68/414/EEC in 1968, which obliged the Member States to

[78]Treaty establishing the EEC of 1957 http://europa.eu/legislation_summaries/institutional_affairs/treaties/treaties_eec_en.htm accessed September 13, 2013
[79] The Euratom Treaty of 1957 http://ec.europa.eu/energy/nuclear/euratom/euratom_en.htm accessed September 13, 2013
[80] Treaty of Rome of 1957 http://ec.europa.eu/economy_finance/emu_history/documents/treaties/rometreaty2.pdf accessed September 13, 2013
[81] The OECD "Europe's Need for Oil: Implications and Lessons from Suez Crisis", 1958 cited in Haghighi, op. cit. p. 45
[82] Haghighi, op. cit. p. 42

maintain a level of stocks equivalent to 65 days of consumption.[83] Thus, during this period the first guidelines towards a Community Energy Policy were established. That was the beginning of the path towards energy security in Europe. Henceforth, the Community began to import energy sources from the Union of Soviet Socialist Republics (USSR).

1.2.1.2. Energy Issues in the USSR

The importance of Russian energy was established in the late 1800s, when the monarchy saw great potential for the Russian Empire to develop this sector on a large scale. Taking into consideration the fact that the empire had neither technology nor the capital even to start up an indigenous energy industry, the monarchy eased its foreign investment restrictions inviting European and the USA's firms to develop the Baku and Volga oil fields. This brought about a period of warm relations between the Russian Empire and many Western partners.

By the turn of the century, the Russian Empire was producing 31% of global oil exports.[84] As for natural gas extraction it was insignificant, while coal mining prevailed during XIX century. Only in the 1920s natural gas field exploration began.[85] It became clear that Russian internal stability greatly affected world energy issues, when the Bolsheviks used the energy sector in their attempts to overthrow the monarchy in the early 1900s. In 1904, when the Russian Empire cracked down, Bolshevik protesters set the Baku oil fields on fire. This cut Russian oil exports by two-thirds, forcing Moscow and the foreign markets to realize oil exports' great vulnerability to Russian domestic stability.[86] However no strategy was developed to prevent such an accident in the future.

During the Second World War (WWII) the USSR was mostly in need of coal extraction, therefore, the energy sector in Ural, Siberia and Central Asia were developing rapidly. Aftermath of the war or the 1950s can be characterised by "gas revolution" in the

[83] **Council Directive 68/414/EEC of 20 December 1968** http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31968L0414:en:NOT accessed September 13, 2013
[84] Lauren Goodrich, Marc Lanthemann, "The past, present, and future of Russian energy strategy", *Geopolitical Weekly*, Global Intelligence, http://www.stratfor.com/weekly/past-present-and-future-russian-energy-strategy accessed April 3, 2013
[85] Ministerstvo Energetiki RF, http://minenergo.gov.ru/aboutminen/historical_calendar/ accessed April 3,.2013
[86] Goodrich L., Lanthemann M., op. cit.

USSR with impetuous growth of gas industry, which changed fuel and energy balance of the country.[87]

However, actual Russian energy strategies began forming later, when the USSR towering over a divided Europe saw no difficulty to achieve dominance in the global energy field. Between the 1950s and 1960s Soviet oil output doubled also due to discovery of new oil and gas fields making the USSR the second largest oil producer in the world and primary supplier to European countries. Besides the longest oil pipeline system called 'Friendship' began to work in 1964, the Soyuz, Urengoi and Yamal pipelines were also built. Revenues from oil exports made up approximately half of Soviet export income.[88]

The Soviet system producing oil *en masse* kept costs almost 50 % lower than oil from the Middle East primary because of the willingness to shape its sphere of influence and undermine the influence of the West. The subsidization of oil to the Soviet bloc and later to Western European countries helped Kremlin undercut Western regimes and strengthen its position in its own periphery. Unfortunately, this strategy came at cost owing to the fact that the USSR was producing oil inefficiently, rapidly depleting its fields.[89]

1.2.1.3. Turning Point

It was not until the 1973 oil crisis that any sort of European Community strategy was created for energy policy.[90] Before that year the embargoes did not really affect developed countries and Europe was busier with economical integration. That is why the collective embargo imposed by the Arab states of the OPEC during the October War (the Fourth Arab-Israeli War) on the European countries and the USA, the policies of which were supportive of Israel; the unprecedented price rise of liquid hydrocarbons shocked the developed countries.[91]

Meanwhile in the USSR, the Soviet leader Leonid Brezhnev's regime was left with a choice whether to use global skyrocketed oil prices as a reason to raise prices in Eastern bloc, which could push it to start thinking about other energy sources, or not. Moscow chose to

[87] Ministerstvo Energetiki RF, http://minenergo.gov.ru/aboutminen/historical_calendar/ accessed April 3, 2013
[88] Peter Rutland, "Russia as the Energy Superpower", *New Political Economy*, Routledge, 2008, Vol. 13, No.: 2, p. 204 http://relooney.fatcow.com/00_New_3186.pdf accessed September 13, 2013
[89] Goodrich L., Lanthemann M op. cit.
[90] Michael J. Gubb "European Energy Policy", CIVITAS Institute for the Study of civil Society, 2007 http://www.civitas.org.uk/eufacts/download/ENV.3.European%20Energy%20Policy.pdf accessed March, 23,.2013
[91] Borovskiy, op. cit. p. 7

protect its own interests and in 1975 raised the price of oil for its customers allowing further increases based on global market prices. By 1976 oil prices in the Eastern bloc had nearly doubled remaining below global prices though, which forced some countries in the bloc to take out loans.[92]

Despite the measures introduced by consuming countries, such as conservation of the oil stocks, restrictions on the sale of gasoline, limitations on heating, oil import prices quadruple worldwide, which lead to 'panic buying'. In that time the notion of 'oil weapon' appears, i.e. when exporting countries take advantage of the dependence of the importing countries on their energy resources to achieve their political goals, particularly, combating Israel.[93]

Having experienced the lack of energy supply, the industrialized countries including the European ones considered energy diversity of the resources as a desirable objective. They not only reviewed their national strategies but also established the IEA meant to implement an international energy program and more important to oppose to the OPEC activity and face other energy threats. Simultaneously the process of restructuring European countries' economies began with accent on energy efficiency and energy-saving mode, e.g. the energy-intensive industries were moved to the developing countries.[94] Besides, in 1974 the European Council adopted a program that prioritised getting energy from different sources, marking the first official step towards diversification.[95]

Later, the Iranian revolution of 1979 followed by the wars between Iraq and Iran in 1980 again caused serious disturbances to the energy security of Europe. The measures were mainly directed at the utilisation of oil stocks and refraining from panic purchases.[96]

The USSR in its turn focused on maintaining high energy revenues continued through the mid-1980s. But when the prices collapsed the West imposed an embargo on Soviet oil. In

[92] Goodrich L., Lanthemann M., op. cit.
[93] Haghighi, op. cit. p. 47
[94] Borovskiy, op. cit. p. 8
[95] Gubb, op. cit.
[96] Haghighi, op. cit. p.48

response, in 1985 the Soviet Union moved closer to a market-based economy, raising prices for the Eastern bloc.[97]

To make things worse, the Chernobyl accident in 1986 crushes the utopia about nuclear energy being sustainable clean and affordable. Consequently, while the USSR was coping with the devastating consequences of the catastrophe, the Council adopted a resolution concerning the necessity of "adequate and secure availability of energy on a satisfactory economic basis"[98]. Therefore, beginning with the 1980s Europe perceives energy security to embrace not only security of supply but also sustainable economic development and environmental protection.

1.2.2. European Energy Security and Russia

The period between the 1990s and the beginning of the 2000s was marked by the acceleration of globalization first of all, collapse of the Soviet Union, particularly in the European Community by the signing of the Energy Charter Treaty (the first attempt of the Community to guarantee its external energy security on a multilateral level), the adoption of the Gas and Electricity Directives by the European Community, the establishment of a European energy market.

1.2.2.1. The 'Honeymoon' of the Relations

After the collapse of the USSR, Europe intended to develop close cooperation in the field of energy with Russia.[99] But Russian energy industry in that time was in disarray. Particularly, the energy liberalisation that started under Mikhail Gorbachev in the 1980s was taken to an extreme under Boris Yeltsin in the 1990s. As a result, production fell by half and the Russian energy sector was divided between foreign groups and the emerging Russian oligarch class.[100] It should be noted that the situation changed only under Vladimir Putin after 2000.

[97] Goodrich L., Lanthemann M., op. cit.
[98] Council Resolution of 1986 concerning New Community Energy Policy Objectives for 1995 and Convergence of the Policies of the Member States, 1986 OJ C/241/1. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:1986:241:0001:0003:EN:PDF accessed April 23, 2013
[99] Haghighi, op. cit. p. 54
[100] Goodrich L., Lanthemann M., op. cit.

A real milestone in EU-Russia relations was the signing of a fundamental Partnership and Cooperation Agreement (PCA) in 1994 concluded for ten years that came into force only in 1997 due to the first war in Chechnya. It defined the main areas for common activities and established three dimensions of political dialogue, economic cooperation and culture. Summing up, the beginning of the 1990s was described as a short period of euphoria and even a "honeymoon" with Europe. But the relationship cooled down in the mid-1990s with Russia's assertive policy towards 'Near Abroad' and more reserved policy towards 'the West'.[101]

1.2.2.2. The period of Great Changes

The relations changed during the Putin presidency so that the year 2000 became a crystallizing point in EU-Russian relations. The newly chosen Russian president tried his best to consolidate the energy sector under state control. The Russian government effectively nationalized the majority of the energy sector under three state behemoths: Gazprom, Rosneft and Transneft.[102] In the 1990s gas industry took a central place for Russia's energy supply and its economy.[103] Putin strengthened a pragmatic policy course towards the EU since 2000 re-evaluating the cooperation with the EU as the main trading and economic partner. This was reflected by a medium-term Strategy[104] towards the EU that was adopted by Russia as a response to the EU's common strategy[105].

Meanwhile the EC in its turn attempted to define "an Energy Policy of the EU"[106]. These efforts focused on liberalising the energy market to promote competition, business

[101] The territory around Russia composed of former republics of the Soviet Union, which were claimed as a special area of interest and responsibility by Russian officials. Kristen Westphal (Ed.). **A Focus on EU-Russian Relations**, Peter Lang International Academy Publishers, 2005, p.114
[102] Jonathan P. Stern, **The Future of Russian Gas and Gazprom**, Oxford University Press, 2005, p. 201
[103] Goodrich L., Lanthemann M., op. cit.
[104]Predstavitelstvo Evropeiskoi Komissii, "Strategiya razvitiya otnosheniy RF s Evrosoyuzom na srednesrochnuyu perspektivu 2000-2010" http://www.mgimo.ru/fileserver/2004/kafedry/evro_int/reader4meo_3-6.htm accessed April 20, 2012 (my translation)
[105]The European Council, "Common Strategy of 1999 on Russia", http://trade.ec.europa.eu/doclib/docs/2003/november/tradoc_114137.pdf accessed April 20, 2012
[106] White Papers of 1995 (http://europa.eu/documentation/official-docs/white-papers/pdf/energy_white_paper_com_95_682.pdf), of 1997 (http://europa.eu/documents/comm/white_papers/pdf/com97_599_en.pdf) , of 2001 (http://eur-lex.europa.eu/LexUriServ/site/en/com/2001/com2001_0428en01.pdf), of 2003 (http://eur-lex.europa.eu/LexUriServ/site/en/com/2003/com2003_0673en01.pdf) accessed September 31, 2012

transparency, security of supply, but met with little success. For example, France consistently blocked moves to let foreign companies compete in internal markets.[107]

At the St. Petersburg EU-Russia summit in 2003 the four common spaces were singled out: an economic space, a space of freedom and justice, a space of cooperation in the field of external security and a space of culture and education. Nevertheless, the period since 2000 "witnessed a weakening of values to which the EU and Russia were committed"[108] mainly due to 'value gap' caused by the way Duma election was conducted in 2003, the situation in Chechnya, and the EU's will rooted in international WTO standards for Russian markets' liberalisation with a specific focus on the energy sector and then regulated gas prices.[109]

Still little changes of their energy policies were expected of both sides until the incident happened in the early XXIst century which turned Europe's awareness of energy security upside down. The urgent need to ensure energy security was highlighted when Russia stopped the flow of gas into transit countries: Ukraine in 2006 and into Belarus in 2007. The EU reacted with a new Energy Plan for Europe in April 2007, the top priorities of which were creation of a common energy foreign policy, an internal market of energy; guaranteeing security of supply, promoting the use of renewable energy.

The EU also presented the Communication "An Energy Policy for Europe", which introduced a complete set of European Energy Policy measures.[110] Thus, the EU hoped to negotiate energy as a united bloc, while diversifying supply and promoting competition to ensure security and sustainability of energy supplies.

Simultaneously, the Treaty of Lisbon[111] signed in 2007, initially known as the Reform Treaty, which also brought legal personality to the EU, laid out for the first time the EU's competencies in this area, the key objectives of energy policy, and declared it to be an area of "shared competence", i.e. in which both the EU and the member states' governments were able to legislate.

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[107] Gubb, op. cit.
[108] The European Commission, Communication, ENP, *Strategy Paper*, 2004, http://ec.europa.eu/world/enp/pdf/strategy/strategy_paper_en.pdf accessed September 13, 2012
[109] Westphal, op. cit. p. 6
[110] The European Commission, Communication of 2007, http://ec.europa.eu/energy/energy_policy/doc/01_energy_policy_for_europe_en.pdf 3.04.2013 accessed April 20, 2012
[111] The Treaty of Lisbon of 2007, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2007:306:FULL:EN:PDF accessed April 20, 2012

But the problem concerning security of supply was not solved, to make it worse; Russia again stopped the flow of gas into Ukraine in 2009 and in Belarus in 2010 significantly reducing the supply to eighteen EU states.[112] The fallout of Russia's pricing war with Ukraine led to supply disruptions for downstream EU member states.[113] Put it context, 80 % of the gas that the EU imports from Russia comes through a Gazprom-owned, Ukrainian pipeline. Moreover, gas from the Caspian and Central Asia currently reaches the EU via Russian pipelines.[114] Obviously, the Community could not help reacting somehow.

In 2009 the USA initiated the establishment of an EU-US Energy Council to strengthen cooperation on energy security and supply of all key actors on both sides of the Atlantic in three areas: energy security, energy technologies research and energy policy.[115] Also in November 2010 the EU adopted the Communication "Energy 2020 – a strategy for competitive, sustainable, and secure energy"[116], which defines the energy priorities till 2020 and sets the actions to be taken in order to tackle the challenges of saving energy, etc.

Overall, the oil crisis of the 1970s brought energy security to the fore. Its importance was reinforced every time political instabilities or disputes took place, as in 2006 and in 2009 with Ukraine. From the historical prospective, European energy security can be characterised as the quest for reliable energy supplies, while Russian understanding of energy was equal to high stable prices.

1.3. THEORETICAL FOUNDATIONS

As mentioned above, there exists no precise definition for energy security phenomenon because consumer countries and supplier countries understand it in a very different manner. As a result, it is essentially difficult to pick one theory to analyse the relations of the actors in the field of energy. While choosing several theories for our analysis would hinder rather than assist our understanding of the complex nature of those relations.

[112] The European Commission, "Energy from Abroad", www.ec.europa.eu/energy/international/bilateral_cooperation/usa_en.htm, access April 3, 2013
[113] Truscott. op. cit. p. 22
[114] House of Commons Library, "Russian Foreign Policy and the State of Anglo-Russian Relations, 2007 / cited in Truscott, op. cit. p. 23
[115] The European Commission, Report to the Parliament and the Council www.ec.europa.eu/energy/international/bilateral_cooperation/usa_en.htm
[116] http://ec.europa.eu/energy/publications/doc/2011_energy2020_en.pdf accessed April 3, 2013

It goes without saying that theory is a tool, which makes the task of intellectual explanation possible. Insofar as none of the international relations theories is able to entirely explain the phenomena concerned, and also for the sake of coherence of our studying approach, the theory of neorealism followed by neoliberal institutionalism, their major concepts and tenets will be presented further to analyse the relations between the EU and Russia with regard to the energy security in the next chapters.

1.3.1. Neorealism

Neorealism, as a modern variant of the broader pessimistic realist tradition, which developed in the period after the Second World War, seeks to explain the world of international politics as it is, rather than how one might like it to be. Realism grew out of a criticism of perfectibility of humanity, collective security, post-national systems for peace and the advocacy of international organizations.[117]

Neo-realists lead to *the logic of self-help* and also to the notion that the world is a hostile and insecure place, where violence is endemic. The self-help system seems as a natural and self-regulating way of conducting international affairs.[118] States are *unitary actors* with *rational state policy-making*, which involves minimizing *risks* and maximizing *benefits.*[119] The international realm is characterized by *conflict*, *suspicion* and *competition* between nation-states.[120]

This theory is more sophistically presented by Kenneth Waltz. There are two political ordering principles are *hierarchy* and *anarchy*. Units either stand in relationships of authority and subordination (hierarchy) or they do not (anarchy). Waltz's theory maintains that the nature of wars and conflicts are rooted in the anarchic international system, i.e. anarchic *structure determines the behavior* of the units within it, i.e. the actors in this case.[121] He contends that the anarchical condition of the international realm imposes "the *accumulation of power* as a systemic requirement on states".[122] Waltz's estimation of *power* includes the

[117] Ben Rosamond, **Theories of European Integration**, Palgrave, 2000, p. 131
[118] Alastair J.H. Murray, **Reconstructing Realism: Between Power Politics and Cosmopolitan Ethics,** Keele University Press, Edinburgh, 1997, p. 32
[119] Ibid., p.132
[120]Scott Burchill, Andrew Linklater, Richard Devetak, Jack Donnelly, Mattew Paterson, Christian Reus-Smit, Jacqui True, **Theories of International Relations**, Palgrave Macmillan, Fourth Edition, 2009, p. 36
[121] Burchill et al., op. cit. p. 35
[122]Ibid. p. 90

following components: "size of population and territory, resource endowment, economic capability, military strength, political stability and competition"[123]. He also contends that the anarchic international system inevitably leads to the logic of self-help and power politics.

According to him, *anarchy could produce order*, but it inhibits long-standing cooperation amongst states not for the sake of order itself, but because "*state survival* is always in question"[124]. He suggests that states struggling for power simply follow the dictates of the international system in order to survive. It does not mean that cooperation never occurs. But alliances and different forms of cooperation are explained with *rational nature of the interstate game*. Without security schemes reducing the risks of cooperation and without measures determining how to divide the gains, states may remain locked in a mutually destructive cycle of competition.[125] This situation is called a "*security dilemma"*[126], when all actors perceive threats from the others and would rather threaten each other than cooperate if in a difficult situation.

However, anarchy cannot impel states to struggle for power, if they do not share any ambitions.[127] A unitary actor or a state must "put itself in a position to be able to take care of itself since no one else can be counted on to do so"[128], thus, states differ only in their capabilities[129]. The main idea of neorealism is that international politics is about the interaction of *self-interested actors* (states) in an anarchic environment and the key variable is "*the distribution of capabilities* across units"[130]. State behaviour will vary with this distribution of capabilities from conflict to cooperation. Waltz defines self-help system as "a system in which those who do not help themselves, or who do so less effectively than others, will fail to prosper, will lay themselves open to dangers, will suffer."[131]

[123]Kenneth N. Waltz, "Theory of International Politics", 1979 cited in Burchill et al., p. 36
[124] Rosamond, op. cit., p. 132.
[125] Burchill et al., op. cit. p.39
[126] Robert Jervis, "Cooperation under the security dilemma", *World Politics*, Vol. 30, Issue 2, January 1978, p. 168 http://www.sscnet.ucla.edu/polisci/faculty/trachtenberg/guide/jervissecdil.pdf accessed April 20, 2012
[127] Stefano Guzzini," The enduring dilemmas of realism in international relations, *European Journal of International Relations*, Sage Publications, 2004, p. 537 http://labmundo.org/disciplinas/GUZZINI_the_enduring_dilemmas_of_realism_in_international_relations.pdf accessed July 29, 2013
[128] Kenneth N. Waltz, **Theory of International Politics**, New York: Random House, 1979, p. 107
[129] Waltz, op. cit., p. 96
[130] Ibid., p. 185
[131] Ibid.

According to changes in the distribution of capabilities, scholars of neorealist approach identify three types of international systems, regarding the number of great powers in the system. The unipolar system involves one core power with small powers on the periphery; the bipolar system includes two great powers and insignificant small powers. The *multipolar system* is composed of more than two great powers. The capacity of each state to achieve the objectives of its own varies according to its relative power and its placement in the international system.[132] The possibility of a conflict is less likely to occur, when, for example, the anarchical system is bipolar. "Bipolarity is the power configuration that produces the least amount of fear among great powers"[133], if compared to multipolar system.

The central idea of neorealism is '*balance*', rather than 'bandwagon'[134]. States balance through alliances, other formal and informal agreements with greater effectiveness especially in the face of a threat, not against external capabilities. Therefore, neo-realists perceive bipolarity in the light of *threat perception*, because each superpower inhibits the threat for another one.[135] Basically, if a state is threatened, it becomes more likely to balance against the threat, which neo-realists call *balance of power*. According to this view, one of reasons of threat is proximity and/or contiguity.

Further, Waltz claims that the first concern of states is their positions in the system, not survival or domination.[136] He also claims that states seek wealth, advantage and flourishing, peaceful coexistence and prosperity, sovereignty, autonomy and independence.[137]

Now we can test applicability of neorealism for the consumer- oriented dimension of energy security. Inspired by Lord Palmerston we could admit that great states have no permanent alliances but only permanent interests. Whether dependent upon energy imports or exports, not only all states but also companies strive to reduce the risks associated with dependence by linking energy with their own security.[138] Indeed, this attempt is rather defensive and even proactive than benefit-oriented. Owing to the fact that energy security is

[132] Ibid., p. 92
[133]John J. Mearsheimer, **The Tragedy of Great Power Politics**, New York and London: W.W. Norton &Company, 2001, p. 224
[134] 'Bandwagoners' attempt to increase their gains by supporting the stronger party.
[135] Burchill et al., op. cit., p. 37
[136] Waltz, op. cit., p. 126
[137] Waltz, op. cit. p. 112, p. 144, p. 175, p. 204, p. 107, p. 104
[138] Amelia Hadfield, "EU-Russia relations: aggregation or aggravation", *Journal of Contemporary European Studies*, Vol. 16, Issue 2, 2008, p. 233 http://www.tandfonline.com/doi/abs/10.1080/14782800802309953#.UndnAFNvXrQ accessed April 20, 2012

inextricably linked to reliance on energy resources, one should not underestimate its role, because "today's currency of power is energy."[139]

1.3.2 Neoliberal Institutionalism

The second theory, which we will use to analyse the issue of energy security in the relations between the EU and Russia is neoliberal institutionalism. It is necessary to highlight how it is depicted in the mainstream literature. To begin with, it should be mentioned that neorealism and neoliberal institutionalism are manifestations of a realistic approach, where anarchic international system is composed of equal units (states). Neo-liberals do not deny the anarchic nature of the international system; however, they argue that its importance has been exaggerated.[140]

Neoliberal institutionalists advocate *political freedom*, democracy and privileged the liberty of individuals and *equality* before the law. They claim that the elimination of war depends on a preference for democracy over aristocracy, free trade over autarky, and *collective security* over the balance of power.[141] For neoliberals, *harmony* and *co-operation* between people are natural; therefore, peace is the normal state of affairs, while war is unnatural.

Neoliberals believe in progress and the perfectibility of the human being. Human beings are peaceful *a priori*. Wars are created by undemocratic governments for their own interests as raising taxes, expanding their bureaucratic apparatus, increasing their control over the citizens. Thus, the 'virus' of war could be successfully treated with the sum of *free trade* and *democracy.*[142] Due to the fact that war brings more costs than gains it is regarded as uncivilized and immoral. Trade can create relations of mutual dependence which would foster understanding between peoples and reduce conflict, thus, trade is the means to bring the war to an end.[143]

Furthermore, neo-liberals maintain that the actors are *not* always *self-helpful*, because states can often discover *a coincidence of mutual strategic and economic interests* through

[139] Michael Stuermer, **Putin and the Rise of Russia**, Pegasus Books, 2010, p. 148
[140] Rosamond, op. cit., p. 135
[141] Burchill et al., op. cit., p. 58
[142] Burchill et al., op. cit., p.60
[143] Ibid., p. 63

formalised agreements and they gain more through *interdependence*.[144] Thus, the co-operation between states is enhanced without the presence of a hegemonic actor. One of the founders of the neoliberal school of thought Robert Keohane asserts that "the ability of states to communicate and cooperate depends on *human-constructed institutions*, which vary historically and across issues in nature and in strength".[145] Hence, cooperation is possible through international regimes and institutions. Generally, neo-liberals believe that anarchic system can lead to conflict and competition, where discords can be managed with the help of international institutions.

To understand the energy security term better one should first start with the concept of 'security'. Unlike realists, who declare that security "exists in a world governed by nation states, where "states balance" or "bandwagon", and "self-help" are the rule of law *de facto*, and where containment and deterrence serve to prevent war[146]; Ole Wæver, as one of the Copenhagen School representatives, believes that "security is a speech act"[147]. Thus, one should bear in mind that by analogy to security, energy security is not destined to be about guns, bombs, soldiers and wars, because "the great decisions of our day will be made by speeches and majority decisions, not by blood and iron"[148]. However, it does not undermine the strategic aspects of energy security concept.

The EU is a very good example of integration including closer economic and political co-operation in a region where national conflicts were taken as a given. Robert Keohane and Joseph Nye ensure that states can broaden their perceptions of self-interest via membership of international institutions by widening the scope for co-operation. It means that neoliberals rejecting centrality of unitary actors claim that key actors of the world politics are

[144]Ibid., p. 40
[145] Robert Keohane, **International Institutions and State Power**. London: Westview Press, Inc., 1989. p.2
[146] Amentahru Wahlrab, "Realism, Security, and Democracy. A 'sophisticated' realist critique of the war on terrorism", *Critique: a Worldwide Student Journal of Politics*, University of Denver, Spring 2003, p. 2 http://lilt.ilstu.edu/critique/spring2003docs/awahlrab.pdf
[147] Barry Buzzan, Ole Wæver, Jaap de Wilde, **Security: a New Framework for Analysis**, Lynne Rienner Publishers, 1998, p. 26
[148] Bismarck's quip cited in Asle Toje, "Working Paper 'Europe's consensus-expectations gap'", EU Consent, Constructing Europe Network, 2008, p. 2 http://www.eu-consent.net/library/deliverables/D83_Toje.pdf accessed April 20, 2012

international organizations, multinational corporations, *transnational* and *transgovernmental* coalitions.[149]

Another assumption of this school of thought is that independence, not anarchy is of great importance.[150] Neo-liberalism does assume cooperation as possible and desirable, unlike neorealism where power and security of the system tend to conflict and competition.[151] Cooperation among states is achievable and is likely to occur due to the interdependence between the states in the system.

As far as benefits are concerned, neo-liberals such as Joseph Nye and Robert Keohane claim that states usually pursue *'absolute gains'* – an assessment of their own welfare rather than their rivals.[152] Neoliberal-institutionalists believe that international relations does not play 'a zero-sum game', when states feel secure enough to pursue and increase their own gains regardless of the opponents' gains. If the interaction between states signifies an asymmetrical gain for one or another, it would increase their capabilities relative to a third state.[153] Basically, common interests motivate states to cooperate especially in economic sphere. Keohane claims that co-operation requires conformity of the states or organizations through negotiation process, which is called "policy coordination".[154] If there are common interests and certain fields to act collectively, all states benefit. Institutions may facilitate the process of co-operation by making commitments more credible, providing information, reducing transaction costs.[155]

Unlike neo-realists, neo-liberals do not accentuate the distribution of capabilities, they address to intentions and *regimes* as a pattern of preferences.[156] A regime is described as "a set of mutual expectations, rules and regulations, plans, organizational energies and financial

[149] Joseph M. Grieco, "Anarchy and the limits of cooperation: A realist critique of the newest liberal institutionalism," *International Organization*,1988, Vol. 42, No.: 3, p. 489 https://umdrive.memphis.edu/rblanton/public/POLS_7508_Fall_2012/grieco_anarchy_IO.pdf accessed April 20, 2012
[150] David A. Baldwin (Ed.) **Neorealism and Neoliberalism: The Contemporary Debate.** New York: Columbia University Press, 1993, p. 4
[151] Robert Powell, "Anarchy in international relations theory: the neorealist neoliberal debate" *International Organization*, 1994, Vol.48 No.:2, p. 314. http://ir.rochelleterman.com/sites/default/files/Powell%201994.pdf accessed May 20, 2012
[152] Burchill et al., op. cit. p. 40
[153] Ibid., p. 57
[154] Robert Keohane, **After Hegemony: Cooperation and Discord in the World Political Economy**, New Jersey: Princeton University Press, 1984, p. 51
[155] Keohane, **After Hegemony: Cooperation and Discord in the World Political Economy**, p. 42
[156] Baldwin, op. cit. p. 7-8

commitments, which have been accepted by a group of states."[157] Krasner defines regimes as "implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations".[158] Thus, international regimes empower states to accumulate their common interests in economic affairs aiming at obtaining absolute gains.

Complex interdependence is another concept which is important to mention in the context of transnational cooperation. According to this concept, states have various channels to connect societies. These channels are nothing else than interstate relations, where *trans-governmental relations* are applied when states act as units; and *transnational relations* are applied when states are the only units of communication.[159] When hierarchy among state objectives is absent, these interstate relations enable adequate policy coordination within governments and between them. Communication on the regular basis and exchange of information permit states to learn about priorities of each other.[160] Neo-liberals also assume that it is better for governments to take into consideration agenda of international organizations, because this can help state to determine governmental priorities, therefore, the scope of arrangements within governments.[161] Basically, liberal institutionalists confirm that co-operation among states is possible without the presence of a hegemonic player, but it can be fragile without formalised agreements, determining the rules of conduct. Henceforth, anarchy is neutralized by regimes and institutional co-operation.

Further, free trade brings about the end of war and creates relations of mutual interdependence, which foster interaction and reduce conflict.[162] In an international system a *'trading state'* is likely to be dominant rather than the 'military one'. This understanding

[157] John G. Ruggie, "International responses to technology: concepts and trends", *International Organization*, 1975, 29(3), p. 570, http://journals.cambridge.org/action/displayAbstract;jsessionid=78B0F4F3AC35E9F14C1E41F2BECDDB2D.journals?fromPage=online&aid=4312552 accessed May 23, 2012

[158] Stephan Krasner, "Structural causes and regime consequences: regimes as intervening variables" *International Regimes*, Ithaca: Cornell University Press, 1983 (177-228) in Hasenclever, Andreas, Peter Mayer, and Volker Rittberger. (1996). "Interests, Power, Knowledge: The Study of International Relations," *Mershon International Studies Review*, 40(2), 1996, p.179

[159] Robert O. Keohan, Joseph S. Nye "Realism and Complex Interdependence" in John Boli, Lechner J. Frank J. (Eds.). **The Globalization Reader** (2nd ed.), Oxford: Blackwell Publishing Ltd., 2004, (77-84), p.78

[160] Helen Milner, "The assumption of anarchy in international relations theory: a critique," *Review of International Studies*, 17, 1991, p. 68 http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=6279108 accessed May 23, 2012

[161] Keohane, Nye, op. cit. p.82

[162] Burchill et al., op. cit. p. 61

produced two pivotal effects.[163] First, the perception of independent and self-sufficient state came. In case a state act aggressively it automatically risks its wealth because of possible economic penalties imposed by the other states of the international community. A state cannot threaten its commercial partners, whose markets and investments are essential for its own existence and growth. Second, this phenomenon declines the importance of territorial conquest, mentioned by neo-realists, due to its being dangerous and costly. More attractive and potentially beneficial way is international trade and foreign investment. Neo-realists, however, seek to demonstrate that interdependency will never precede strategic security, i.e. survival.

Another pivotal feature of neoliberal approach is democracy, as an opposition to a balance of power, i.e. 'secret diplomacy'[164], which give no credence to the common interests of humankind. Neoliberal institutionalists believe that autocratic regimes must be replaced with ones based on democratic values respecting human rights. Unlike neo-realists, they do not defend conflicts and small powers, which form temporary alliances to countervail the dominant military state. Neo-liberals criticize the methods violating international law and human rights by which great powers pursue their economic or strategic interests at the expense of small powers.

As for trade, neoliberal institutionalists objecting to protectionist policies advocate *laissez-faire* approach, which is inherited in human being nature, propensity to 'truck, barter, trade'.[165] *Free trade* directly affects the distribution of wealth and power within states, establishing new dependencies, hierarchies. The life within states is transformed into market life. At the same time, it mitigates national autonomy and state control by exposing the economy to the instabilities of the world market. Therefore, in a world of free movement of goods and capital, private companies, transnational corporations can serve as an instrument of state power.

For neo-liberal institutionalists, an open global market with goods and services passing freely across national borders is the top economic objective for all nation-states. They believe that only free trade can maximize economic growth and enable competition leading to an

[163] Ibid. p.63
[164] Ibid. p. 67
[165] Ibid. p. 70-72

efficient use of resources and capital. From their perspective, protectionist policies corrupt international trade, distort markets. The cornerstone of the free trade argument is the theory of *'comparative advantage'*[166], i.e. advising states to specialize in goods and services they can produce most cheaply. Though, nowadays the idea of states trading as discrete economic units is an exception rather than the rule due to globalization and the high role of the private sector in global markets.

Thus, neo-liberal institutionalism is the approach, which favours the world where endogenous determines exogenous. Neo-liberal institutionalists believe in *democratic society, a peaceful global order*, where liberties protected and market relations prevailed. According to this school of thought, common interests, globalization, international integration and free markets motivate states to form their policies, in particular, energy policy.

To sum it up, conceptual, historical and theoretical backgrounds of energy security have been analyzed to come to a better understanding of what energy security stand for in the relations between the two actors.

[166] Burchill et al., op. cit., p. 71-73

CHAPTER 2

ENERGY POLICY OF THE EUROPEAN UNION

To better understand the components of the energy security, the elements of the internal energy policy of the EU will be analysed. The EU's energy policy and the extent to which it is developed will be discussed. First, EU energy current situation will be presented to form our judgment on the implications of this policy, followed by current developments and future aspirations of the EU's energy policy. This section of our work is mainly dedicated to the internal dimension of European energy policy, while the existence of an external one will be argued in the next chapter. As for this chapter, official documents of the EU have been used, and statistics have been provided by various agencies. Since the energy security is of great significance for our thesis, not all the pieces of legislation are examined, but only that part, which is useful for forming the concept.

2.1. EU CURRENT ENERGY SITUATION

The aim of this section is to present an analysis of EU current energy situation[167] in order to better understand the energy direction of the Union, which is going to be discussed further. Empirical data of the International Energy Agency, EU Energy Outlook, World Energy Outlook, EU Green Paper and US Energy Department will be relied on to accomplish the task.

The EU can be characterized as a resource-poor region. The EU-27 (the new twenty-eighth member, Croatia's reserves insignificant) holds only 6.073 billion barrels of proved oil reserves and 69.592 trillion cubic feet of proved natural gas reserves, which are the two main fossil resources that are consumed worldwide and in the Union in particular.[168] These limited reserves are concentrated in the North Sea, owned mainly by the Netherlands.

Crude oil production is dominated by the UK. The other countries with relatively significant crude oil production are Denmark, Italy, Germany, Romania and the Netherlands,

[167] Energy situation here means the production and consumption levels, import dependency, resource and import allocation.
[168] International Energy Statistics http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm accessed July 27, 2013

at the same time, five of the EU-28 member states have no oil production at all, they are Cyprus, the Czech Republic, Luxembourg, Malta, Slovenia.[169]

As for natural gas, in 2000 the EU had 136.945 trillion cubic feet proved reserves, whereas nowadays it has less than 70.000 trillion cubic feet.[170] The main gas producer is the Netherlands, followed by the UK. Only Denmark and the Netherlands produce more gas than they consume, and thirteen EU member states have no gas production at all. It is worth noting that after the North Sea's crude oil production peaked in the 1990s, oil production has been declining in the Union. The decline is also predicted for natural gas. Its production will fall in the EU from 225 billion cubic meters to 147 bcm up to 2030.[171]

Energy consumption has increased over recent years not only worldwide, but also in the EU due to growing population and rising of living standards, which could push global energy demand up by 40% by 2030.[172]

In particular, the EU is the second largest energy consumer in the world after the USA. As demonstrated in Figure 1, in 2010 the EU-27 consumed mostly crude oil (35.1%) and natural gas (25.1%), followed by solid fuels (15.9%) and nuclear (13.5%).[173] Overall, the domination of fossil resources is not expected to change in the medium term.

At the same time, the EU is the largest energy importer in the world. Up to now two-thirds of the consumed oil and gas and half of the consumed energy in the Union are imported, with Russia being its main exporter of crude, natural gas and hard coal.[174] Crude oil and petroleum products as well as natural gas continue to dominate the energy mix of the EU.

The majority of EU member states are net importers[175], which means that overwhelming amount of energy mix, fossil fuels accounting for 99%[176], comes to the EU from abroad, mostly from Russia, Norway and Libya with regard to crude oil (Figure 2).

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[169] International Energy Statistics
[170] Ibid.
[171] Gabriella Schaad, Anders Sandoff, "Oil resources and future supply", *University of Gothenburg*, 2009, p. 205 http://www.energy-pathways.org/pdf/Pathways_page201-304.pdf accessed at July 27, 2013
[172] The European Commission, Communication "The EU Energy Policy: Engaging with Partners beyond Our Borders", Brussels, 2011, p.2 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0539:EN:HTML:NOT accessed July 27, 2012
[173] Ibid.
[174] The European Union, Communication "Making the internal energy market work", Brussels, 2012, p.15 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012DC0663:EN:NOT accessed July 25, 2012
[175] The IEA, Key World Energy Statistics, IEA, 2012 http://www.iea.org/publications/freepublications/publication/kwes.pdf accessed July 27, 2012
[176] The European Commission, Communication "Making the internal energy market work", Brussels, 2012, p.15

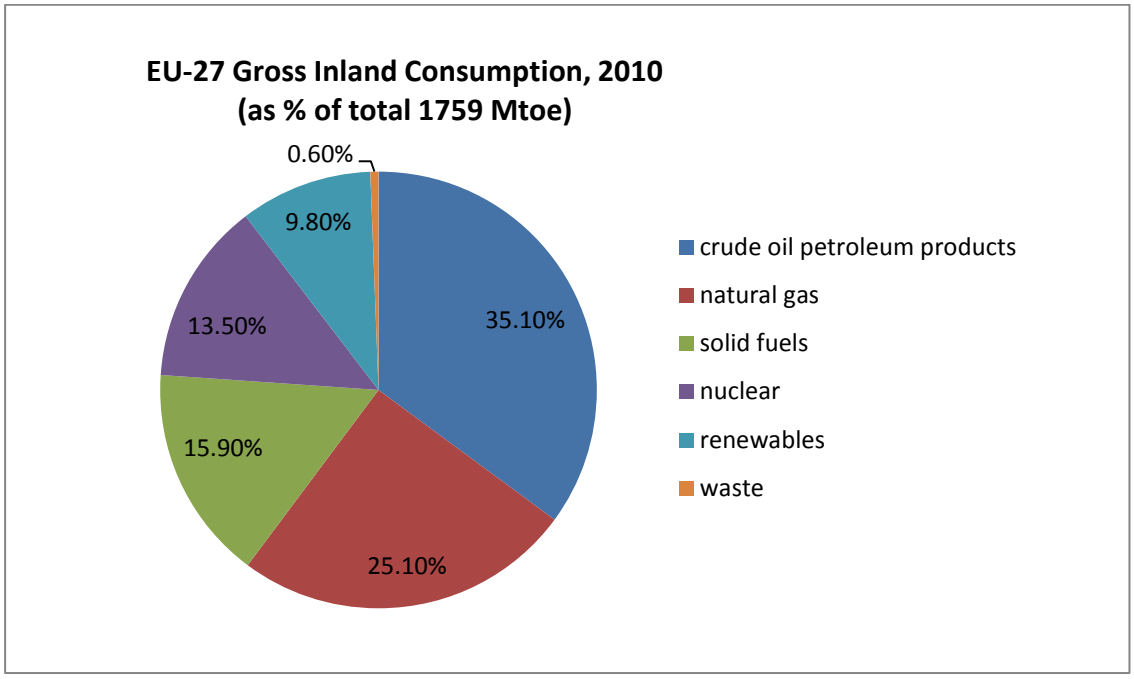

Figure 1: EU-27 Gross Inland Consumption[177]

Source: Eurostat, EU Energy Consumption, Data from August 2012

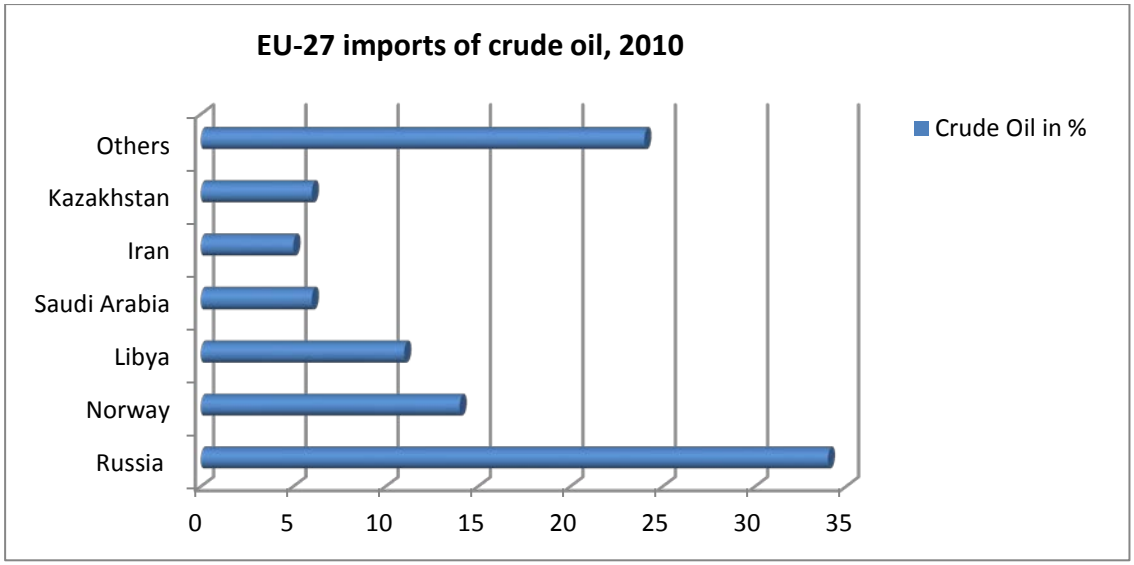

Figure 2: EU-27 Imports of Crude Oil, 2010[178]

Source: Eurostat, EU Energy Production and Imports

[177] Eurostat, EU Energy Consumption, Data from August 2012, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Consumption_of_energy accessed July 31, 2013

[178] Eurostat, EU Energy Production and Imports, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Energy_production_and_imports , accessed July 21, 2012

As far as imports of natural gas concerned, the largest exporter of the EU is Russia with significant share, followed by Norway and Libya as demonstrated in Figure 3.

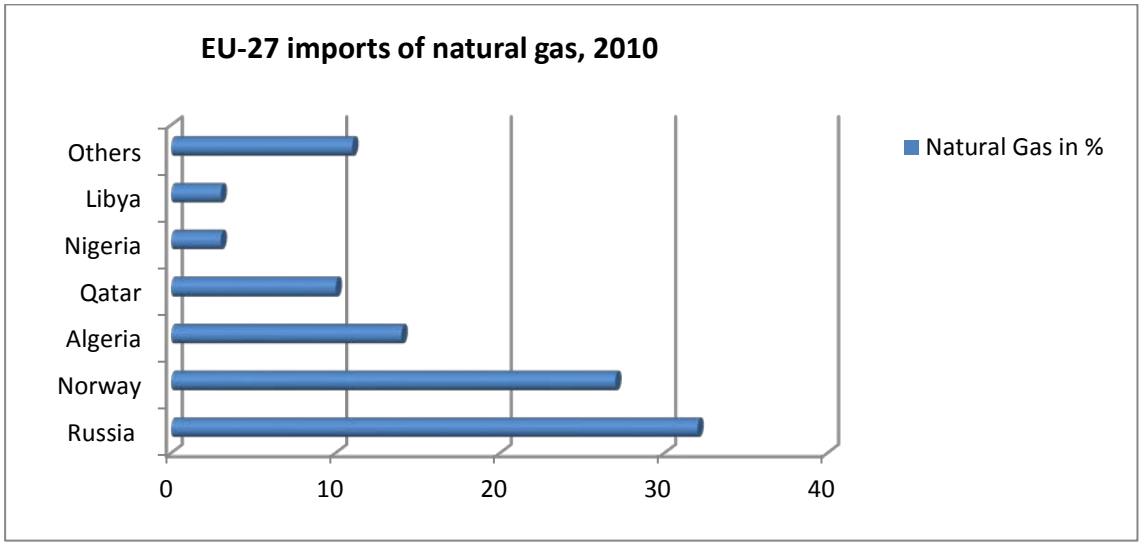

Figure 3: EU-27 Imports of Natural Gas, 2010[179]

Source: Eurostat, EU Energy Production and Imports, 2012

By 2030 the EU's import dependency is not expected to change significantly, and will accounts for 56.4% according to the reference situation.[180] Oil is projected to constitute 33.8% of total consumption, natural gas 27%, solids 15%, renewables 12% and nuclear 11% up to 2030.[181] As far as total consumption is concerned, the share of energy imports is expected to increase to 70% in the next thirty years.[182]

The expectation of the share of the gas differs. For instance, the IEA predicts that by 2030 natural gas's total consumption will reach 32% in the Union.[183] To continue, if the present trends proceed by 2030, 60% of EU gas imports are expected to come from Russia.[184] When it comes to the future projections of import dependency, it also is argued that the

[179] Ibid.
[180] The European Parliament, Workshop "EU Energy Roadmap 2050: EU External Policies for Future Energy Security", November 2012 http://www.iris-france.org/docs/kfm_docs/docs/observatoire-pol-etrangere-europe/2013-03-eu-energy-roadmap-2050-eu-external-policies-for-future-energy-security.pdf accessed July 28, 2012
[181] The Green Paper "A European Strategy for Sustainable, Competitive and Secure Energy", Brussels, Annex,2006 http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf accessed July 28, 2013
[182] The Green Paper "A 2030 framework on climate and energy policies", Brussels, 2013 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52013DC0169:EN:NOT accessed July 28, 2012
[183] The IEA, Key World Energy Statistics, 2012
[184] Euractive, "Energy" www.euractive.com/energy, accessed July 27, 2013

dependency on natural gas rises to a great extent, i.e. it will increase from 49% (2000) to 81% by 2030.[185]

Import dependency on solid fuels is also expected to increase greatly from 30% in 2000 to 65% by 2030. As the EU plans to decrease its oil consumption, import dependency on oil will increase not significantly as on gas or solids. It is expected that oil import dependency will rise to 90% by 2030, from 75% of 2000.[186]

To conclude, it is obvious that the EU's energy dependency will increase step by step due to high living standards with its reserves depleting slowly. However, it is difficult to predict to which extent the EU will depend on one energy resource or another, because it will be directly influenced by the political situation of its neighbors, global energy trends, and finally, by its future possible scenarios of the European Energy Policy, discussed below.

2.2. CHRONOLOGICAL DEVELOPMENTS OF ENERGY ISSUES IN EUROPEAN INTEGRATION

To achieve a genuine internal energy market is a priority goal in terms of energy for the EU, because the aim of the EU's energy policy is to maintain energy security within the Union. The internal energy market is supposed to be made up of the European natural gas and electricity markets, which are the subjects of numerous directives and regulations, grouped into 'legislative packages'. However, an energy policy comprises not only an internal dimension, but also an external one, which are quite difficult to separate. Basically, all developments of the internal policy have a direct effect on external one. Various official documents of the EU contain guidelines for the co-operation with third countries. Yet, apart from several provisions, a united energy policy within the EU doubtfully exists. Hence, this section of the study is dedicated to the challenges and developments of the internal dimension, which is supposed to form the structure for external action in the field of energy,

[185] EU Directorate-General for Energy and Transport, "European Energy and Transport Trends to 2030", 2003 http://ec.europa.eu/energy/observatory/trends_2030/doc/trends_to_2030_update_2009.pdf accessed July 28, 2012
[186] Ibid.

because "the Union should shape its internal and external energy policy in accordance with its values to the benefits of its citizens"[187].

2.2.1. A Humble Beginning

Before analysing the internal and external dimensions of EU energy policy, it would be useful to have a glimpse at a brief history of it from the European Coal and Steal Community to the Energy Roadmap 2050 in order to acknowledge the dynamics of its development and to track the chosen direction of energy scenarios.

In 1951 the Treaty establishing the ECSC[188], was signed, marking the beginning of the integration of Europe and setting up a common customs union, the aim of which was to control collectively the two essential for welfare commodities, as it is stated in Chapter 1. With the establishment of the European Atomic Energy Community (EURATOM) six years later another early institution of European cooperation was energy based. Together with the EURATOM the European Economic Community (EEC) was founded by the Treaty establishing the EEC in 1957. The famous 'Treaties of Rome' brought a common market to the EU "to promote throughout the community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standard of living and closer relations between the states belonging to it"[189] Apart from the customs union and free movement of goods, persons, services and capital, several common policies as agriculture, trade and transport policies were formally enshrined in the Treaty. It is imperative to note that although the EU evolved out of the ECSC, the concept of comprehensive European energy policy was not discussed or even mentioned.

After the Six Days War, also known as 1967 Arab-Israeli War, the European Council adopted the Directive 68/414/EEC[190], which obliged the member states to hold stocks equivalent to 65 days of consumption, the number of days was increased in 1972 to 90 days.

[187] The European Council, Presidency Conclusions, 2007 http://www.european-council.europa.eu/council-meetings/conclusions accessed July 29, 2013
[188] The Treaty of Paris 1951 http://europa.eu/legislation_summaries/institutional_affairs/treaties/treaties_ecsc_en.htm accessed July 27, 2013
[189] The Treaty of Rome 1957 http://ec.europa.eu/economy_finance/emu_history/documents/treaties/rometreaty2.pdf accessed July 27, 2012
[190] The Council Directive 68/414/EC of 1968 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31968L0414:EN:HTML accessed April 4, 2013

In 1998, Council Directive 98/93/EC[191] amended the first directive on stock obligation taking into account the development of European internal energy market, i.e. defining the failure of supply not only by physical lack of petroleum products, but also by volatile prices. That was a very impressive development in European energy security towards ensuring energy security in Europe.

Overall, during the first decades of European integration the Community institutions' competence to act was limited especially in the field of energy. That time can be characterised by a focus on the nation state level. The oil crisis in the beginning of the 1970s activated a push towards energy cooperation. Consequently, in 1974 the Council Resolution of 17 September concerning a new energy policy strategy for the Community was passed.[192] The Council emphasised the added value of close coordination among the member states to tackle energy problems. It also adopted guidelines concerning energy supply and demand, such as promotion of nuclear energy, hydrocarbons, solid fuels, and diversification and, finally, using energy more rationally.

Over the following years, environmental protection was not yet incorporated into European legislation, particularly, as climate change was not high on the agenda, integration process was new for Europe, and the then member states were understandably cautious about yielding their sovereignty for ambitious policy innovations. This changed with coming into force of the Single European Act 1987[193], which included environmental protection with the focus on the completion of the internal energy market.

However, the first attempt to create energy policy failed when the Commission was not successful to include a separate energy chapter into the Treaty of Maastricht[194], signed in 1992, due to the veto of several member states, because they were not eager to give away autonomy in that field. In fact, those vague incorporations on energy were not of quite importance for legislation. In spite of the failure with regard to energy issues, the Treaty on

[191] The Council Directive 98/93/EC of 1998 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31998L0093:EN:HTML accessed April 4, 2013
[192] The Council Resolution of 17 September 1974 "A new Energy Policy Strategy for the Community", http://eur-lex.europa.eu/en/legis/latest/chap121020.htm accessed July 27, 2013
[193] The Single European Act 1986 http://europa.eu/legislation_summaries/institutional_affairs/treaties/treaties_singleact_en.htm accessed July, 27, 2013
[194] Treaty on the European Union 1992 http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html accessed July 27, 2013

European Union (TEU)[195], signaled the next step for European integration with the creation of three pillars, namely the European Communities, the Common Foreign Security Policy, and justice cooperation in criminal matters (JHA), as well as the initiation of economic and monetary union.

Later, after the establishment of the Intergovernmental Panel on Climate Change (IPCC)[196] of 1990, the so-called 'Earth Summit'[197] in Rio de Janeiro in 1992, and, finally, with the adoption of the Kyoto Protocol[198] in 1997, though not quite effective nowadays, energy appeared to be pretty high on the EU's agenda providing a productive atmosphere for ambitious goals, which will be set later in the XXIst century.

The Amsterdam Treaty[199] signed in 1997 abolished physical barriers across the internal market by incorporating the Schengen Area within the competences of the EU, but meant almost nothing for the internal energy market. Meanwhile, in 1998 and 1988 directives on the electricity and gas[200], based on internal market and environmental regulations of the Treaties, came out, but they were not quite a success. Summing up, neither the Treaty of Amsterdam nor the Treaty of Nice (2001)[201] was dedicated much to a Common Energy Policy. Therefore, the main energy regulation in the years after, were still based on environmental regulations, for example, the Renewables Directives of 2001 and 2003[202], Emissions Trading System[203] in 2005.

2.2.2. Current Developments

There are numerous measures adopted by the EU dealing with the security of Europe's energy supply that do not create direct legal obligations for the member states, but instead have a soft characteristic, such as Green Paper and White Papers. These instruments are not legally obligatory, as they do not fall within the category of EU 'legislation', however, the

[195] The Maastricht Treaty 1992, http://www.eurotreaties.com/maastrichtec.pdf
[196] The IPCC www.ipcc.ch accessed July 27, 2013
[197] The Earth Summit www.earthsummit.info accessed July 27, 2013
[198] The Kyoto Protocol www.kyotoprotocol.com accessed July 27. 2013
[199] The Treaty of Amsterdam 1999 http://www.eurotreaties.com/amsterdamtreaty.pdf accessed July 27, 2013
[200] The European Parliament, Directive 96/92/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0092:EN:HTML , Directive 98/30/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31998L0030:EN:HTML accessed July 27, 2013
[201] The Treaty of Nice 2003 http://www.ecb.europa.eu/ecb/legal/pdf/en_nice.pdf accessed July 27, 2013
[202] The EP, **Directive 2009/28/EC, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=Oj:L:2009:140:0016:0062:en:PDF** accessed July 27, 2013
[203] The Emissions Trading System www.carbontrust.com accessed July 27, 2013

indirect effect which they may have in encouraging the member states is important, which is examined here.

The following documents were of importance for the further development of the energy policy: two White Papers: *'An Energy Policy for the EU' (1995)*[204], *'the White Paper for the future: renewable sources for energy' (1997)*[205]*;* and two Green Papers: *'Towards European strategy for energy security of energy supply' (2000)*[206], and *'A European strategy for sustainable, competitive and secure energy' (2006)*[207], and the conceptual document *'An External Policy to serve Europe's energy interests'* (2006)[208].

2.2.2.1. The White Papers of 1995, 1997

The aim of the first White Paper, which contains proposals for the Community action, was to initiate a coherent European energy policy. The Commission asserts that the effectiveness of actions in energy area directly depends on common aims, which can be achieved if a framework for the discussion and cooperation, as well as a framework for consultation on energy guidelines are established. Energy policy is still seen as a part of the Community's economic policy. The Commission notes that due to high energy imports the dependence will increase, therefore, the Community is in need of energy market integration and external cooperation with the third countries. However, no extra budget spending for energy policy is foreseen.

The second document laying down a Community Strategy and Action Plan specifies the reform of a certain energy sector, i.e. renewable energy. It sets an ambitious target for the Community to achieve 12% contribution by renewable sources of energy, such as biomass, hydropower, wind energy, solar thermal, photovoltaic, geothermal, etc., to its gross inland energy consumption by 2010, which failed, as far as we can see from the previous part. The result depended not only on the will and dedication of the member states, but also on technologies, finance measures and many other factors. The White Paper also presents

[204] The White Paper 1995 http://europa.eu/documentation/official-docs/white-papers/pdf/energy_white_paper_com_95_682.pdf accessed July 29, 2013
[205] The White Paper 1997 http://europa.eu/documents/comm/white_papers/pdf/com97_599_en.pdf accessed July 29, 2013
[206] The Green Paper 2000 http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=COMfinal&an_doc=2000&nu_doc=769 accessed July 29, 2013
[207] The Green Paper 2006 http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf accessed July 29, 2013
[208] The European Commission, Paper, "An External Policy to Serve Europe's Energy Interests" 2006, http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/reports/90082.pdf accessed July, 2013

internal market measures to provide fair access to the electricity market for the renewable. It identifies three key energy policy objectives, they are as follows: improving competitiveness, security of supply and protection of the environment, which could be achieved with promotion of renewable sources of energy. All in all, the Commission believes that increasing use of renewable sources of energy is not only future for Europe, taking into consideration its immense dependence on energy imports, but energy of future worldwide due to its environmental-friendly peculiarities.

2.2.2.2. The Green Paper of 2000

The Green Paper of 2000 'Towards a European strategy for the security of energy supply' initiates a new European energy strategy. The Commission confesses the impossibility of its energy self-sufficiency. It also signals that the lack of an active energy policy will not allow the EU to free itself from its increasing energy dependency, which is supposed to be 70% up to 2030, opposed to the then 50% of imported energy products. At the same time, the Green Paper highlights that security of energy abolishes dependence or minimizes it, it targets at reducing the risks related to such dependence, by balancing between the sources and diversifying them. Climate change is also given a precise attention, where the Kyoto Protocol is perceived to be the first step. The Green Paper reveals that the member states are still independent as regards the issues of climate change and energy market, but it underlines also that any energy policy adopted by one member state is inevitably affects the functioning of the market in the other member states. Therefore, after the discussion of the weaknesses in current energy supply, the Green Paper claims that the Union needs a long-term energy strategy, the sketch of which is presented in the Green Paper. It includes three elements: favouring the demand side of energy policy, changing of consumer behaviour, and, finally, fighting against global warming by financial measures such as aids, tax deductions.

In addition, energy mix is presented in detail with oil being the favourite one, nuclear energy and solid fuels being undesirable, while natural gas and renewable are tomorrow's priorities. It makes quite clear which course of action will be taken later: decreasing supply risks, increasing diversification, promoting the use of renewable and natural gas, providing financial assistance and, ultimately, bearing in mind that an action of one member state in the field of energy directly has an impact on the others.

2.2.2.3. The Green Paper of 2006

The Green Paper of 2006 'A European Strategy for Sustainable, Competitive and Secure Energy' firstly presents trends, which play the most important role in creating European energy policy, they are as follows: urgent need for investment, the increase of global demand for energy and, consequently, the increase of dependence, oil and gas prices rising, climate getting warmer, the lack of competitive internal energy markets in Europe. As a result, the following priorities will be on top of the agenda: competitiveness of internal energy markets, diversification of energy mix, and solidarity between the member states, sustainable development, innovation and technologies, a common external energy policy.

To achieve three main objectives, namely, sustainability, competitiveness and security of supply, the Commission specifies six priority areas with concrete policy proposals. The first priority is the completion of the internal gas and electricity markets, by developing a European Grid, effective unbundling, boosting competitiveness. The second priority area is the establishment of the internal energy market by means of the European energy supply observatory, which will monitor the demand and supply patterns. The third priority is the diversification of energy mix by using clear and nuclear power. Another priority area is an integrated approach to tackle climate changes, which could be achieved through long-term targeted energy efficiency campaigns. The next area is the creation of a strategic European energy technology plan, which will help to achieve sustainability and security of supply through the contribution of energy efficiency. Last but not least, the inspiration of common external energy policy being of the most importance for our work will be analysed in the next chapter. It should be mentioned that for the first time the pivotal importance of the external dimension of European energy policy is regarded as an inseparable part of European energy supply security. Probably the Ukrainian crises in 2006 and in 2009 contributed significantly to the developments to such an extent, because the Green Paper's priority was *de facto* to avoid pipelines proposed by Gazprom. Thus, the projects going from Caspian region, North Africa and Middle East were of most significance. Yet, the Commission still highlights the importance for the EU of the partnership with Russia as a key energy partner.

This Green Paper looks similar to its predecessor Green Paper of 2000 in the sense of achieving security of supply while preserving environment and integrating energy markets, however, the Green Paper of 2006 contains several policy implications if compared to the Green Paper of 2000.

2.2.2.4. The Conceptual Document on the Energy Policy

"An external Policy to Serve Europe's Energy Interests"[209] is a document, which formulates the concept of the EU's energy policy with its external dimension. It specifies 'the sources of threats' being, first of all, increasing dependence on energy import. The next threat is those suppliers, who use the EU as a tool for the sake of their own political interests and lacking the competition in their domestic markets violate the market rules of the EU. The document probably hinted at Russia. In order to deal with these threats, the member states are expected to act in unison, which would lead to strengthening a collective European energy security. Apart from the need to act in unison, the energy policy is supposed to be strategic, i.e. taking into consideration geopolitical factors of energy security. The Commission expects the member states to act collectively on a number of issues as: developing energy cooperation with third countries, modernization of exporting infrastructure, an access to export pipelines of third countries, increasing infrastructure security and environmental security, a wide use of alternative sources of energy, and, finally, diversification of imported energy sources.

The authors of the Paper defined the structure of energy security for the EU, which consists of well-functioning reliable world energy markets and diversification of sources, resources, and routes.

The concept of external European energy policy suggests certain measures in the form of dialogues between EU member states and the third countries at bilateral, regional, and international levels. Russia is mentioned as the most important energy partner for the EU.

The aim of the energy dialogue at the regional level is widening of internal European market on European countries. The energy dialogue at the international level is supposed to integrate the objectives of the EU's energy policy into its trade policy, and strengthening the cooperation with the IEA, while promoting the membership in it. It means that the EU aims at becoming the leader in the energy issues not only in Europe, but in the world.

Though the Paper defines the concept of energy security for the EU and highlights the main conditions to achieve it, some of them are still quite difficult to perform, for example, 'speaking with one voice'.

By and large, it was accepted worldwide among policy-makers that energy and climate change were delicate and crucial issues, which are to discussed prior at the

[209] The European Commission, Paper, "An External Policy to Serve Europe's Energy Interests".

intergovernmental but sometimes even at the *supranational level*[210]. As it can be derived from the official documents, negotiating a common energy policy proved to be difficult, as each country has different energy priorities and combination of energy sources. Nevertheless, the EU aspires to take the lead in fighting against climate change and made environmental sustainability as well as energy security its top priorities.

2.3. CURRENT DEVELOPMENTS

To better understand the core of the internal energy policy of the EU main official documents coming into force after the Lisbon Treaty will be analysed. Nowadays, the Commission among the other EU institutions has the central role of initiating policy; it also ensures that all EU policy conforms to the principles of the internal market. It is argued that the member states follow the will of the European Commission.[211] At the end of this section it will be clarified, whether the member states are seen as followers in the policy processes or actors.

2.3.1. New Competence and the Action Plan

The 2007 year is remarkable and quite productive for EU energy policy, mainly due to the Lisbon Treaty, which sometimes is called a 'Reform Treaty', and due to the first European action plan (2007-2009) 'Energy Policy for Europe'[212]. As it was demonstrated, prior to the Lisbon Treaty the EU energy legislation has been based on the EU authority in the area of the common market and environment.

Signed in 2007, the Lisbon Treaty[213], which amended the Treaty on European Union (1992) and the Treaty Establishing European Community (1957), was *de jure* a tremendous pace towards a coherent EU. It finally included a title on energy. First, the Article 12 enumerates several innovations, such as ensuring the functioning of energy supply, promoting the interconnection of energy networks, which refer to the "functioning of the internal

[210] Ian Bache, Stephan George, **Politics in the EU**, Oxford University Press Inc., 2006, p. 37
[211] Dame Janne Haaland Matláry, **Energy Policy in the EU**, MacMillan Press Ltd., 1997, p. 46
[212] The European Commission, Communication on Energy Policy for Europe, 2007 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0001:FIN:EN:PDF accessed July 29, 2013
[213] The Treaty of Lisbon

market". Then, Article 194[214] on energy presents the objectives of Union mission on energy. The most striking new point is referring to ensuring energy security in the EU, which was traditionally under the member states' control. Nevertheless, energy mix, energy foreign policy and the conditions for exploiting the union's energy resources remain in charge of the nation states. All decisions of "fiscal nature" are made unanimously by the Council after consulting the European Parliament, having no veto power. In the past, the Council used to decide all energy legislation unanimously with many initiatives brought to an end. After the Lisbon Treaty, the measure necessary to achieve the objectives stated above are made by qualified majority. The Treaty highlights that all decision made have a direct impact on all member states; that is why the union should act "in a spirit of solidarity". The Lisbon Treaty is a cornerstone particularly for the energy policy, since it sets objectives for the member states and demands 'single voice' speaking to preserve the interests of the EU.

It was not until 2007 when the EU created the first coherent strategy named "Energy Action Plan"[215] for Europe. The Action Plan marked three main challenges for the EU to overcome: sustainability, security of supply, and competitiveness. For the EU to reach these goals three quantifiable well-known targets were laid out: "20/20/20" targets. In particular, they stand for 20% goals which should be reached until 2020:

- a reduction in EU greenhouse gas emissions of at least 20% below 1990 levels;
- 20% share of renewable of total EU energy consumption;
- 20% reduction of energy use through energy efficiency.

According to the report of European Energy Agency (EEA), the level of greenhouse gas emissions fell by 3.3% in the EU in 2011, i.e. the lowest level of emissions since 1990 (18.4% below 1990 levels).[216] When the Action Plan was laid out, there was still illusory hope for the first quantifiable objective to be achieved. While the second goal was quite unrealistic to deal with, because in 2010 share of renewables of EU countries was only 13.0%, in 2004 it was

[214] Ibid.
[215] Communication 2007
[216]The European Environmental Agency, "Greenhouse Gas Emission Trends and Projections in Europe 2012", **EEA Report No 6/12**, http://www.google.ru/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CDcQFjAA&url=http%3A%2F%2Fwww.eea.europa.eu%2Fpublications%2Fghg-trends-and-projections-2012%2Fdownload&ei=OoR3UpDNFKbt4gSjhIDwDQ&usg=AFQjCNENycoI-15Vk7EB8ifQ3zO4TwaPDg&bvm=bv.55819444,d.bGE accessed July 20, 2013

8.1%.[217] The last objective is still significantly dependent on the success of the Kyoto Protocol[218] (1997) and EU Emission Trading System's[219] (EU ETS) achievements. It is not only market-based instrument of the energy policy inside the union; EU ETS is also prominent achievement of the EU to combat climate change and to reduce industrial greenhouse gas emissions. According to the official data, EU ETS is really working, with the EU setting different goals to protect our planet, such as 'the 2°C target'[220].

Back to the plan, it listed five main action priorities: the completion of the internal market for gas and electricity, ensuring security of supply, speeding up the development of international energy policy, achieving energy efficiency, and finally, strengthening energy research, notably renewable and low carbon technologies. Thus, the action plan addresses the crucial issue of security of energy supply with certain steps to be performed.

2.3.2. Brand-new Developments

There are also current documents concerning energy in the EU, they are as follows: the Energy Strategy 2020, the Energy Roadmap up to 2050, and finally a new Green Paper. Besides in 2005 a new international organisation, the Energy Community[221], was established by the EU including all member states, Norway, Turkey as observers and nine Contracting Parties from the South East Europe and Black Sea region. The main aims of the Community are to create an integrated energy market, to enhance the security of supply and competition at the regional level.

2.3.2.1. Energy 2020 Strategy

In 2010 there came another energy strategy 'Energy 2020. A strategy for sustainable, competitive and secure energy'[222], rooted from the previous Action Plan discussed earlier. It is full of criticism of EU energy policy's position. Particularly, it is not convinced with "the

[217] Eurostat, http://ec.europa.eu/eurostat accessed July 29, 2013
[218] The Kyoto Protocol is an international Treaty, signed in 1997, entered into force in 2005, which sets binding obligations to reduce emissions of greenhouse gases. http://www.kyotoprotocol.com accessed July 29, 2013
[219] EU ETS www.ec.europa.eu accessed July 29, 2013
[220] The 2°C limit is the EU climate protection target, established by the EU Governments in 1996 and since then reaffirmed by the Environment Council 2003, and European Council, 2005, 2007. Oliver Ceden, **The Report of EU Climate Change Expert Group EG Science**, "The 2°C Target", 2008 http://www.swp-berlin.org/fileadmin/contents/products/research_papers/2013_RP05_gdn.pdf accessed July 20, 2013
[221] Energy Community webpage http://www.energy-community.org/portal/page/portal/ENC_HOME accessed July 29, 2013
[222] The European Commission, Communication, "Energy 2020. A Strategy for Sustainable, Competitive and Secure Energy", 2010 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0639:FIN:En:PDF accessed July 27, 2013

fragmented internal energy market", which lacks "transparency, accessibility and choice". It expresses some disappointment about the quality of the National Energy Efficiency Action Plans (NEEAP) developed by the member states' governments since 2008.

The Commission urges that "the security of energy supplies is undermined by delays in investments and technological progress", therefore, it seems unrealistic to achieve the famous 20/20/20 targets. Besides, it also complains that there is still no common approach towards its partners, suppliers and transit countries.

'Energy 2020' calls for the restructuring the energy market and emphasises a persuasive need to act all together to stay competitive in the future. It launches a new strategy to achieve the old goals. As for the areas of priority, they are as follows: achieving the highest level of safety and security in an energy efficient Europe, strengthening the external dimension of the EU energy market, and extending Europe's leadership in technology and innovation.

The Commission plans to achieve the 20/20/20 targets by focusing on transport, buildings and industry through converting them to 'green'. All in all, 'Energy 2020' is a kind of disappointment with what have not been done yet but could be in the near future if new guidelines will be followed properly.

2.3.2.2. Energy Roadmap 2050

In 2012 the European Commission launched a new strategy 'Energy Roadmap 2050' aimed at establishing the framework for the joint action from 2020 to 2050. The motto of the strategy is "decarbonisation is feasible". The EU sets the goal to cut greenhouse gas emissions by 80-85% by 2050 below 1990 levels. It develops two trend variants of decarbonisation, both of them including high share of the RES: *reference scenarios*, which includes current trends and long-term projections on economic development, the 20/20/20 targets for the renewable energy sources (RES), GHG reductions, and the ETS directive; and *current policy initiatives*, such as 'Energy 2020 Strategy', 'Energy Efficiency Plan'[223], 'Energy Taxation Directive'[224].

[223]The EEP 2011 forms part of the EU's 20 % targets, and 2020 Energy Strategy, aiming at implementing environmental-friendly plan for further energy development. Communication from the Commission 'Energy Efficiency Plan 2011' http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0109:EN:HTML:NOT accessed July 29, 2013

[224] The Council Directive 2003/96/EC, which restructures the Community framework for the taxation of energy products and electricity, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0096:en:HTML accessed July 29, 2013

The five decarbonisation scenarios are as follows: high energy efficiency, diversified supply of energy, high share of the RES, delayed Carbon Capture and Storage[225] (CCS), low share of nuclear energy. But there are several difficulties, for example with CCS. The process is highly energy intensive, and involves high costs as the captured carbon would have to be stored. In addition, it is criticized for possible uncontrolled release of CO_2 in case of storage accidents.[226] Nevertheless, the strategy highlights the importance of investment even in the absence of ambitious low-carbon projects, because all infrastructures are old-fashioned. Greater decarbonisation means less dependency on imports and exposure to the volatility of fossil fuel prices, i.e. security of supply. Such measure as smart cities, technologies, green vehicles, recycling, lean manufacturing, ocean and solar power using, generation biofuels, offshore wind turbines, renewable heating and cooling will significantly contribute in decarbonisation process, but they need huge investments. The EU developed the Strategy Energy Technology Plan[227] (SET-plan) in order to deploy cost-efficient low-carbon technologies, which proposes new governance method based on joint strategic planning and jointly decided actions. The role of the EU is to motivate and mobilize public and private investors. Investment will pay off in case of growing employment, greater energy security, and lower fuel prices.

As for the future energy mix, it is expected to look as following: the lion's share of it will be of the RES in all spheres of life. The policy scenarios indicate a share of around 30% in 2030. Gas will still play a key role as a substitution of coal and oil, at least in order to reduce GHG emissions till 2030. Taking into consideration LNG and shale gas revolution in the USA together with internal market integration the EU could relax concerns about significant gas imports from Russia. Along with it, gas market needs more integration, diversification, larger storage capacity. Oil and coal will remain in the energy mix of future but mainly for the sake of energy security and petrochemical industry. Nuclear energy will demand safety costs after the Fukushima incident for decommissioning existing plants and disposing of waste.

[225] CCS is technology for cutting CO2 emissions from fossil fuel-based power generation and CO2 intensive industries. The European Commission "Energy" http://ec.europa.eu/energy/coal/ccs_en.htm accessed July 29, 2013

[226] Susanne Langsdorf, "EU energy policy: from the ECSC to the Energy Roadmap 2050", *Green European Foundation*, 2011, http://gef.eu/uploads/media/History_of_EU_energy_policy.pdf accessed July 29, 2013

[227] The European Commission, the SET-plan http://ec.europa.eu/research/energy/pdf/set-plan_en.pdf accessed July 29, 2013

Overall, the document seems "introvert"[228], because it is fully focused on the internal market, which is important though, while the external market is neglected.

2.3.2.3. The Green Paper of 2013

The Green Paper 'A 2030 framework for climate and energy policies'[229] speaks in unison with the 'Energy Strategy 2050' and aims at getting attention and support of stakeholders to develop the 2030 framework of energy policy. It discusses the current EU policy framework and the things have already been done. For example, the 20% GHG reduction target for 2020 is expected to be implemented through the EU ETS and the Effort Sharing Decision[230], which establishes binding annual greenhouse gas emission targets for the member states for the period of 2013–2020. The renewable energy target is supposed to be achieved through massive investments in research, development, and innovation for infrastructure and distribution grids; and through the completion of internal energy market. The energy saving measure, also contributing to the decarbonisation of energy, is likely to succeed with the help of the Energy Efficiency Directive[231] containing a comprehensive legislation framework at EU level. Aftermath of the gas crises of 2006 and 2009 with Russia the EU launched the Regulation on security of gas supplies[232], discussed further, to ensure the security of supply and affordability in the internal market.

It is obvious that the current approach is based on a combination of aspirations of the EU and binding measures. To achieve the future plans targets and policy instruments are necessary. First of all, according to the Green Paper, there is no place for divergence and, thus, the best cost-effective targets will drive energy policy up to 2030. The absence of legally binding energy savings targets under the 2020 framework for the member states is linked to the need for EU legislation. As for the policy instruments, they should be coherent, because the lack of overall consistency between policies is observed, therefore, national measures

[228] EU Directorate-General for External Policies, Briefing Paper "Energy Roadmap 2050 Workshop" , Policy Department, 2012 http://www.europarl.europa.eu/RegData/etudes/workshop/join/2012/457140/EXPO-AFET_AT%282012%29457140_EN.pdf accessed July 29, 2013
[229] The Green Paper of 2013
[230] These targets concern emissions from the sectors such as transport, buildings, agriculture and waste; they are not included in the EU ETS. The European Commission, Climate Policies, http://ec.europa.eu/clima/policies/effort/index_en.htm accessed July 29, 2013
[231] The Council Directive 2012/27/EU http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:315:FULL:EN:PDF accessed July 29, 2013
[232] EU Regulation No.: 994/2010 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:295:0001:0022:EN:PDF accessed July 29, 2013

must not lead to fragmentation of the internal market. Competitiveness in domestic and international energy markets is another measure to deal with EU energy framework. To achieve it, full implementation of the internal market legislation, which is crucial to keep prices in check; the need for future exploitation of indigenous oil and gas resources; and, finally, further diversification of energy routes to improve competition on internal energy markets is crucial. While pursuing these goals Brussels should bear in mind the different capacity of the member states concerning implementation of the *acquis communautaire* on energy with a lighter burden placed on lower income member states.

Hereafter, the transformation of the energy system seems to be a broadly contested issue. Many policy makers criticise the "Roadmap 2050" because of its being only a strategy not a piece of legislation, thus, the directives that may shape the energy markets for the future are not written yet. The European Green Parties, for instance, have also ambition to achieve the 2050 goals with the RES accounting for 100% even without the use of nuclear energy and CCS.[233] It should not be forgotten that only the Council and the Parliament are pivotal actors in legislative process[234], that is why the Commission's initiatives of desirable nature are not enough all the time. Nowadays, an objective of an existing legally binding framework is obligatory to achieve the goals prescribed in the Roadmap. Besides, it is sensible to have a plan B, in case expected conditions are not met in the future.[235]

To conclude, as it is seen from the analysis of the official documents concerning energy security concept, the EU future energy scenarios are inspired not only by the geopolitical motives such as diversification of energy sources and routes, but also by environmental needs of the planet, and global challenges as climate warming and environmental pollution. Henceforth, a well-balanced approach to all energy security challenges, which the EU is willing to face, is needed. The approach, which encompasses three main pillars of energy policy of the EU for today's sustainability of development, security of energy supply, competitiveness, will guarantee the energy security in Europe. Well-integrated internal energy market of the EU, discussed further, will be of great importance to achieve these goals.

[233] Langsdorf, op. cit. p. 8
[234] Ibid. p. 3
[235] Speech of Szymon Polak in **Briefing Paper** "Energy Roadmap 2050", Workshop, Directorate-General for External Policies, Policy Department, 2012

2.4. TOWARD AN INTEGRATED ENERGY MARKET

The economic ideal of a common or single European market lies at its core. The aspiration to create a common market was fundamental in the decision in the mid-1950s to set up the EEC. Thirty years later, the decision to achieve a single internal market by the end of 1992 was fundamental to the revival of European integration. Nowadays, the internal single market exists with free movement of goods, except for imported energy item. There are still restrictions for free moving of energy resources and no competition in the internal market with regard this strategic item. However, the EU tries to deal with this situation by implementing different pieces of legislation, analysed further.

It took more than fifteen years for the EU to come up with the legislation concerning liberalization of electricity and gas markets aiming at fostering competitiveness, decreasing energy prices for EU citizens. The creation of an internal, *pan-European* energy market is one of the signals of the EU's ability to ensure energy security. An integrated internal market for Europe is one, which is open to competition, investment, and greater solidarity between the member states.[236] The internal energy market (IEM) improved greatly since 2007 in terms of binding legislation on energy, first of all due to the post-Lisbon changes. There have been three such packages up to now, put together by the European Parliament and the European Council, which establishes common rules for the internal energy market for the member states.

2.4.1. The EU Third Energy Package

The cornerstone of the IEM is so-called 'the Third Energy Package' with legislative proposals for electricity and gas markets. The essence of the energy package is to integrate a segregated European energy market to keep prices as low as possible and increase security of supply. In practice, liberalization of Europe's electricity and gas markets has proven to be a very difficult task. Industries and private households were able *de jure* to choose their energy supplier due to EU directives of 2004[237] and 2007[238], but only with coming into force of the

[236] Truscott, op. cit. p. 54
[237] Directive 2004/8/EC available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:052:0050:0050:EN:PDF accessed July 29, 2013
[238] Directive 2007/46/EC available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007L0046:EN:NOT accessed July 29, 2013

package in 2011 liberalization allowed *de facto* a harmonized approach over inner-states energy issues. Transparency is of grave importance in this process because it ensures that network access could not be monopolized, resulting in greater price stability.[239]

2.4.1.1. The Essence of the Package

The package consists of Regulation on conditions for access to the natural gas transmission networks[240], Regulation on conditions for access to the network for cross-border exchanges in electricity[241], Directive concerning common rules for the internal market in natural gas[242], Directive concerning common rules for the internal market in electricity[243], and, finally, Regulation establishing an Agency for the Cooperation of Energy Regulators (ACER Regulation)[244]. These documents aim at creating a single competitive energy 'super-grid'[245] inside Europe, which provide variety of energy suppliers for affordable prices. It should be noted that a regulation is directly applicable, whereas a directive need to be transposed into national law first, thus, there is a room for manoeuvre.

There are basic five innovative elements of the third package. The first is a high standard of public service obligations and customer protection, which is ensured by the provisions, for example, enabling customers to switch suppliers within three weeks; or by obligations on suppliers to provide information to consumers and to foresee efficient complaint handling procedures. A recent European Commission study demonstrated that EU consumers could save approximately €100 per year, if they switched to the cheapest electricity supplier available.[246]

Another element is stronger powers and independence of national regulations, i.e. "independent market watchdogs"[247]. It means that the National Regulatory Authorities (NRA)

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[239] Truscott, op. cit. p. 55
[240] Regulation No 715/2009 http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009R0715:EN:NOT accessed July 29, 2013
[241] Regulation No 714/2009 http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009R0714:EN:NOT accessed July 29, 2013
[242] Directive 2009/73/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009L0073:EN:NOT accessed July 29, 2013
[243] Directive 2009/72/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009L0072:EN:NOT
[244] Regulation No 713/2009 available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009R0713:EN:NOT accessed July 29, 2013
[245] Truscott, op. cit. p. 55
[246] The European Commission, "EU Consumers Not Making Full Use of the Savings Opportunities of Energy Market Liberalisation, Study Finds", *Press Releases Database*, November 15,2010 http://europa.eu/rapid/press-release_IP-10-1507_en.htm accessed July 29, 2013
[247] Truscott, op. cit. p. 56

must be legally distinct and functionally independent from any private or public entity, for instance, not being a part of a ministry and having its own annual budget. At the same time, it is expected to approve the transmission and distribution tariffs, to enforce customer protection provisions and to impose effective penalties if required. The third party access principle, which allows any electricity and gas supplier non-discriminatory access to the transmission network, is regulated by the NRA.

Third element is the tools harmonizing market and network operation rules on the basis of common principles at pan-European level. The main objective of these rules to facilitate cross-border trade and reduce transaction costs initially to the benefit of consumers. This extensive process requires the participation of stakeholders.

The next innovation is of institutional nature. Several institutions were set up, namely, the Agency for the Cooperation of Energy Regulators (ACER)[248], being a centrepiece of the creation of the Single Energy Market; the European Network of Transmission System Operators for Electricity (ENTSO-E)[249], and the European Network of Transmission System Operators for Gas (ENTSO-G)[250] to further progress on the completion of the internal energy market and to ensure effective cooperation between the NRA. These new institutions are responsible for developing regulatory framework and ensuring that market integration is done in respect of the EU's energy policy objectives: competitiveness, security of supply, efficiency and transparency. The ACER also adopts decisions on cross-border issues and reports on market functioning. The ENTSO-E and the ENTSO-G are in charge of developing network development plans and promoting regional co-operation between Transmission System Operators (TSOs).

The last innovative measure being of grave importance is an ownership structural unbundling between transmission and supply activities, which aims at preventing energy companies from using their privileged position to obstruct access of their competitors to energy market, i.e. aiming at fair competition and liberalisation of energy market. Unbundling means separating the gas and electricity networks from the supply business.[251]

[248]The ACER http://www.acer.europa.eu/The_agency/Pages/default.aspx accessed July 29, 2013
[249] ENTSO https://www.entsoe.eu/about-entso-e/inside-entso-e/mission-and-vision/ accessed July 29, 2013
[250] ENTSO http://www.entsog.eu/ accessed July 29, 2013
[251] Truscott, op. cit. p. 56

2.4.1.2. Unbundling Models

According to the package documents, gas and electricity holdings of the EU are to choose one of the three possible unbundling models: Ownership Unbundling (OU), the Independent System Operator (ISO), and the Independent Transmission Operator (ITO). OU model requires energy companies to sell off their gas and electricity grids, because neither supply company nor producing company is allowed to hold a majority share in a transmission system, to exercise voting rights or to appoint board members. In this case, the TSO owns and manages network and co-ordinate its plans with the NRA and the ENTSOs. This model separates transmission assets from generation and distribution ones, being nothing less than 'expropriation'[252]. [253] A number of large companies proceeded with OU model, for example, E.ON Vattenfall, Endessa, and RWE divested their transmission assets.[254] Nevertheless, not all energy companies are ready to break up their vertically integrated monopolies, that is why, 'a compromise model'[255] of unbundling was created.

Under the ISO model, large energy suppliers are allowed to retain ownership of the transmission assets, but the maintenance, entire operation of the network and investment decisions are taken over by an independent company or by the Independent System Operators, designated by national governments. Nominal owners of transmission networks will not *de facto* run the transmission infrastructure, but will gain stable income.[256] The so-called 'Gazprom clauses' were also approved for limiting the ability of energy companies from outside buying up distribution networks.[257] There are several bottlenecks, which usually occur at borders between the member states, as power links between Germany, Poland, and Lithuania, off-shore wind power connections in northern Europe, electricity connections between Spain and France, and several gas pipelines from the Caspian to Central Europe.[258] The EU must provide measures to overcome these difficulties, which undermine the compliance with the legislation directives and regulations.

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[252] Expropriation means taking of private property for public use or the public interest. **Longman Contemporary Dictionary**, Longman, 1998, p. 455

[253] Svetlana Melnikova , "Tretiy energopaket stal realnostiu" *TEK, Ministerstvo Energetiki RF*, No.:2 Mart-Aprel, 2011, p. 5 (my translation)

[254] The European Commission, Press Releases Database, op. cit.

[255] EurActiv, Energy News, "Energy ministers clinch deal on liberalisation", October 13, 2008 http://www.euractiv.com/energy/energy-ministers-clinch-deal-liberalisation/article-176279 accessed July 29, 2013

[256] Borovskiy, op. cit. p. 188

[257] Truscott, op. cit. p. 57

[258] Ibid.

The third variant of unbundling, the ITO, suggests that companies own and operate the network, while a subsidiary manages the network, taking financial, technical and other decisions independently from the parent company. A supervisory body is in charge of permanent monitoring and preserving the financial interest of the mother company.

According to the Package, third countries *de jure* can register their transmission operators, but they must comply with all standards derived from the directives. It seems quite difficult because the ACER is in power to reject the registration of a foreign TSO.[259]

It is worth noting that the unbundling legislation was implemented in March 2012, for a transmission system controlled from a third country the deadline for the compliance was March 2013.[260] There are new amendments to the pieces of legislation and different member states implement the guidelines with different speed.

There is also an exemption from certain obligations, including tariffs and unbundling, for relatively new gas and electricity companies under the conditions listed in the Third Energy Package, if the real risks of underinvestment and failure exist.

2.4.2. Obstacles to the IEM

Despite the clear messages on the energy strategy and on the IEM, in particular, significant obstacles to open integrated energy markets still remain, namely, insufficient interconnection capacities, the availability of cheap LNG in several regions, the absence of harmonization of market rules in different member states.[261] To overcome these difficulties the Third Energy Package legislation has to be incorporated in the national laws of all the member states, otherwise it will lead to the segmentation of the market. For example, Lithuania, Latvia and Estonia still remain integrated into Russian energy network, while the management of the power system and the functioning of the market have not yet been aligned with the requirements of the Third Energy Package.[262] To overcome segmentation of markets, harmonized market rules for gas and electricity have to be prepared, and implemented by 2014.

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[259] Borovskiy, op. cit. p. 189
[260] The European Commission, Press Releases Database, op. cit.
[261] The EU publications, "The Internal Energy Market, time to switch into higher gear" http://ec.europa.eu/energy/gas_electricity/legislation/doc/20110224_non_paper_internal_nergy_market.pdf accessed July 29, 2013
[262] **The Lithuania Tribune**, "Brussels supports Lithuania in implementation of EU's Third Energy Package", April 24, 2013 http://www.lithuaniatribune.com/35170/brussels-supports-lithuania-in-implementation-of-eus-third-energy-package-201335170/ accessed July 29, 2013

Another step is to upgrade and integrate the networks from Lisbon to Helsinki, from Bucharest to Dublin. The Commission proposed electricity grids for 2020: offshore grid in the Northern and Central Europe, interconnections in South Western Europe to accommodate solar, wind and hydro facilities, completion of the Baltic Energy Market Interconnection Plan (BEMIP)[263].

As for the gas market, aftermath of the 2009 crisis, when Russia shut down the flow of gas going to Europe via Ukraine, the EU indentified several priority corridors[264] for the sake of long-term deliverability, i.e. supply security, mentioned in the second Strategic Energy Review. The development of the BEMIP[265] will improve the security and diversity of the Baltic region energy supply linking the Baltic, Black, Adriatic, and Aegean Seas. Southern Corridor bringing gas from the Caspian Basin, Central Asia, and the Middle East will also in the long term improve security of supply. Completion of a Mediterranean energy ring, linking Europe with the Southern Mediterranean through electricity and gas interconnections will help develop the vast solar and wind energy potential. North-Southern Corridor in Western Europe to make full use of alternative external supplies. Besides, taking into consideration of the importance of LNG, as a main source of diversification, sufficient capacity should be available to all the member states on the basis of solidarity agreements.

The next step is to protect consumers and to support them in making right choices. To achieve this goal awareness of the existence of alternative offers, gas and electricity consumption costs, and possibility of switching should be raised. If an energy consumer wants to switch a supplier, the process should be as easy as possible. All together these interconnectors will be able to create the European super-grid.

Generally, the Third Energy Package provides the legal basis and the institutional framework for the action. A cohesive internal market will require a single super-grid and a strong regulator. The EU must proceed with unbundling and establish measures to overcome the bottlenecks. Thus, first of all, a correct and timely implementation of the Third Energy Package is a key factor in completing the single European energy market, and enhancing consumer welfare. To achieve this objective, an international co-operation with EU energy

[263] The BEMIP suggests integration of the Baltic States into the European market through reinforcement of their internal networks and strengthening of interconnections with Finland, Sweden and Poland.
[264] The European Commission, Communication "Second Strategic Energy Review", http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008DC0781:EN:HTML:NOT accessed July 29, 2013
[265] The BEMIP aims at concrete measures to connect Lithuania, Latvia and Estonia better to wider EU energy networks. http://ec.europa.eu/energy/infrastructure/bemip_en.htm accessed July 29, 2013

partners is also of vital importance, as mentioned in the latest official documents of the EU on energy. For example, in order to optimise the functioning of the IEM, *an information exchange mechanism*[266] with regard to intergovernmental agreements between the member states and third countries in the field of energy was established in 2012. The member states are supposed to inform the Commission of negotiations with regard to new intergovernmental agreements, while the Commission has the right to participate as an observer at its own request.

Overall, the course of the energy policy is defined not by a single document, but a number of documents prepared by the European Commission especially since 2000. Taking decisions, writing Papers, creating legislation on energy issues at supranational level means that the value of the desired European energy policy is as much as it was for the introduction of euro, for example. Notwithstanding this fact, in practice, many policy initiatives in relation to energy remain at national member state level, and progress in policy at European level requires voluntary cooperation between the member states. For instance, the Third Energy Package was published in the Official Journal of the EU in 2009, but it is still not fully implemented by all the member states. The adoption of a common energy policy means *de facto* the loss of some sovereignty of the member states. John Bruton, an Irish politician, said that the energy course direction of the EU in the last fifty years is one of the biggest failures, especially taking into consideration that the integration began with steal and coal industries.[267] It is true that European integration began with pooling of steal and coal industries, however, at that time the primary goal was to avoid possible wars between France and Germany, not to create an integrated energy policy. It is obvious that the member states are still not ready for a considerable surrender of sovereign control over energy issues. Bearing in mind the lack of single voice between the member states on energy issues and current mineral resources deficit within the EU, the reality of the EU's energy policy differs vigorously from what is enshrined in the official documents. If the existence of the IEM is doubted, the achievement of energy security is quite debatable.

[266] The European Parliament, Decision No 994/2012/EU http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:299:0013:0017:EN:PDF accessed July 29, 2013
[267] Valentina Pop, "Energy policy is the EU's 'big failure' of Past 50 Years", May 28, 2005 http://euobserver.com/news/28200 accessed July 20, 2013

CHAPTER 3

THE RELATIONS BETWEEN THE EU AND RUSSIA IN THE FIELD OF ENERGY

The EU and Russia are not only neighbours but also strategic partners who cooperate on a wide range of bilateral and global challenges, based on joint commitments and shared interests. As Putin said, "Between Western Europe and Russia there are only a few dotted lines while between Europe and America there is on Ocean"[268], probably hinting on common values and interests. This chapter begins with highlighting the milestones of the relations, proceeds with analysis of the current state of affairs between the actors, and studies the main issues of the EU-Russia energy agenda.

3.1. RUSSIA'S ENERGY POLICY

Russia has more territory both onshore and offshore than any country. It encompasses the world's richest hydrocarbon province, West Siberia. Russia's discovered and estimated undiscovered oil and natural gas reserves bases are among the very largest on the planet.[269] Nowadays, Russia is a major producer and exporter of oil and natural gas and its economy largely depends on energy exports. Russia's economic growth continues to be driven by energy exports given its high oil and gas production and the elevated prices for those commodities. In 2011, Russia was the world's second-largest producer of oil after Saudi Arabia, and the second-largest producer of natural gas in 2011, second to the United States.[270] The volumes of production, imports and exports for 2010 are presented in the table 2.

[268] Stuermer , op. cit. p. 44
[269] John D. Grade, **Russian Oil Supply, Performance and Prospects**, Oxford University Press, 2005, p. 215
[270] U.S. Energy Information Administration, Independent Statistics and Analysis, http://www.eia.gov/countries/cab.cfm?fips=RS

Table 2: Russia's Oil and Gas Production, 2011[271]

Resource, Unit	Natural Gas, *TJ on a gross calorific value*	Crude Oil, *1000 tones*
production	25128116	484687
Imports	162745	0
Exports	-7172216	-243260
domestic supply	17842472	238984
final consumption	6662963	109

Source: IEA Statistics, 2011

Basically, Russia produces more energy than it consumes, the half of energy produced goes on export mainly to the European markets. Internally, Russia gets over half of its domestic energy needs from natural gas.

3.1.1. Oil and Natural Gas Sectors

3.1.1.1. Oil Sector

According to the *Oil and Gas Journal*, Russia's proven oil reserves, mostly located in Western Siberia, were 60 billion barrels as of January 2012.[272] In 2011 Russia produced an estimated 10.2 million bbl/d of total liquids, consumed roughly 3.1 million bbl/d, while exported around 7 million bbl/d.[273] The extraction of oil reached 44473.7 thousand tons, while export share was 18734 thousand tons in August 2013.[274] Russia's pipeline oil exports fall under the jurisdiction of the state-owned pipeline monopoly, Transneft[275]. In the past years, Russia holds leading positions in terms of crude oil production and provided 12% of

[271] The IEA http://www.iea.org/statistics/statisticssearch/report/?&country=RUSSIA&year=2010&product=Oil accessed July 29, 2013
[272] The Oil and Gas Journal http://www.ogj.com/index.html accessed August 23, 2013
[273] U.S. Energy Information Administration, "Russia" http://www.eia.gov/countries/cab.cfm?fips=RS accessed July 29, 2013
[274] Ministerstvo Energetiki Rossiyskoi Federatsii http://minenergo.gov.ru/activity/oil/ (my translation)
[275] OAO 'Transneft' is a company, where state representatives in the management bodies of the company define its strategic direction and control the development and production of economic and financial activity. http://www.transneft.ru/ accessed July 6, 2013

the world oil trade. Over four-fifths of Russian oil is exported to the European market, mainly to Germany, Poland, France, Finland, Spain, Italy, Lithuania, and Sweden.[276] Russian oil meets its competitors from the North Sea and the Middle East.[277]

The untapped oil reserves of Eastern Siberia, Sakhalin Island, the Russian Arctic, and the northern Caspian Sea attract attention of ExxonMobil, Shell, and BP, who are investing in exploration and development on hydrocarbon-rich Sakhalin Island; although the government opts for a greater role for domestic companies in these areas.[278] For example, Gazprom acquired control of the Sakhalin-2 project from Shell, and the Russian state company is continuing to seek control of the marketing of gas supplies from the Sakhalin-1 project, led by ExxonMobil.

There are several big oil companies in Russia with enormous oil volumes of production. The state-run Rosneft is the largest oil producer in Russia, emerged after the liquidation of Yukos assets, which Rosneft had acquired. Lukoil is the second-largest holder of oil reserves and producer in Russia, followed by the partnership of TNK-BP, and such companies as Sugutneftegaz, Gazprom Neft, and Tatneft.[279]

The main factors made the growth of crude oil production possible are stable world oil prices, granting preferential tax tariffs for new promising fields, the expansion of transport infrastructure in the area of new fields in Eastern Siberia.[280]

Recently oil has become a labor-intensive and effort-consuming energy resource due to harsh weather conditions and complicated geologic structure of new fields.[281] The following projects are the most important in the sphere of development of oil pipeline transportation: the oil pipeline Eastern Siberia – Pacific Ocean; construction of the oil pipeline Unecha – Ust-Luga, which is the second line of the Baltic pipeline system;

[276] Ministrestvo Energetiki RF, Energostrategia na Period do 2030, http://minenergo.gov.ru/aboutminen/energostrategy/ch_3.php accessed July 6, 2013
[277] Sarah Dixon, **Organisational Transformation in the Russian Oil Industry**, Edward Elgar Publishing Limited, UK, USA, 2009, p. 25
[278] U.S. Energy Information Administration http://www.eia.gov/countries/cab.cfm?fips=RS accessed July 6, 2013
[279] Ministerstvo Energetiki RF, http://minenergo.gov.ru/activity/oil/ accessed July 6, 2013
[280] Ibid.
[281] **Neftegaz Novosti,** "Doktrina energeticheskoi bezopasnosti Rossii. Vsa nadejda na neftepoligony s lgotnim nalogooblajeniem?" http://neftegaz.ru/news/view/103117 accessed July 6, 2013 (my translation)

development of oil and oil products export terminals in the ports of Primorsk, Ust-Luga, and Nakhodka.[282]

3.1.1.2. Natural Gas Sector

Russia is the world leading country in terms of reserves with 1,680 trillion cubic feet (TCF) accounting for 23% of the world reserves, and annual production of natural gas.[283] The main importers are the EU and the CIS. Russian gas accounts for approximately 30% of the overall gas consumption in the European countries, including Turkey. With a unique gas transportation system, Russia also plays an important role in supplying gas from Central Asia to Europe and to the countries of the CIS.

About 70% of Russia's natural gas is destined for Germany (27%), Italy (10%), France (8%), Eastern European countries (31%), and the CIS (37%).[284] Russian energy policy is also developing in Asian direction under the principle of diversification.

The state-run Gazprom, controlling most of Russia's gas reserves, dominates Russia's upstream, producing about 80% of Russia's total natural gas output and gas pipeline system.[285]

It should be mentioned that disputes over gas pipelines occur quite often. Russia's natural gas exports to Eastern and Western Europe that are transported through pipelines traversing Ukraine and Belarus were affected by political and economic disputes between Russia and these natural gas hubs in 2006 and in 2009.

Overall, the EU and Russia are not only interdependent on each other in economic terms; they are also interconnected and bound to each other by oil and gas infrastructure.

3.1.2. Formation of Russia's Energy Policy

A long-term formation of energy policy began after the collapse of the USSR, when 'Energy Policy Concept'[286] was approved by the government in 1992. Two years later 'Major Directions of Energy Strategy of Russia'[287] and 'Major Provisions of the Energy Strategy of

[282] Ministerstvo Energetiki RF, op. cit.
[283] U.S. Energy Information Administration, op. cit.
[284] U.S.Energy Information Administration, op. cit.
[285] Rawi Abdelal, Sogomon Tarontsi, Alexander Jorov, "Gazprom: energy and strategy in a new era", *Harvard Business Review*, July 7, 2009, p. 2 http://www.hbs.edu/faculty/Pages/item.aspx?num=36340 accessed July 6, 2013
[286] The Resolution N° 26 of September 10, 1992 of the Government of the Russian Federation http://www.energystrategy.ru/ab_ins/about.htm accessed July 7, 2013
[287] Ukaz Prezidenta RF ot 7 Maya, 1995 N° 472 http://base.garant.ru/100707/ accessed July 7, 2013 (my translation)

Russia'[288] both for the period up to 2010 were adopted by the government of the Russian Federation. These documents signaled that Russia became aware of the need for a coherent long-term planning and strategy for the action to prosper and ensure further developing of its new-born market economy.

Owing to the necessity of regular monitoring of the strategy implementation and its correction, the Ministry of Fuel and Energy in 1998 decided to establish the State Institute of Energy Strategy (IES), which would be in charge of analysis and long-term forecast of the energy development in regards with the trends of the socio-economic development of the country.

In 2003 'The Energy Strategy of Russia for the period up to 2020'[289] was approved. The document defined main priorities, its aims, and mechanisms of the realisation of the energy policy of the country. The main objective of the energy policy up to 2010 was the restructuring of fuel and energy sector and economy as the whole. The main objective of the strategy is to define the mechanisms of the formation of conditions for secure, efficient, and sustainable functioning of the energy sector of the country. According to the strategy, to achieve this goal, first of all, the strong, democratic, legitimate and *sui juris* state power is needed. The strategy defines the energy security of Russia as the ability of the energy industry to produce energy resources enough for export and import, i.e. the absence of the deficit of energy resources, and thus, timely investment; the efficient energy consumption; the flexibility of the energy sector meaning readiness for short-term and long-term threats, including economic, political, and military challenges. Proactive measures such as investment and diversification of sources are of high concern.

3.1.2.1. The Energy Strategy for the Period up to 2030

In 2007–2008 the IES in close collaboration with other working groups prepared concepts and proposals for a project of 'The Energy Strategy of Russia for the period up to 2030'[290]. The project was finalized despite the global economic crisis in 2008. Russia's determination to adopt a basic strategic document for the development of the key sector of its

[288] Postabovlenie Pravitelstva N° 1006 ot 13 October, 1995 http://gostfile.ru/gost_pr/normativnye_dokumenty/postanovlenie/postanovlenie_pravitelstva_rf_ot_13_10_1995_n_1006/index.html accessed July 7, 2013

[289] Ministerstvo Energetiki RF, "Osnovnie polojenia energeticheskoi Strategii Rossii na period do 2020" http://esco-ecosys.narod.ru/2002_2/art31.pdf accessed July 17, 2013

[290] Energostrategia, op. cit.

economy in spite of the high uncertainty of the external economic environment demonstrates the change of both its attitude and its approach to strategic planning. It should be stressed that the Strategy of the Russian energy sector has not been adapted to external conditions; it has been formed from the target model of its future development. Russian energy sector holds a sufficient potential for external and internal resistance to threats, enabling the formation of a strategic course of its development on the basis of target guidelines, rather than on steadily changing forecasts of external and internal conditions.

The main aims of the Strategy are to maximize the efficient use of energy resources and energy potential of the country, to foster sustainable development and improve the quality of living standards of the citizens, and, finally, to strengthen foreign economic position of the country, with the latter being a good example of how energy is interconnected with foreign policy.

The document presents current results of the previous Strategy, main trends and forecasts of the interaction between energy and economy, prospects of demand for Russian energy resources, main provisions of the state energy policy, development prospects of Russian energy complex and expected results. The main domestic challenge is seen in the transition to an innovative path of economic development. The main external challenge is perceived to lie in the necessity to overcome the threats rooted in the instability of world energy markets and volatility of world energy prices. The energy sector is also supposed to reinforce Russia's positions in the world economic system. The Strategy offers the scenario of basic innovative development based on a model for phased long-term development of the energy sector, leading to the decrease in dependence of the economy on the energy sector. Therefore, a significant contribution to the investment for the innovative development of the domestic economy will be of crucial importance.

There will be three phases of restructuring of Russian economy up to 2030. At the end of the third phase, the country is expected to have new key sources of economic growth more powerful than oil and gas sector based on the high technology services.

The concept of energy security, being the main strategic guideline of the long-term state energy policy, is defined in the document as the *internal diversification of sources* (the continental shelf of Sakhalin, the Republic of Sakha, the Magadan And Irkutsk Regions and The Krasnoyarsk Territory, the continental shelf of the Arctic seas and northern territories of Russia); and *external diversification of export destinations* (Eastern energy markets, such as

China, Japan, Republic Of Korea, other countries of the Asia-Pacific region); *development of non-fuel energy; promotion of energy saving*. As a result, the total volume of Russian energy exported to the European energy markets is expected to steadily decline. However, Russian gas import from the Central Asian countries, such as Turkmenistan, will simultaneously allow to meet the EU's energy needs and to develop eastern export dimension of energy.

To provide energy security of the country the construction of the oil pipeline Eastern Siberia – Pacific Ocean with an annual carrying capacity of 80 million tons, projects "Sakhalin-1" and "Sakhalin-2" were launched. The exploration of the Western Siberia, the Eastern Siberia, and the Far East commenced.

As far as the gas complex is concerned, gradual and controlled liberalization of domestic gas market was launched in 2011. Within the period up to 2030, export of energy resources, particularly gas, is expected to remain the same as twenty-six deposits with proven gas reserves of 10.4 trillion m^3 were discovered within the Yamal Peninsula.

After 2010, the forecasted volumes of gas production are expected to be provided at the expense of development of deposits on the Yamal Peninsula, the continental shelf of the Arctic seas, including Stockman deposit, in waters of the Gulfs of Ob and Taz, as well as in the Eastern Siberia and Far East.

Besides, Yamal – Europe gas pipeline was completed, gas pipeline "Goluboy Potok"[291] was constructed. Construction of gas pipelines "Severniy Potok"[292] and Northern Areas of the Tyumen Region – Torzhok was commenced. Decisions on the construction of Pre-Caspian gas pipeline and "Yuzhniy Potok"[293] , being of great importance, were taken.

Overall, the Strategy abounds with detailed information on energy situation in the country, and a step-by-step instruction of how to restructure Russian economy, which is significantly, depends on energy revenues. The document defines the energy security phenomenon and the ways to achieve it with regards to Russia energy policy, first of all by diversification of Russian export destinations, which can be reinforced by the utterance made by the President Putin: "The position of many European countries is not reliable. Russia is a European nation – with several million Muslims. We have vast interests in Asia… We shall not waste our chances with the EU… We have to diversify."[294]

[291] Blue Stream http://www.gazprom.ru/about/production/projects/pipelines/blue-stream/ accessed July 17, 2013
[292] Nord Stream http://www.nord-stream.com/ru/ accessed July 17, 2013
[293] South Stream http://www.south-stream.info/ accessed July 17,2013
[294] Stuermar, p.64-65

3.1.2.2.. Russia's Energy Security Doctrine

The dynamically changing global energy markets have made Russia to revise its main cornerstones in the area. Russian authorities have prepared a new conceptual document on energy security, the Doctrine on Energy Security.[295] The Doctrine is a normative document with the fixed administrative law principles, and mechanisms. The document differentiates between six types of energy security: global energy security, national energy security, security of energy system, energy security of corporation, and local one concerning individuals. As far as Russia is concerned, "energy security encompasses resource sufficiency, economic affordability of energy, environmentally concerned energy, physical and technological accessibility, and, finally, balanced supply and demand of energy"[296].

The document defines external and internal threats to Russian energy security. External threats are as follows: deliberate violation of energy transit, hindering the access of energy resources in the world market; an unfavourable situation in the world market with limited demand and price volatility; global climate change, leading to the restrictions on the use of hydrocarbons. Amongst the internal threats there is the lack of monitoring and forecasting of natural disasters, depreciation of fixed assets, high dependence on imported technologies, corruption in investment and operating costs resulting in the increase of consumer tariffs can be named.

Energy security is supposed to be achieved by proactive measures as monitoring the current situation in global energy market and foreseeing possible threats of natural, financial, technological, and geopolitical nature. It is highlighted in the Doctrine that Russia limits the participation of foreign partners in the development of strategic reserves of energy resources, especially in the field of innovative energy technologies, and import substitution of equipment for strategic energy facilities, such as nuclear power plants, oil and gas, information and management systems.

As a matter of fact, the 'Energy Strategy of Russia for the Period of up to 2020', issued in 2003, assumes that Europe will remain key for Russian oil and gas exports for the next 20 years. But the Russian objective is to increase oil and gas exports to China, Korea, Japan, and India from 3 percent in 2003 to 30 percent in 2020.[297] Russia's energy diplomacy

[295] Neftegaz News, op. cit.
[296] Doktrina Energobezopasnosti RF, http://labenin.z4.ru/Docs/en_bezop_project.doc accessed July 17, 2013
[297] Energy Strategy of Russia up to 2020, University of Energy Strategy, Moscow, 2010
http://www.energystrategy.ru/projects/docs/ES-2030_%28Eng%29.pdf accessed July 17, 2013

also makes its presence felt by the East Siberia/Pacific Ocean (ESPO) oil pipeline, which is known as "a strategic project" for the Russian state.[298] If the ESPO is intended to diversify Russia's oil and gas exports, Europe is no longer the monopsonistic consumer of Russian energy sources, which makes its energy security even more vulnerable.

Notwithstanding this fact Russia's position towards Asian markets is precautionary. In order to service these markets a more complete infrastructure, including new pipelines, roads and railways have to be built. Besides, the parties have not agreed on prices. It will not only take years to reach this goal, but also can facilitate the spread of Chinese economic influence, which is not favourable for Russia.[299]

3.1.3. Peculiarities of Russia's Energy Policy

The Medvedev-Putin tandem introduced new elements to the way society and power organized in Russia, as well as changed the nature of Russia's relations with the West[300]. Vladimir Putin came to power after disagreement over the war in Kosovo, NATO enlargement, the war in Chechnya, America's proposed National Missile Defense system, when the stagnation of relations between Russia and the EU consequently led to aggregation.[301] As Vladimir Putin claimed: "The only realistic choice for Russia is the choice to be a strong country, strong and confident in its strength, strong not in spite of the world community, not against other strong states, but together with them."[302] Thus, Putin set two main goals: to establish democracy and to restructure economy of the country by adapting the free market to Russian realities.

As far as democracy is concerned, Putin put forward an ideology of pragmatism, self-concentration, and "a strong nation-state"[303] with "managed democracy"[304] or "administrated

[298] Wojciech Kononczuk , "The East Siberia-Pacific Ocean (ESPO) Oil Pipeline: a Strategic Project – an Organizational Failure?" *Centre for Eastern Studies*, Warsaw, Issue 12, October 10, 2008 p. 2 http://www.osw.waw.pl/sites/default/files/commentary_12.pdf accessed August 3, 2013

[299] Dieter Dettke, "Europe and Russia: From Neighborhood Without a Shared Vision to a Modernization Partnership", *European Security*, 20: 1, 2011 p. 7 http://www.tandfonline.com/doi/abs/10.1080/09662839.2011.557367#.Une6TlNvXrQ accessed April 10, 2011

[300] Lilia Shevtsova, **Lonely Power**, Carnegie Endowment for International Peace, 2010, p.76

[301] Truscott, op. cit. p. 245

[302] Vladimir Putin, State-of-the-Nation Speech, 8 July, 2000, http://archive.kremlin.ru/eng/speeches/2007/02/10/0138_type82912type82914type82917type84779_118123.shtml accessed July 17, 2013

[303] Rita de Leo "Putin, Professional Politician" in Ronald J. Hill, Ottorino Capelli (Eds.) **Putin and Putinism**, Routledge, 2010, (103-113) p.108

Russian-style democracy"[305], controlled by and enlightened elite, i.e. "the vertical of power"[306]. "Democracy is not a potato that can be transplanted from one place to another", as Minister of Defense Sergey Ivanov argued. He added that the "speed and forms of transformations should be predicated on the specific conditions of a particular country".[307]

As for the restructuring of the economy, that seemed a well-nigh impossible task. As it is known, with the Soviet Union demise the decay of the Russian people in terms of rising death-rates, deteriorating health, increasing alcoholism, declining birth-rate, and wide-spread corruption in oil companies[308] had been registered by international organisations[309], the price was to be paid "for the legacy of the Soviet-type economy"[310]. Putin realized that Russia needed to be integrated into global institutions, world economic structures, and expand foreign trade.[311] The best possible solution was interdependent links with the EC in the sphere of energy, which was quite logic, given the fact that Russia was a huge source of energy.

In general, the outcome of this policy direction can be presented by two significant consequences. The first one is that Russia has enjoyed a very favourable position in the area of energy transit: all possible existing pipelines from the region run through the Russian territory, which made customers of Russian energy resources dependent on 'Russia's will' to permit them access to the pipeline network.[312] As a result, a political discourse abounds in accusations of Russia using its energy resources as "a political instrument", "a foreign policy tool"[313] for "strategic manipulation"[314]. The question of the liberalisation of Russia's gas market, in particular, and the splitting up Gazprom's monopoly into production, transport,

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[304] Stephan K. Wegren, Dale R. Herspring, (Eds.) **After Putin's Russia: Past Imperfect, Future Uncertain,** Rowman & Littlefield Pub. Ltd, 6th Edition, 2010, p. 301
[305] Struemer, op. cit. p. 175
[306] Struemer, op. cit. p. 175
[307] The BBC Moscow, Interview MFA Sergey Lavrov in connection with "Russia in Global Politics", 5 February 2005, http://www.mid.ru/brp_4.nsf/0/7E5558FD466E13C744257B28002CA821 accessed September 20, 2013
[308] Heike Pleines, "Corruption and Crime in the Russian Oil Industry" in David Lane (Ed.) **The Political Economy of Russian Oil**, Rowman & Littlefield Pub.,Inc., 1999, (97-111), p. 97
[309] Hill, Cappelli, op.cit. p.108-109
[310] Vladimir Putin "Russia at the Turn of the Millennium" in Andrei Melville Vladimir Putin "Russia at the Turn of the Millennium" in Andrei Melville, Tatiana Shaklein (Eds**.) Russian foreign Policy in Transition**, CEU Press, 2005, (221-234), p. 233
[311] Ibid. p.223
[312] Westphal, op. cit. p. 21
[313] Jurgis Vilemas "Russia's Energy Policy" in Janusz Bugajski (Ed.), **Toward an Understanding of Russia: New European Perspectives**, The Council of Foreign Relations Inc., 2002, (45-57), p. 45
http://www.google.ru/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&ved=0CFMQFjAG&url=http%3A%2F%2Fwww.cfr.org%2Fcontent%2Fpublications%2Fattachments%2FUnderstand_Russia.pdf&ei=JbN3UuCbCIyR5ASo6oCgCw&usg=AFQjCNFXV-uf-4lVAulTmZfPpsRu9kgMVg&bvm=bv.55819444,d.bGE accessed July 20, 2013
[314] Adam N. Stulberg, **Well-Oiled Diplomacy: Strategic Manipulation and Russia's Energy Statecraft in Eurasia**, State University of New York Press, 2007, p. 37

supply and export has always been an issue of disputes between the EU and Russia. However, it does not have any advantage to Gazprom, and, consequently, to Russian energy policy, because "what is good for Gazprom is good for Russia"[315]. Moreover, all major gas pipelines from Central Asia gas fields are running through Russia and therefore the only way to sell Asian gas to European market lies across Russia. Gazprom imports Asian gas and sells it at low prices to Russians and the CIS, while exports its own gas to European markets at higher prices.[316] Thus, Russia gains high windfall profits.

Another consequence is that Russia has become a heavily hydrocarbon-based economy being significantly dependent on exported natural resources as oil and gas. This reality has resulted in two challenges Russia is facing nowadays: managing a resource-based economy successfully and facilitating economic diversification over time.[317]

More than a half of Russian exports is the share of petroleum and natural gas (70%)[318], thus, federal budget is directly dependent on stability of oil world prices. To sustain economic growth the country must continue to increase exports of hydrocarbons and make its economy less vulnerable to importing foreign capital.[319] At present, Russia's extracting capacity more than reproducing one. In order oil and gas sector continue to strengthen Russia's economy, mineral resources should be reproduced enough.[320] The experts claim that if Russia possessed energy efficient technologies the EU has, it would consume 35 % less energy than it does at present. Every year Russia 'loses' as much energy as ten countries like Finland would consume.[321] Hence, Russia needs "to develop its economy based on new energy sources and technologies"[322], to provide favourable atmosphere for international investments and "diversify its source of income"[323].

However, any major diversification in the export structure is unlikely to happen for the foreseeable future, thus, Russia is almost certain to remain highly dependent on natural resource exports.

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[315] Valentin Panushkin, Mihail Zygar, **Gazprom: Novoe Russkoe Orujie**, Zaharov, 2008, p. 116
[316] Westphal, op. cit. p. 23
[317] Rudiger Ahrend, "Sustaining Growth in a Hydrocarbon-Based Economy" in Michael Ellman (Ed.) Russia's **Oil and Natural Gaz Bonanza or Curse?** Anthem Press, 2006, (105-127), p. 105
[318] Energy Roadmap 2050, op. cit.
[319] Ahrend, op. cit. p. 112-113
[320] Semen Kimelman, Sergei Andrushin, "Problemy Neftegazovoi Orientatsii Ekonomiki Rossii" *Voprosy Ekonomiki*, Rossiyskaya Akademia Nauk, April 4, 2006, p. 64
[321] Borovskiy, op. cit. p. 90
[322] Ibid.
[323] Energy Roadmap 2050, op. cit.

Very often national resources are seen as "a resource curse"[324] for long-term economic development, leading to "Dutch disease"[325], a situation when a country discovers large natural resources, the extraction of which increases the equilibrium exchange rate and, thereafter, puts pressure on the competitiveness of the other sectors tradable in economy. Carlex Boix argues that there are zero examples of a successful transition to democracy in a country where oil generates more than one third of its export income.[326] Moreover, 'resource curse' not only exert negative effects on democracy, it also boosts corruption and distorts economic liberalisation.[327] Yet, Russia is different from other resource-based economies in structure of its political economy and in the resources it possesses: oil, natural gas, iron, steel, copper and nickel. Russia's aim is to develop its hydrocarbon industries and by utilizing the revenues from them to diversify into new economic activities, thus, reducing its dependence on energy sector, which is called "Kuwaitisation"[328]. Hence, this 'curse' can be significantly mitigated by good macroeconomic policies and a sound institutional framework.

Apart from diversification of export routes, which would allow Russia to benefit economically and geopolitically, Moscow aims at preserving its role of a customer of Southern Caucasian and Central Asian countries, such as Kazakhstan, Turkmenistan, and Azerbaijan. For instance, Kazakhstan and Turkmenistan initiated the projects to widen gas pipeline network "Central Asia- Center"[329] with the projected Pre-Caspian gas pipeline bringing natural gas from Turkmenistan passing Kazakhstan to Russia as it is seen at the map, thus, preventing the EU to buy gas from Turkmenistan.

Another example could be the Samsun-Ceyhan[330] and the Burgas-Alexandroupolis oil pipeline networks will allow Russia to pomp huge volumes of Kazakh oil circumventing the

[324] Jeffery D. Sashs, Andrw M Warner, "Natural resources and economic development: the curse of natural resources", *European Economic Review*, 45, p. 828 http://www.earth.columbia.edu/sitefiles/file/about/director/pubs/EuroEconReview2001.pdf accessed August 30, 2013
[325] Ahrend in Ellman, op. cit. p.118
[326] Carles Boix, Democracy and Redistribution, New York: Cambridge University Press, 2003, p. 85
[327] Peter Rutland, "Putin's Economic Record" in Richard Sakwa (Ed.) **Power and Policy in Putin's Russia** Routledge 2009, (173-194), p. 183
[328] Debra Johnson, "EU-Russian Energy Links" in Debra Johnson, Paul Robinson (Ed.) **Perspectives on EU-Russia Relations**, Routledge, 2005, (175-193), p. 176
[329] Central Asia-Center Pipeline http://www.gazprom.com/about/production/projects/pipelines/central-asia/ accessed July 20, 2013
[330] "Russia Turkey to start negotiations for Samsun-Ceyhan oil line", *Pipeline and Gas Journal*, Vol. 238, No.: 1, Januray 2011, http://www.pipelineandgasjournal.com/russia-turkey-start-negotiations-samsun-ceyhan-oil-line accessed September 20, 2013

Turkish Straits. Besides, Moscow managed to reach an agreement with Baku over buying Azeri gas since 2010.[331]

Figure 4: Map of the Central Asia-Center Pipeline Project

Source: Central Asia-Center Pipeline http://www.gazprom.com/about/production/projects/pipelines/central-asia/ accessed July 20, 2013

Another objective is to ensure the presence of Russian energy companies in international markets. However, this is a difficult task for Moscow, and several attempts as buying Britain Centrica or Ukrainian distribution gas network failed.

3.2. HISTORY OF THE RELATIONS

This section examines the history of the European Union and Russia relations, which can be described in short by the expression 'two steps forward, one step back'. Further, it will

[331] Borovksiy, op. cit. p. 45

be clear that both sides prefer to go solo in energy policy and approach reforms or innovations cautiously despite the great interdependence demonstrated further.

3.2.1. Cold War Rhetoric

Europe's relationship with the Soviet Union was largely determined by Cold War rhetoric. Initial diplomatic contacts between Western European countries and the Soviet Union tended to be on a bilateral basis usually limited to trade policy.[332] As one of Russian oil leaders said: "Crude oil along with other natural resources were nearly the single existing link of the Soviet Union to the world"[333].

In the 1950s the relations between the actors were uneasy and complicated, first of all due to Russian perception of Europe as an economic base for the NATO. At that period of Cold War the USSR did not recognize the Treaties of Rome for a long time, while Western Europe did not recognize the Council for Mutual Economic Assistance[334] (Comecon).

In the middle of the 1970s the Community's approach towards Comecon members can be regarded as integrated with the role for the Community institutions growing up. 1973 October War and Arab oil embargo caused the quadrupling of oil prices, which was quite beneficial for the Soviet economy, enabling the country to finance its urgent needs.[335] In general, till the 1980s, there were no concrete developments in the relations.

The first important step towards official co-operation was the joint EC-Comecon Declaration[336] signed in 1988 aiming at developing the relations in strategic spheres of interest of both actors. One year later the USSR, the European Economic Community (EEC) together with the ECSC signed their first historic agreement on trade, commerce and economic co-operation (TCA)[337]. Although it was only a temporary document, the TCA gave a prominent start to building legal foundations for the EU–Russia relationship.[338] This

[332] Johnson, Robinson, op. cit. p. 4
[333] Yergin, **The Quest**, p. 23
[334] Comecon was founded in 1949 by the Soviet Union, Bulgaria, Czechoslovakia, Hungary, Poland, and Romania. It worked till 1991 to enable member states to exchange economic experiences, extend technical aid to one another, to render mutual assistance with respect to raw materials, foodstuff, machines, and equipment. http://www.shsu.edu/~his_ncp/CMEA.html accessed July 30, 2013
[335] Yergin, op.cit., p. 23
[336] The EU/Comecon Joint Declaration http://europa.eu/rapid/press-release_MEMO-88-97_en.htm accessed July 30, 2013
[337] The European Commission, Trade, http://ec.europa.eu/trade/policy/countries-and-regions/countries/russia/ accessed July 30, 2013
[338] Sergey Tumanov, "Russia-EU Relations, or how the Russians really view the EU", *Journal of Communist Studies and Transition Politics*, Routledge, London and New York, Vol. 22, December , 2008, p. 3 http://www.tandfonline.com/doi/abs/10.1080/13523279.2011.544387#.UnfKgFNvXrQ accessed July 20, 2013

agreement regulated political and economic relations between the parties, required gradual abolishment of quantitative restrictions on the Soviet export to the EC except for several types of goods. The USSR, in its turn, was supposed to provide favourable conditions for European goods.

3.2.2. After the Collapse of the USSR

With the fall of the Berlin wall in 1989 a period of profound political, socio-economic and cultural transformations began in the former Soviet Union states (FSU). The USSR subsequently collapsed, and so did the Comecon and the Warsaw Pact. New sovereign and independent states emerged on the post-Soviet territory, soon stimulating a number of new inter-governmental agreements: the Commonwealth of Independent States (CIS), Collective Security Treaty Organization, Eurasian Economic Community and others. Simultaneously, the countries of Central and Eastern Europe (CEE) applied for the membership of NATO and the EU, and several years later successfully were accepted by both organizations.[339]

3.2.3. Formalisation of Relations

Russia became not only a trade partner of the EC but also a neighbour, therefore the lack of legal base in the relations should have been fulfilled. The EC, the ECSC, the Euratom and Russia moved forward and institutionalized their relations. In June 1994 in Corfu, the president of the Russian Federation and leaders of the EC member states headed by the president of the European Commission signed the Partnership and Co-operation Agreement (PCA)[340], which came into force three years later due to EU concerns over the first war in Chechnya (1994-1996). Before this agreement, the relations of Russia and the EU had been of a rather *ad hoc* nature. The agreement comprising one hundred and twelve articles, ten annexes, two protocols, and a joint declaration is mostly about trade and economics.

The PCA not only covers trade and economic relations, but establishes a political dialogue, comprehensive technical cooperation. The main principles of the agreement are as follows: strengthening of political and economic freedoms, democratic development, a socially oriented market economy; establishment of an appropriate framework for dialogue

[339]Ibid. p.124
[340] The PCA http://europa.eu/legislation_summaries/external_relations/relations_with_third_countries/eastern_europe_and_central_asia/r17002_en.htm accessed July 30, 2013

based on the principles of mutual benefit, responsibility and support; encouragement of trade, provision of conditions for the establishment of a free trade area between Russia and the EU in the future, encouragement of cross-border trade and capital movement.

The PCA formally enabled the widening of EU–Russia co-operation in such fields as: energy, environment, education, science, technology and the fight against organized crime. The agreement ran out *de jure* in November 2007; however, it contains a provision on an automatic annual renewal of the agreement till one of the parts quit or a new agreement amends the old one.[341]

On the base of the agreement a regular political dialogue between the parties was established in the form of biannual official meetings. The parties provided each other with *'most favoured nation'* status, i.e. low tariffs and high import quotas. The co-operation in legislation sphere was of quite importance: Russia committed itself to comply with European laws and regulations in private business, banking, taxation, competition policies, environment and health protection policies, nuclear energy policy, etc.[342] The program 'Technical Assistance to the Commonwealth of Independent States' (TACIS) is called upon to facilitate this process of convergence.[343] The priority areas of technical assistance to Russia were human resources development, social protection, energy, environment, food and agriculture.

> The Parties recognize that an important condition for strengthening the economic links between Russia and the Community is the approximation of legislation. Russia shall endeavour to ensure that its legislation will be gradually made compatible with that of the Community.[344]

Other areas of co-operation were illegal migration, corruption, protection of intellectual, industrial, commercial property rights. The Cooperation Council consisting of the members of the Russian Federation government and the members of the European Council and the Commission was an efficient mechanism to ensure the work of the agreement. The PCA alludes to Russia's infrastructure problems, speaking about the 'modernisation of energy infrastructure including interconnection of gas supply and electricity networks'.

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[341] Vladimir Chijov, "Rossia i Evropeiskiy Soyuz: formirovanie strategicheskogo partnerstva", *Mejdunarodnaya Jizn, MID RF*, Vol. 10, 2009, http://interaffairs.ru/author.php?n=arpg&pg=27 accessed July 30, 2013 (my translation)
[342] Pavel Biryukov, **Mejdunarodnoe Pravo**, Moskva, Yurist, 1998, p. 95 (my translation)
[343] Yuriy Shishkov, "Russia's Policy Towards the EU" in John Pinder,Yuriy Shishkov, **The EU and Russia: the Promise of Partnership**, Federal Trust for Education and Research, 2003, (71-105), p. 92
[344] The European Council, Provisions of the TFEU, 1997: Art. 56
http://ec.europa.eu/internal_market/capital/framework/treaty/ accessed July 21, 2013

The most striking difference between the European agreements and the PCA is that the latter clearly does not envisage future EU membership. The PCA refers to an "appropriate framework of gradual integration", "larger area of European cooperation"[345], so that it is cooperation, not an integration agreement. Thus, the PCA does provide for Russia's participation in the process of European unification without integration.

Further, with the arrival of Yevgeny Primakov in the Russian Foreign Office in 1996 Russian foreign policy took quite negative attitude towards the West, NATO enlargement in particular. Russia's foreign policy elite began to perceive cooperation with the West as not good prospect for the future, though the objectives of the PCA were achieved in general. Moscow concentrated on the co-operation with the CIS, providing financial assistance, asserting control over the ex-republic's strategic property and transportation infrastructure. For example, Moscow pressed control of oil pipelines in the Caucasus, Central Asia, Ukraine, and the Baltic states. Russia obtained the right to be the main electricity provider in Georgia and Armenia. In Azerbaijan, the Kremlin secured the use of the Gabala radar station. The most important achievement was a strategic energy accord with Turkmenistan.[346] Russia began to develop a strategy of distinct national independence instead of an exclusive partnership with and reliance on the West, i.e. desired for a multipolar world.[347] Overall, the parties managed to save the relations through the crisis of the late 1990s.

3.2.4. Medvedev-Putin Tandem

The beginning of the XXIst century was marked by a significant revival of the dialogue between the parties with the arrival of Putin-Medvedev tandem. Russia's European discourse and foreign policy changed drastically from the anti-Western pragmatism of the late Yeltsin period to the pro-Western pragmatism of Putin's administration.[348] The president of Russia Dmitry Medvedev (2008-2012) invoked the language articulated fifteen years earlier by the then-presidents Bill Clinton and Boris Yeltsin about 'unity between the whole Euro-Atlantic

[345] Article 1, the PCA
[346] Jacob W. Kipp, "Putin and Russia's Wars in Chechnya", in Herspring, op. cit. p. 206
[347] Ibid.
[348] Elenea Klitsounova, "EU-Russia Relations: the Russian Perspective" in Debra Johnson, Paul Robinson, op. cit. (35-54), p. 39

area from Vancouver to Vladivostok'[349], being a good example of a new Russian foreign policy direction.

President Vladimir Putin's foreign policy *vis-a`-vis* Europe was limited to economic integration without institutional participation. Putin knew well that for the foreseeable future, the main market for Russian oil and gas will be Europe.[350] Vladimir Putin is not a long-term planner. He does not conceptualize problems or answers; rather, he uses whatever the situation will permit. When he was a KGB officer his primary goal was to find a way to solve problems. The result: he is pragmatic and flexible when comes to policy issues.[351] This crucially influenced the EU-Russia relations after presidential elections of 2000 in Russia. He put forward the course different from Boris Yeltsin's for the future cooperation with the West, and the EU in particular, thus concentrating on the resolving short-term tasks.

In order to proceed with developing of the relations between the parties, the Common Strategy on Russia[352] (CS) was adopted at the Cologne Summit in June 1999, making Russia a test case for the strengthened EU Common Foreign and Security Policy (CFSP) on the basis of the Treaty of Amsterdam.[353] The strategy remained in force until 2004. It was an attempt to establish greater consistency in the EU's policies towards Russia. Whereas the PCA emphasized the importance of economic relations, the CS concerns political actions, such as consolidation of democracy, respect for the rule of law and public institutions, stability and security in Europe, and challenges common to the whole continent. The main strategic goals of the document were promoting "a stable, pluralistic democracy in Russia, governed by the rule of law"[354], maintaining European stability, the creation of reliable collective security system in Europe through intensified cooperation with Russia, and advancing market economy in Russia by using the EU's great potential and experience.

The document claims that "the future of Russia is an essential element in the future of the continent and constitutes a strategic interest for the European Union"[355], that is why it aims at integrating Russia into a common European economic and social space. However,

[349] Gomart, op. cit. p. 4
[350] Dettke, op. cit. p.133
[351] Peter Rutland, "Putin and the Oligarchs", in Herspring, op. cit. p.174
[352] EU Common Strategy of 4 June 1999 on Russia http://trade.ec.europa.eu/doclib/docs/2003/november/tradoc_114137.pdf accessed July 31, 2013
[353] Dettke, op. cit. p.132
[354] Common Strategy of the EU of 4 June 1999 on Russia
[355] Ibid.

Javier Solana, the then High Representative of the CFSP, criticized the CS because of the lack of detailed proposals, hence being "useless foreign policy"[356].

In response to the EU's strategy, Russia published its own medium term strategy[357] for dealing with the EU for the period of 2000-2011. This was the first comprehensive document to define Russia's foreign policy towards the EU. The strategy encompasses two concepts: the establishment of a multipolar world and the promotion of economic security in Russia. Like the EU's strategy, it confirms the mutual possible economic and security benefits of close strategic EU-Russian cooperation. At the same time it signals the significant role of Russia on the international arena, as being "a world power situated on two continents"[358], thereby, making it more difficult for the EU to dictate the terms of the relationship to it.

The most striking thing is that the strategy contains a long list of how Russia can help the EU, first of all, by providing stable energy supplies and raw materials for a long period of time, then, by greater integration of key transport and energy infrastructures. Besides, in trade, Russia is supposed to adopt a framework compatible with the relevant *acquis communautaire*. Russia's medium-term strategy implicitly accepts the notion of gradual inclusion of the *acquis communautaire* into its legal framework. However, such incorporation will be selective; thus, Russia will pick and choose the most favorable aspects of the *acquis* for its economy and regulatory framework.[359] The Strategy stresses the absence of Russian objective to accession or 'association' with the EU for the foreseeable future, thereafter, the whole adoption of the *acquis* is out of the question. Given these facts, approximation to EU norms will be done on a case-by-case basis, bringing advantages to Russia.[360] All the facts mentioned above point out that Moscow demands "equal and worthy place"[361] in the relations with the EU. It means that Russia views itself, first of all, as a vital, equal partner of the EU, rather than a simple neighbour.[362] This can be easily proved by Russia's refusal to cooperate through the European

[356] Joan DeBardeleben, "Public Attitudes Toward EU-Russia Relations: Knowledge, Values, and Interests", in Joan DeBardeleben (Ed.) **The Boundaries of EU Enlargement**, Palgrave Macmillan, New York, 2008, p.58
[357] Pravitelstvo RF, Strategiya razvitia otnosheniy RF s ES na srednesrochnuyu perspektivy 2000-2010, http://www.ieras.ru/journal/journal1.2000/9.htm accessed June 19, 2013 (my translation)
[358] Ibid.
[359] Ania Krok-Paszkowska, Jan Zielonka, "The European Union's Policies Toward Russia" in Alexander J. Motyl, Blair A. Ruble, Lilia Shevtsova, **Russia's Engagement with the West: Transformation and Integration in the 21st Century**, M.E.Sharp, Inc., 2005, (151-167), p. 164
[360] Johnson, Robinson, op. cit. p. 8
[361] Fyodor Lukyanov "Russia-EU: The Partnership that Went Astray" in Sakwa, op. cit. (229-241), p. 233
[362] Dov Lynch, "Russia's Strategic Partnership with Europe", *Institute for Security Studies*, Spring, 2004, p. 110, http://www.iss.europa.eu/uploads/media/analy077_01.pdf accessed July 20, 2013

Neighbourhood Policy, its Northern Dimension, instead of it 'Common Spaces' were developed.

3.2.5. Common Spaces

At the St. Petersburg summit in May 2003, the EU and Russia agreed upon strengthening co-operation by creating four 'Common Spaces' under the PCA framework. In May 2005 at the Moscow EU–Russia summit, a single package of 'Road Maps' was adopted, which involved short- and medium-term activities leading to the creation of four common spaces, namely the common economic space concerning Russia's accession to the WTO and a so-called 'common free trade area' between Russia and the EU; the common space of freedom, security and justice; the common space on external security; the common space on research, education and culture.[363] These Common Spaces cover industrial standards, competition and public procurement policies, investment climate and enterprise policy, cross-border cooperation, financial services, agriculture and forestry, customs procedures, transport and telecommunication networks, energy, space and environment. Throughout the negotiations Russia focused on the economic as well as internal security side of agreement. The EU attempted to bring Russia in line with its approach of democracy projection beyond its external borders.[364] Those common spaces revealed the EU desire to raise the crucial issues of the opening of Russian markets and their liberalisation with a specific focus on the energy sector and then regulated gas prices, as well as, Russian accession to the WTO.

It is obvious that initiatives aiming at fostering EU-Russia relations have gained more importance during Putin's presidency, however, those years also witnessed misunderstanding and weakening of the dialogue due to, first of all, the terrorist activities in Chechnya, when Russia was accused of human rights violation because of Kremlin's resuming military operations in the republic, and the Yukos affair[365]. Russia's then new president wasted no time and took advantage of September 11 events to reshape Russia's relations with the West and redefine the threats to Russia as those of global terrorism.[366]

[363] Tumanov, op. cit. p.127
[364] Maria Lipman and Michael McFaul "Putin and the Media" in DeBardeleben op. cit. (3-21), p. 59
[365] Yukos was Russia's largest private oil company, the CEO of which, Mikhail Khodorkovsky was charged with tax evasion and fraud, and sentenced to nine years imprisonment. He supported opposition parties and was said to be 'paying' Duma deputies in order to influence legislation.
[366] Anderi Tsygankov, "Putin and Foreign Policy Putin's Russia" in Herspring, op. cit. (195-217), p. 197

3.2.6. Energy Dialogue

In October 2000, during the sixth bilateral summit between Brussels and Moscow, the parties agreed to institute an 'Energy Dialogue' that was supposed to secure Russian supplies and European investment in Russia.[367] The declaration adopted by the EU and Russia enabled the parties to raise energy concerned issues and solve them. The dialogue fell under the umbrella of the PCA. As for the short-term perspective, it concerned the strengthening of mutual confidence and reliability of relations between the parties. While the long-term perspective was a strategic partnership in energy field, because Russia, being an alternative partner of the EU outside the OPEC, was regarded as a reliable and stable energy supplier, which delivered gas to West Germany since the 1970s.[368] Therefore, the 'dialogue' was designed to develop the 'energy partnership' for the sake of mutual advantage.

The issues defined by the Energy dialogue can be divided into four themes[369]: a) internal market issues concerning transparency and competition, abolition of destination clauses in long-term contracts; b) sustainable development including the ratification of the Kyoto Protocol, and safe infrastructure network; c) predictable and stable supply encompassing predictable trade rules and stable legal framework; and, finally, d) market harmony across the continent, which was later presented in the form of the third Energy Package.

Enlargement of the EU in 2004 considerably increased the EU's dependence on Russian energy supplies. Thus, the main purpose of the energy dialogue was to establish and to maintain durable links of a particular aspect in EU-Russia relations.[370] Hence, Energy Dialogue brought more technical results on day-to-day issues rather than strategic questions concerning the building up of an energy space. The dialogue has become intertwined with other EU-Russia negotiations, particularly, the World Trade Organization (WTO) accession talks and Russia's refusal to have binding targets of the Kyoto protocol in its second commitment period, Russia's refusal to ratify the Energy Charter Treaty and Transit Protocol. Though the Energy Dialogue was geared towards establishing a common regulation scheme

[367] Gomart, op. cit. p.12
[368] Kristen Wesphal, "The EU-Russian Relationship and the Energy Factor: a European View" in Westphal, op. cit. (1-17), p. 16
[369] Ibid. P. 17
[370] Gomart, op. cit. p. 61

or even one common market for energy, it is obvious that there is still lack of understanding and compromise between the parties, for example, in the third Energy.

Energy relations became also a political matter during Putin's second term owing to the Ukrainian crisis in January 2006 and later in 2009. The politicization of energy can be explained by a combination of three factors: strong global demand; liberalization of the European gas market; and re-nationalization of the energy sector, not only in Russia. For Russia it became a vehicle for projecting power. Presented as a 'factor of cooperation' at the start of the Putin era, energy relations have gradually become a 'factor of tension'.[371] Therefore, the dialogue was aimed to contribute to the conversion of mutual dependency into interdependence.

As for external and internal security, Russia started to reassess its European foreign policy, emphasized on cooperation with Europe in the framework of ESDP, thus reducing the role of NATO. After September 11, the number of meetings and agreements in the political and security areas has increased. Russia stresses the need for the EU to operate only within the United Nation's mandate; also insisted on the creation of a distinct EU-Russia Council similar to the NATO-Russia Council. However, the EU is not likely to allow Russia to shape ESDP. Consequently, since 2002 Russia lost its enthusiasm in this field.[372]

The PCA expired at the end of 2007. Without a new agreement it has been renewed automatically according to its provision. However, intensification of trade and growing interdependence of Russian Federation and the EU requires a new framework to facilitate Euro-Russia relations. Nowadays all the bilateral frameworks for cooperation having made by the two contracting parties are rooted in the PCA. During the Summit in Khanty Mansiysk in 2008, the parties discussed the launch of negotiations of a new possible EU-Russia Agreement to replace the PCA, building on the four Common Spaces. The new agreement is supposed to provide a more comprehensive framework for the relations, reflecting the growth of cooperation and interdependence since the 1990s; and also include legally binding commitments of all areas of partnership, such as political dialogue, energy issues, security and

[371] Ibid. p. 8
[372] Helena Rytovuori-Apunen, "Regulatory Convergence and Global Partnership: Another Phase in EU-Russia Relations" in DeBardeleben, op. cit. (58-69), p. 63-64

justice, economic cooperation, research, investment.[373] The parties plan to move towards "a real partnership on an equal footing"[374] with a very broad scope, with energy security and supply being the first priority, but also including issues such as migration, trade and security.

3.2.7. Partnership of Modernization

Following the 2010 Rostov-on-Don Summit, Partnership of Modernization was launched, the recent initiatives of which include rule of law projects, anti-corruption activities, civil society developments, economic and technical modernization.[375] The Partnership is built on the four Common Spaces and complements the bilateral partnerships for modernization existing between several EU member states and Russia.

Russia's accession to the WTO approved by the Eighth Ministerial Conference on December 16, 2011[376] will definitely change the quality of the relations with the EU due to the fact that individual peculiarities and interests of a member state is replaced with a common customs tariff, common procedures and standards, common competition and subsidy systems equal for all WTO members.[377]

Overall, the EU and Russia have cooperated on a number of issues of bilateral and international concern, including climate change, drug and human trafficking, organized crime, counter-terrorism, non-proliferation, the Middle East peace process, for example, Syria Resolution. But the main and probably the most important issue is energy one. The history of relations has revealed the parties' quest for engaging in a long-term relationship due to the inevitable common challenges and mutual benefits without subscribing to any serious commitment though. There are several disputes, being discussed further, which do not allow the parties to achieve a real strategic partnership in energy field.

[373] EU External Action Service http://eeas.europa.eu/russia/ accessed July 29, 2013
[374] EurActive, "The EU Ready to Start Partnership Talks with Russia", April 1, 2008, http://www.euractiv.com/enlargement/eu-ready-start-partnership-talks-news-219557 accessed July 20, 2013
[375] Ibid.
[376] WTO Accession Status: Russia, http://www.wto.org/english/thewto_e/acc_e/a1_russie_e.htm accessed September 20, 2013
[377] S.V. Zimnin, "Rossia i ES v Mirovoy Torgovle: Soperniki ili Partnery?" *Jurnal Vlast*, Vypusk 12, 2005 p. 30-35 (my translation)

3.3. ENERGY FACTOR IN THE EU AND RUSSIA RELATIONS

Russia is fighting with economic restructuring and transformation and waiting for the energy sector to generate the basis for a competitive and diversified economy. The EU, in turn, first of all for the geographical and historical reasons, is potentially one of the most promising and secure energy markets for Russia. Nevertheless, energy is a very special item related to "geoeconomy". Energy resources due to their nature are very difficult and merely impossible to liberalise.

3.3.1. Mutual Interdependence

The EU accounts for 2.9 % of oil production and 7.1 % of gas production, yet it accounts for about 19 % of global consumption of oil and 17 % of gas. So that by 2030 the EU is expected to increase its energy dependency on all providers, at the head of which list is Russia.[378] Moreover, Russian gas exports to the EU account for 84.8 % of Russia's total gas exports and 26.3 % of European consumption.[379] A total of 75 % of Russia's export revenue depends directly on the single European energy market.[380] Russia is the EU's most important single supplier of energy products, whereas the European Union is the most important destination for Russia's energy exports. Energy represents 65% of total EU imports from Russia.[381] These figures are a reminder of Russian-European interdependence in energy matters.

Henceforth, the EU certainly is in need of Russian energy supplies, while the Russian Federation, despite the existence of alternatives, needs Europe's energy markets.[382] In other words, if Europe seeks for security of energy supply, Russia searches for security of energy demand or markets, thus, there is a mutuality of interests on both sides.

This interconnection is represented not only by the share of bilateral export and import, but also by the existing infrastructure between the parties. The EU and the Russian Federation are closely interconnected through a dense energy network, notably concerning

[378] Diana Bozhilova and Tom Hashimoto, "EU-Russia Energy Negotiations: a Choice Between Rational Self-interest and Collective Action", *European Security*, Vol. 19, No. 4, December 2010, p. 629 http://www.tandfonline.com/doi/abs/10.1080/09662839.2010.528406#.UnfcvlNvXrQ accessed March 8, 2011
[379] Kaveshnikov, op. cit. p. 587
[380] Gomart, op. cit. p. 13
[381] EU Business, "EU-Russia Partnership: Basic Facts and Figures", February 23, 2011, http://www.eubusiness.com/europe/russia/facts.11accessed March 20, 2011
[382] Johnson, op. cit. p. 177

gas, oil and. The most notable operating and proposed gas pipelines are as follows: Yamal-Europe pipeline carrying Russian gas to Poland and Germany via Belarus; **Blue Stream** pipeline connecting Izobilnoye in Russia to Samsun, Turkey via the Black Sea with a proposed pipeline to Bulgaria; the system of four pipelines **Yamburg-Uzhgorod, Orenburg-Uzhgorod, Urengoy-Uzhgorod,**and **Dolina-Uzhgorod** carrying Russian gas to Western European countries, mainly Germany, Italy, France, via Ukraine; **Nord Stream** running between Vyborg, Russia and Greifswald, Germany across the Baltic seabed; **South Stream** pipeline being under construction, which is supposed to transport natural gas from Izobilnoye in Russia across the Black Sea seabed to Italy. Gazprom expects the pipeline to be completed by 2015.[383] As a result of the Russia-Ukraine disputes, the South Stream pipeline will be constructed through Turkey's waters, avoiding Ukraine's territory altogether.

3.3.1.1. Consumer Mindset

Whether dependent upon energy imports or exports, not only all states but also companies strive to reduce the risks associated with dependence by linking energy with their own security.[384] Indeed, this attempt is rather defensive and even proactive than benefit-oriented.

There are some grounds for believing that Russia might be able to use its petrodollars to rebuild its military strength and win political concessions from Europe. First dispute concerns energy prices. Russia's strength stems from the export of oil and gas. Since the 1990s, when the oil price decreased to a catastrophic US $10 per barrel, the oil price knew one direction: up and up.[385] When the EU was making demands of Russia in the WTO talks, the EU complained about unfairly high external gas prices and low domestic energy prices, for instance, gas prices were one-fifth of those on the world market.[386] So-called subsidized gas prices were paid by 'the near abroad'[387]. As far as Russia provides more than 40 % of

[383] South Stream http://www.gazprom.ru/about/production/projects/pipelines/south-stream/ , accessed July 21. 2021
[384] Hadfield, op. cit. p. 2
[385] Stuermer, op. cit. p. 47
[386] Katinka Barysch, "EU-Russia Economic Relations" in Antonenko (Ed.) op. cit. (115-129), p. 120
[387] The term is used in Russia to refer to the former Soviet Republics to reinforce that these countries are not quite abroad. Edwin Bacon, Mattew Wyman, **Contemporary Russia**, Palgrave McMillan, 2006, p. 202

imported to Europe natural gas and more than 30 % of crude oil[388], Europe is dependent on Russia's energy export no matter how high the prices might be.

Second, the prevailing number of academic articles and monographs on energy security phenomenon, such as Neuman's, and Hadfield's, are dedicated to Russia's perceived quest for political leverage through the use of its hydrocarbons. In particular, the Russian state cut off gas supplies to Ukraine in 2006 and 2009 in wintertime because of price disputes (or to Lithuania in 2006 based on a 'technical problem') leaving "the EU was left with cold batteries and damaged nerve cells of its citizens"[389].

These interruptions were brief, but the former EU Representative for Foreign and Security Policy, Javier Solana, expressed his concern about Russia's role as a reliable energy partner "there is a justified concern across Europe about Russia seeming more interested in investing in future leverage than in future production."[390] Naturally, Ukrainian crises have been chosen as a case study which is described further.

Third, Brussels complains about Kremlin's 'multi-vector' approach, which favours co-operation with growing East Asian energy markets, which in its turn can undermine European energy security. In 2001, Russia and China agreed on the Shanghai Cooperation Organization (SCO) founded on the principles of multi-polarity and national sovereignty, clearly aimed at preventing western influence in Central Asia.[391] Recently Moscow and Shanghai opened a branch pipeline from Eastern Siberia (Skovorodino) to Northeastern China (Daqing) designed to pump 300,000 barrels of oil per day to China in the next 20 years.[392] Meanwhile, the European Commission's Green Paper 'Toward a European Strategy of Energy Supply' clearly expresses the importance of Russia as an inevitable supplier of oil and, in the greatest extent, natural gas, because by 2020 almost 70 % of the union's gas will have to be imported to meet EU inhabitants needs, while up to 40 % of gas will come from Russia.[393] Taking into consideration opinions of some geologists and engineers, who argue that 'oil is finite and is

[388] Gazpromexport, Statistika Postavok, http://www.gazpromexport.ru/statistics/ accessed August 20, 2013 (my translation)
[389] Hadfield, op.cit. p. 5
[390] Javier Solana Speech cited in Marek Neuman, "EU-Russian Energy Relations after the 2004/2007 EU Enlargement: An EU Perspective", *Journal of Contemporary European Studies*, Vol. 18, No.: 3, 2010, p. 342
[391] Dettke, op. cit. p. 8
[392] Jeremy Page, "Daqing-Skorohodino oil pipeline to pump 300,000 barrels a day for 20 years", *The Wall Street Journal*, September 27, 2012, http://www.theaustralian.com.au/business/news/daqing-skovorodino-oil-pipeline-to-pump-300000-barrels-a-day-for-20years/story-e6frg90x-1225929909694 accessed June 20, 2010
[393] Green Paper "Toward a Euroepan Strategy of Energy Supply"

running out'[394], added to the EU's worries about Russia's, honestly speaking, not brand-new infrastructure and lack of foreign capital for investment, security of energy supply in Europe is surely in danger.

The reasons of Russian attitudes are rooted in its financial benefit, in historical background or even in Russian foreign policy direction. Since energy for the Russian state is a bridge to a much more broadly based economy, this type of Russia's attitude should be regarded as self-helping, for the sake of survival and economic wealth.

3.3.1.2. Supplier Viewpoint

The previous section provided several assertions concerning Europe's accusations of Russian deliberate use of energy as a political tool. Indeed, it is true that nowadays different FSU countries pay different prices for Russian gas. Sergey Komlev, a Gazprom expert reassures that price differential will stay for a short transitional period, hinting at liberalisation of Russian energy sector.[395] Moreover, during webcast with the President of Russia Vladimir Putin in 2006, Bridget Kendall, BBC moderator, submitted the question about Russia's interruption of gas flows to Europe and hikes in Russian gas prices, Putin asked Ms. Kendall how much her necklace was, which she admitted was a few hundred pounds. Mr. Putin responded: "You wouldn't want to sell it for five kopeks. Hysteria in the press over increases in Russian gas prices for Ukraine was really an attempt at applying political pressure… Someone wants to force us to sell gas for throwaway prices. This has stopped."[396] It means that Russia is unhappy about selling gas for different prices across Europe.

As for the gas price on the internal Russian market being lower than world market price, it results from the financial crisis of August 1998, before it external and internal gas prices were exactly the same.[397] In addition, the analysts state that the existing price distortions lead to overconsumption of gas in the internal market and have affected the economy. One should not forget that without properly controlled "oil and gas money"[398] it is

[394] Haghighi, op. cit. p. 9
[395] Sergei Komlev, "Five myths about Gazprom, assertions and a true story", Presentation, Istanbul Conference, November 10-11, 2008. http://www.bea-associates.com/articles/documents/Fivemythsaboutgazprom_1.pdf accessed March 2, 2012
[396] Michael Schwirtz, James K. Philips, "Putin Goes Online for Chat, and Russians Want to Know", **The New York Times**, http://www.nytimes.com/2006/07/07/world/europe/07russiasumm.html?pagewanted=print&_r=0 July 7, 2006 accessed 16 June, 2013.
[397] Komlev, op. cit.
[398] Bugajski, op. cit. p. 47

impossible to start modernizing Russia's feeble industry and deteriorating infrastructure. It means that not only Europe but also Russia is interested in equal and stable prices for all consumers.

Further, Gazprom informed its consumers that it planned to enter into new agreements that would eventually bring them to world prices. Despite Ukrainian refusal, Gazprom stopped shipments of gas to Ukraine for three days in January 2006, because the contract which provided gas to Ukraine expired on December 31, 2005.

Thus, from Russia's official perspective, this gas disruption was an economic dispute as the Russian state were simply motivated by a commercial desire to get the best price for their products. The speech at the Russia-EU summit in May 2006 of the Russian President Vladimir Putin can be a good example of it: "Look back at your childhood. You go out for a walk with a candy in your hand. And the guys immediately also want to have it. You clench it in the sweaty fist and ask what you get in return. And we also would like to know what we get in return"[399]. Economic concerns of Russia are more than obvious then.

Third debatable issue is Russia's diversification of markets. China, India, and Japan are also potential new markets for Russian energy. Putin favours a 'multi-vector' approach: "The position of many European countries is not reliable… We shall not waste our chances with the EU."[400] By comparison, Russian officials have demonstrated, at least in public, a "very united and determined" approach vis-à-vis the EU.[401] It is a basic need for Russia to diversify its energy export routes taking into consideration the peculiarities of its economy.

To sum it up, Europe perceives that Russia pretends 'a world power', whereas Russia assures that it only seeks respect and fairness among partners. According to many Western scholars, Russia's claim to 'world power' rests on three assumptions: the wealth of mineral resources, its permanent seat on the UN Security Council with the veto power, and the strength of its nuclear power.[402] Europe fights for its energy security and tries to diversity its energy sources, while Russia's strategy is to make her less dependent on a consumer's mood

[399] Vladimir Putin replies to Russian journalists after the Russia-EU summit press conference, 25 May 2006, Sochi. http://president.kremlin.ru/appears/2006/05/25/2358_type63380_106079.shtml accessed March 25, 2010
[400] Putin V. cited in Stuermer , op. cit. p. 64
[401] Anatol Lieven, United Moscow, New America Foundation, September 19, 2008 www.newamerica.net accessed June 11, 2013
[402] Stuermer , op. cit. p. 97

and a transit country, because Russia's engagement in various oil and gas conflicts over economic issues put Russia's reliability as an energy supplier at risk. This situation is taken as a case study, which is analysed further.

3.3.2. The Ukrainian Crisis

3.3.2.1. The Role of a Transit country

Natural gas is a vital product that needs additional security of delivery. The Ukrainian crisis may be an ideal case to illustrate not only the dependence between the parties, but also the lack of unity between the member states. The analysis of this case can help us shed the light on whether Russia uses her gas to exert political influence on the CIS, for example Ukraine, or energy is only a business matter and Europe is driven by perceptions of Russia as 'the unceasing other'[403].

Firstly, the role of Ukraine as a transit country should be highlighted. To reach major customers in Western Europe Russian gas or oil need to get through two tiers of countries.[404] Tier 1, consisted of Belarus and Ukraine, is called by Russia 'the near abroad'. Tier 2 is made up of Poland, Slovakia, Hungary, which are NATO and EU members. There is also possible but very expensive routes through the North Sea and the Baltic Sea, i.e. the Nord Stream[405], which delivers gas from Vyborg (Russia) to Lubmin (Germany). However, the major amount of gas is delivered through Tier 1. Thus, Ukraine holds the vital geographical position in the transit of Russian gas.

Obviously, pipelines have created a climate of mutual dependence between supplier, consumer, and transit countries. If any transit country of Tier 1 or Tier 2 tried to shut off gas flow, Russia, as a supplier, could respond by cutting off the entire energy supply to that country, which consumes gas too. That proved decisive in Russia's disputes with Ukraine in 2006 and in 2009.

Notwithstanding that, it is not Russia's interest to shut down the flow of gas, because Russia's fortunes directly depend on stability of gas flow and prices; otherwise, consumers as the EU would then be forced to search for alternative energy sources. Thus, economic

[403] Neuman, op. cit. p. 3
[404] Anita Orban, **Power, Energy, and the New Russian Imperialism**, Praeger Security International, 2008, p. 3
[405]Nord Stream, www.nord-stream.com/ru/

interdependency ensures that actors cannot act aggressively without risking economic penalties imposed by other members of the international community. It also makes little sense for a state to threaten its commercial partner, whose investment and markets are essential for its own economic growth.[406]

3.3.2.2. History of the Conflict

During the 1990s, the Ukrainian-Russian gas relationship is characterized by Ukrainian inability to pay for gas leading to very high levels of debts, which led to reduction of supplies, which in turn, ultimately, led to unauthorized diversions of the volumes in transit to the EU. An agreement between the parties in 1998 appeared to be a significant step towards a workable contractual framework.[407]

In 1998 Gazprom claimed that huge volumes of Russian gas were being illegally diverted from the pipes by Ukrainian organizations. The Russian Energy Ministry halted exports of oil and electricity to Ukraine in response to the theft of gas.[408] All in all, the 1990s saw a political scandal and corruption allegations connected with the gas industry at the highest levels in Ukraine.

It should be mentioned that Ukraine buys gas from Central Asia too, particularly from Turkmenistan, though its marketing has been controlled by Gazprom, resulting in neutralization of the positive effects of geographical diversification. In 2004 the Turkmen authorities requested a price increase from their Russian and Ukrainian counterparts, followed by the cut-off of supply. The deliveries resumed after the negotiations between Turkmen President Niyazov and Gazprom Chairman Miller. They agreed that the price would remain the same, but would be 100 percent cash rather than barter.[409]

The actual difficulty began with the storage episode. In May 2005 it was revealed that the gas deposited in Ukrainian storage reservoirs by Gazprom during the previous winter had disappeared due to technical problems or had been stolen.[410] Indeed, energy can be a very

[406] Burchill, op. cit. p. 40
[407] Jonathan Stern, "Natural gas security problems in Europe: the Russian-Ukrainian crisis of 2006", *Asia Pacific Review*, Routledge, Vol.13, No.: 1, 2006, p. 33 http://www.tandfonline.com/doi/abs/10.1080/13439000600697522#.Unfl6lNvXrQ accessed April 3, 2012
[408] Ibid., p. 34
[409] Ibid., p. 40
[410] Panushkin, Zygar, op. cit. p. 161

lucrative business. The Russian state accused Ukraine with allegedly siphoning off gas without paying. Unfortunately, the security of Russian gas stored in Ukraine to provide insurance for supplies to Europe during the winter months was called into question.

To make it worse, the Yushchenko Administration suggested April 2005 that gas transit tariffs should be moved to 'European' levels and paid in dollars. Deputy Chairman Alexander Medvedev said in an interview that the time, when Ukraine could have considered $160/mcm to be a market price has now passed, and that the generally accepted $230/mcm would be applied to Ukraine from 2006.[411] Consequently, in July 2005 the Russian Duma voted unanimously that the CIS countries should pay 'world prices' for Russian gas.[412] President Putin offered the Ukrainian side a political concession, i.e. if the Ukrainian side agreed to this gas price, the increase could be suspended for three months before the switch to market prices. Ukraine rejected the suggestion and in the morning on January 1, 2006, Gazprom cut off gas supplies to Ukraine.[413]

3.3.2.3. The January 2006 crisis

The fall in volumes of gas delivered to the EU caused an outcry all over Europe. The reaction of European society was immediate, though predictable. *The Daily Telegraph* wrote that Russia is "a gangster state"[414] and its blackmail techniques inherited from Soviet times. *The Polonia* noted that Russia exchanged its firearm for natural gas.[415]

On 4 January 2006 Energy Commissioner Piebalgs argued that "Europe needs a clearer and more collective and cohesive policy on security of energy supply… Security of energy supply is only really considered at national member state level; but in reality we need a much greater European-wide approach on this issue"[416]. Then Commission President Barroso followed suit: "There should be an important external strand to Europe's more integrated energy approach. When we depend increasingly on imports of energy, we cannot separate the external from the internal. Europe must put its external instruments at the service

[411] Russian News Room http://news.russiannewsroom.com/details.aspx?item=6465 accessed April 3, 2011
[412] Stern, p. 55
[413] Ibid.
[414] **The Daily Telegraph** "Russia: a Gangster State" February 27, 2012 http://www.telegraph.co.uk/news/worldnews/europe/russia/9107811/Russia-a-gangster-state.html accessed July 27, 2013
[415] **Ukrainskaya Pravda**, "Rossia Polzuetsa Gazom vmesto Orujia" June 25, 2011 http://www.pravda.com.ua/rus/news/2013/06/25/6992914/ accessed July 27, 2013 (my translation)
[416] Andris Piebalgs, "Speaking notes welcoming the agreement between Gazprom and Naftogaz,, Speech/06/1 (Brussels), January 4, 2006, http://europa.eu/rapid/press-release_SPEECH-06-1_en.htm accessed July 6, 2012

of more secure and competitive energy"[417]. Gazprom asserted that it finalized its transition to a full-fledged joint stock company and began the process of ending the subsidized to the former Soviet Union.[418] Gazprom claimed that it was an economic issue, not a political one.

Nevertheless, the EU failed to pursue any common active position; statements from Brussels about the unacceptability of the fact that "European gas consumers were held hostage."[419] to this dispute were nothing more than statements. The actions were undertaken by particular member states and companies on their own.

Further, several member states directly put the blame for interruption of supplies both on Russia and Ukraine, showing that they, as consumers, were not ready to accept part of the transit risks, preferring to leave them all with the Russian supplier. Having failed to find an arrangement with the Ukrainian transit operator, Naftogaz, Gazprom also shouldered the part of the blame.

Consequently, the 2006 Commission Green Paper on energy criticised the EU's rhetoric for being focused too much on the internal aspects of markets, where the external policy should be of greater importance.[420] All in all, the essence of the EU approach was nothing more, than not to intervene in the 'dispute between the Slavs'.[421]

This accident led to one positive consequence: it made the counterparts of the conflict proceed to the steps towards energy security. According to Keohane's *hegemonic stability theory*, discord does not reduce actions to self-interested means, but instead, it leads to cooperation, which serves as damage limitation to interconnected economies.[422] In March 2006 the European Council subsequently agreed to develop "a common foreign and trade policy approach in support of energy policy objectives"[423]. The Council determined only that Russian ratification of the Energy Charter Treaty (ECT) should take priority, which looked

[417] Barroso, J. M. D. Speaking with a Common Voice: Energy Policy in the 21st Century, Honorary Degree Ceremony, Georgetown University, Washington, DC, February 9, 2006 http://www.eurunion.org/News/speeches/2006/060209jmb.htm accessed July 20, 2013
[418] Komlev, op. cit.
[419] Ibid.
[420] Faber Van Der Meulen, "Gas supply and EU-Russia relations", *Europe-Asia Studies*, Vol. 61, No.: 5, p. 850 http://www.tandfonline.com/doi/abs/10.1080/09668130902905040#.Unfw8FNvXrQ accessed July 29, 2012
[421] Kaveshnikov, op. cit. p. 600
[422] Keohane, op. cit. p. 14
[423] The European Parliament, Report of the European Parliament on "Towards a Common European Foreign Policy on Energy", Committee on Foreign Affairs, September 11, 2007, http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A6-2007-0312&language=EN , accessed March 20, 2012

like impossible and still does for the reasons discussed further. It also maintained that the Energy Dialogue should be revitalised and become more open and effective in support of EU energy objectives"[424]. Despite all the statements, no substantive policy initiatives, except for a five-year contract regarding transit tariffs and payments in cash for gas, were added to any of the Energy Dialogue's numerous objectives. The EU's new found energy initiatives fell outside the scope of the Energy Dialogue.[425]

Compared to the damage experienced by the EU, the damage to Russia reputation as a reliable supplier was immense. Former EU's High Representative, Javier Solana, expressed his concern about Russia's role as a reliable energy partner, when he proclaimed that "there is a justified concern across Europe about Russia seeming more interested in investing in future leverage than in future production"[426]. Solana's position was supported by former EP President Jerzy Buzek, who called for Europe to speak with one voice when negotiating with energy partners, in order to enhance the EU's economic stability and strength.[427] The Russian Federation, in its turn, tried to ensure its European partners that all its actions were contractually legitimate due to Ukrainian debt and its unwillingness to pay for gas. The explanations were not given much credence.

However, even with all planned alternative pipelines built, Russian gas will be piped to Europe via Ukraine, because approximately 80 %[428] of the gas that Europe buys from Russia arrives through pipelines that cross Ukrainian territory. In the long run, the situation might lead to the establishment of a consortium that would enable European and Russia gas companies to take partial responsibility over the Ukrainian gas pipelines, which seems a real solution to obtain stable transit.

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[424] Ibid.
[425] Hadfield, op. cit. p.2
[426]The Council of the EU, Summary of the address by the EU High Representative for the CFSP, Javier Solana, "Where Is Russia Going? A New Attempt for an all-European Security Order" at the 44the Munich Conference on Security Policy, Munich 10 February, 2008. http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/discours/98707.pdf accessed October 20, 2012
[427] Jerzy Buzek calls for EU "Energy Community", in EurActiv, December 11, 2009 http://www.eng.notre-europe.eu/011-16053-J-Delors-J-Buzek-A-Vitorino-et-S-Andoura-sur-Euractiv-com-La-communaute-europeenne-de-l-energie-c-es.html accessed October 19, 2012
[428]Ekaterina Zelenovskaya, "Russia-Ukraine: another winter without gas?", *International Center for Climate Change*, February 2012, http://www.iccgov.org/FilePagineStatiche/Files/Publications/Reflections/02_reflection_february_2012.pdf accessed October 11, 2012

3.3.2.4. Results of the Crisis

The January 2006 crisis caused shock in the European markets and prompted a substantial debate in the EU, not only about its energy relations with Russia, but also about its energy security. As this conflict has demonstrated, energy seems to be the main power of Russia, and the main weakness of Europe. The Europeans are interested in moderately low prices, while Russians want them to be high.

This conflict once again highlighted the importance of distinguishing between the various components of energy diversification – energy source diversification, geographical diversification and contractual one. Thus, legally binding relations with transit countries is also a key to energy security. Along with the construction of alternative pipeline projects, which is quite cost-consuming, a new international legal basis for energy security is necessary, because Russia does not intend to ratify the ECT, which was designed to guarantee security of transit vital for all European countries.

For the EU energy security is interconnected with tariffs and gas prices. This leads to a position, where Gazprom tries to maximise its direct (short-term) profits as much as it can, while Europe intends to buy energy resources at affordable and stable prices. The Russian government uses Gazprom to supply the basic energy needs to the population, therefore the EU is, in effect, paying for Russian subsidy system on the domestic gas market. As a result of its particular situation, Gazprom's investment priorities are to spend its money on distribution networks within the EU in preference to developing new sources of supply such as the development of the Shtokman or Yamal peninsula fields[429]. To prevent new crises with immense effects on every-day life, there should be an efficient stable system, which includes regulations of investments, price setting mechanisms and distribution of profits, representing the interests of all major consumers, producers.

The EU should follow the recommendations of Solana and Barroso and speak out with one voice, instead of accusing Putin of his taking advantage of opportunities created by the lack of coherence among the EU member states vis-à-vis Ukraine, and vis-à-vis the development of European energy security strategy. Europe needs supply security and cannot afford individual EU members be separated even for legitimate oil and gas cutoffs. Russia and

[429] Barents Observer, http://barentsobserver.com/en/sections/energy accessed July 27, 2013

Europe need to achieve a mutually beneficial dispute settlement procedure as soon as possible in order to avoid cutoffs in the future. Finally, the EU will have to enhance the integration of its energy policy and improve its storage capacity as well as power grid.

Despite all economical issues, energy cannot be purely of business or cost-benefit nature; energy will always be intertwined with politics. Indeed, Gazprom implemented price increases for all the CIS countries in 2006 except Belarus on the grounds of prospective economic union between the countries, as well as the fact that Gazprom owns the Belarusian section of the Yamal export pipeline to Europe. A logical political interpretation of the events is that if Ukraine wishes to turn away politically from Russia towards the EU and, opposing to any relationship with Gazprom in terms of ownership of gas assets, then it can expect the same commercial terms as European countries. A Putin said: "We have subsidized Ukraine for fifteen years. If the West wants an 'orange revolution', please, pay for it." Had Ukraine chosen to maintain a closer economic and political relationship with Russia, probably it could have continued to pay lower gas prices at least for a period of time.

Probably, this relation includes the elements of asymmetrical interdependence, when one dominates the other in some cases. Such conflicts can be solved if both sides had a common strategy, which enhance not only an egoistic will of consumers, but also desirable needs of producers and also third actors as transit countries. Russia's state control over internal and external gas markets and intervention is Gazprom's issues are characteristics of a state with resource-based economy, because Russia's federal budget depends on high price crude sales.[430]. The history of Dutch gas extraction, where the state has been a vital, if not determining, actor can be a good example.[431] Thus, this is an inevitable factor, while dealing with Russia. If the main drive for this economic growth came from the energy sector in Russia[432], according to its own records, the EU "is the world's largest importer of oil and

[430] Grade, op. cit. p.101
[431] Aad F. Correljé, Paper "Regulatory reform in the Dutch gas industry", presented at the ECPR Standing Group on Regulatory Governance, Utrecht, June 5 to 7, 2008 http://regulation.upf.edu/utrecht-08-papers/acorrelje.pdf accessed October 11, 2012
[432] Rudiger Ahrend, "Russia's post-crisis growth: its sources and prospects for continuation", Europe-Asia Studies, Vol.58, No.: 1, 2006, p. 5 http://www.tandfonline.com/doi/abs/10.1080/09668130500401590 accessed October 6, 2012

gas"[433]. Russian crude oil accounts for 25 percent and Russian natural gas accounts for over 25 percent of the EU's total consumption.[434]

To sum it up, some member states of the EU and Russia, have discovered a coincidence of mutual interests concerning energy, i.e. all of them gain more through interdependence. That is why; the behaviour of the parties looks like self-helpful, though both actors seem pursuing 'absolute gains'.

3.4. ENERGY SECURITY IN THE RELATIONS OF THE EU AND RUSSIA

There are several energy concerns rooted from the energy item itself, the EU divergence and Russia's stance to be analysed further. Despite high interdependence, which is not likely to diminish in the long run, the parties still do not have a legally binding agreement taking into consideration the last developments worldwide, though the discussions over new PCA began in 2008. That is why the parties must integrate the 'four common spaces' within a new framework agreement. Second, the free-trade zone desired by the two parties turns to be difficult with regards to energy component. Owing to the fact that Russia does not want EU membership and openly refuses any type of political conditionality, and it is much more powerful and rich than it was in 2000, there are only two ways for the EU to update and transform the PCA: to deepen the integration process by accepting political conditionality or to create a new agreement which will reflect the nature of the relationship, desired by both sides.

Recently, the Roadmap of EU-Russia Cooperation until 2050 has been established with two ambitious aims: to build a strategic cooperation in the future, and to develop "a pan-European energy market"[435] without any artificial trade barriers on the principle of mutual benefit. The Roadmap is full of recommendations and scenarios of future gas and oil demand/supply before 2020, and up to 2050. It also discusses possible infrastructure, political

[433] The European Commission, the Brochure "Sustainable, Secure and Affordable Energy for Europeans', http://europa.eu/pol/ener/flipbook/en/files/energy.pdf accessed July 27, 2013

[434] Christophe-Alexander Paillard, "Rethinking Russia : Russia and Europe's mutual energy dependence", *Journal of International Affairs*, SIPA, Columbia, Vol. 63, No. 2, Spring/Summer 2010, p.68, available at www.jia.sipa.columbia.edu accessed July 27, 2013

[435]Roadmap of EU-Russia Energy Cooperation up to 2050

risks and regulations. This document seems like a synthesis of recent Russia's Energy Strategy and EU Energy Roadmap up to 2050 with no clear detailed instruction for action apart from the proclamation that the parties to reach a strategic partnership in the future.

Notwithstanding this fact, neither Russia, nor the EU finds the absence of a strategic agreement negative, because, in general, all the disputes and energy issues within the EU are discussed at the intergovernmental level. Russia favours the bilateral approach with the member states. Worse, the EU cannot boast "speaking with one voice"[436]. The internal dichotomy between the energy interests of the old and the new (Central and Eastern European) member states hampers the possibility of joint action.[437] The thing is that the member states fail to have a common opinion not only on energy links with Russia, but also an opinion on Russia. Leonard and Popescu have identified five policy approaches shared by the member states when it comes to Russia:

- 'Trojan Horses' (Cyprus and Greece), who often defend Russian interests in the EU system, and are willing to veto common EU positions;
- 'Strategic Partners' (France, Germany, Italy and Spain), who enjoy a 'special relationship' with Russia which occasionally undermines common EU policies;
- 'Friendly Pragmatists' (Austria, Belgium, Bulgaria, Finland, Hungary, Luxembourg, Malta, Portugal, Slovakia and Slovenia). They simultaneously maintain a close relationship with Russia and tend to put their business interests above political goals;
- 'Frosty Pragmatists' (Czech Republic, Denmark, Estonia, Ireland, Latvia, the Netherlands, Romania, Sweden and the United Kingdom) are less afraid than others to speak out against Russian behaviour on human rights and other issues. And, finally, 'New Cold Warriors' (Lithuania and Poland) who have an overtly hostile attitude vis-à-vis Moscow.[438]

There are several reasons[439] for the EU being so divergent apart from the absence of energy competence of the European Commission, which led to the lack of coordination between the member states. To begin with, energy security problem does not disturb all the

[436] Communication on Security of Energy Supply
[437] Neuman, op. cit. p. 1
[438] Marc Leonard, Nicu Popescu, "A power audit of EU-Russia relations", European Council on Foreign Relations. http://www.ecfr.eu/content/entry/commentary_pr_russia_power_audit/ accessed June 11, 2013
[439] Böhme, Dunn, op. cit.

member states equally. First, the amount of energy consumed by industrial and agricultural countries, North European and Mediterranean countries differ on a large scale. Second, natural resource abundance of the member states is not the same throughout Europe. For example, Germany cannot boost with energy production, while the UK and Denmark are gas and oil producers, though in time of energy crises they insist on national control over their resources, which goes at odds with the principles of an integrated energy market. Third, there exist transit countries, the choice and stance on a particular energy issue of which depends on their current foreign policy or economic interests.

Further, the member states import energy resources from different suppliers. For instance, Central and Eastern Europe is dependent on Russia energy exports, while Southern Europe buys crude oil or natural gas from North Africa and the Middle East. Fifth, every member state with accordance to Lisbon Treaty defines its own energy mix. In Germany, Greece, Portugal, the UK, and the Benelux countries the use of oil dominates the other resources, whereas, Poland, the Czech Republic, and Slovakia are generally content with consuming coal. The Netherlands and Hungary choose natural gas, while Sweden and Austria due to their unique geographical position can afford use water as an energy source. In France the lion's share more than 70% of energy is produced by nuclear plants, however, Germany has opted for abandoning nuclear power by 2022.[440] Thus, energy concerns of the member states *a priori* cannot be identical or even alike, leading to the conclusions that even the IEM is quite a difficult task to perform.

3.4.1. Pipeline Disputes

This section is dedicated to gas pipeline disputes as natural gas the most consumed energy resource according to decarbonization scenario of the EU for the future, being relatively clean energy resource in comparison with dirty coal and oil, expensive nuclear, or limited solar, wind, hydro-electric. Last year, according to BP report, Nonwage was the number one supplier to the EU, due to its policy of diversification.[441] This is a result of not only Ukrainian gas crises of 2006 and of 2009, but also Gazprom's setting prices. For instance, according to the newspaper "Izvestia", Macedonia, Poland, Bosnia and Herzegovina,

[441]BP, Statistical Review of World Energy 2013 http://www.bp.com/en/global/corporate/about-bp/statistical-review-of-world-energy-2013.html accessed October 15, 2013

the Czech Republic and Bulgaria are paying more than $ 500 per 1,000 cubic meters of gas, whereas the UK pays for Russian gas $ 310, Germany - 380 dollars.[442] Moreover, Russia has opted for an extraction regime of natural gas that is based on state control, hereafter; it offers limited roles for foreign investors in gas extraction, based on a system of minority stakeholders.[443]

A well-known fact, transmission of gas requires pipeline infrastructure. The future of European gas markets is dependent on four gas pipeline projects: three supported by Russia (Nord Stream, South Stream, Blue Stream) and one by Europe (Nabucco), the aim of which are to bring Caucasian gas to Europe.

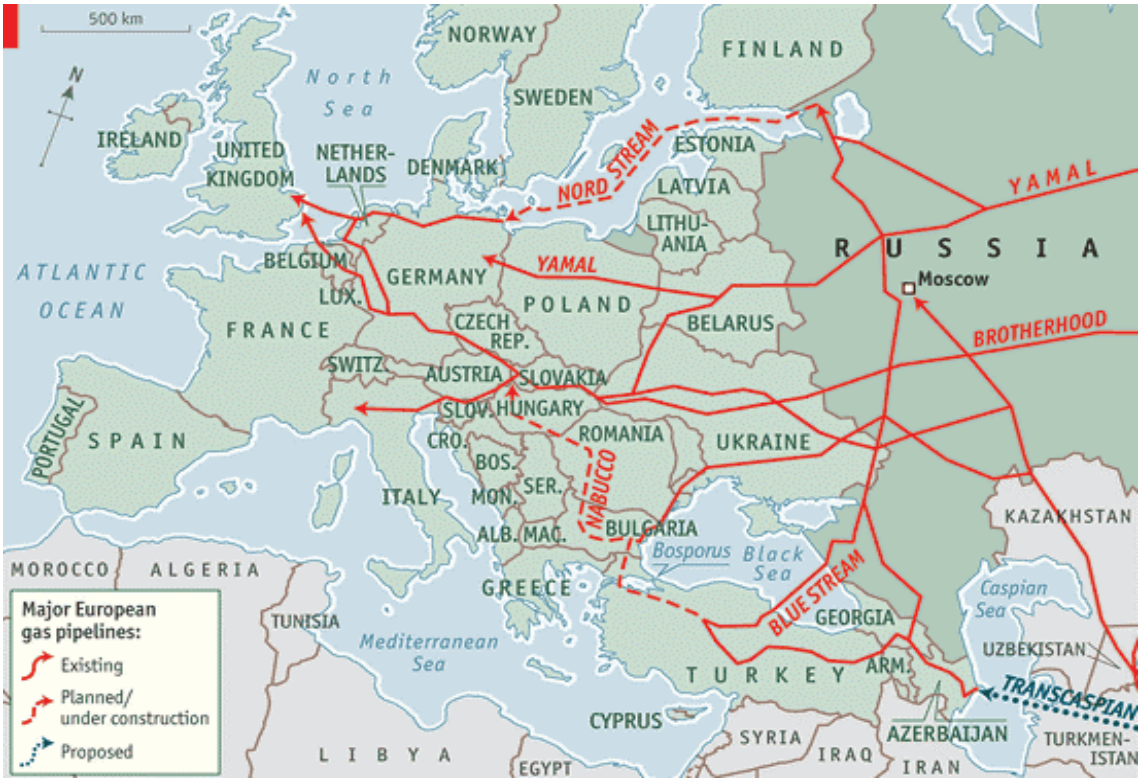

Figure 5: Map of Major Natural Gas Pipelines between Europe and Russia

Source: BBS News, Russia: Facts. http://news.bbc.co.uk/2/shared/spl/hi/guides/456900/456974/html/nn4page1.stm, accessed October 20, 2013

[442] Gerald Hosp "Nabucco poterpel krah", **Neue Zuercher Zeitung**, Sweden, July 28, 2013 (translation INOSMI) http://www.inosmi.ru/world/20130628/210481118.html accessed October 15, 2013
[443] Dettke, op. cit. p. 132

Russian natural gas is carried through the major gas pipeline routes from West Siberian gas fields to West European gas markets that run through the Ukraine. Following the first dispute between the Russian Federation and Ukraine over price levels and transit rights in 2006, Gazprom undertook a number of parallel projects in order to diversify and secure the access of Western European markets to gas, bypassing Ukraine. Putin said: "We will broaden our capacity to transport hydrocarbons in the north, including in northwest Russia, [and] to reduce our dependence on transit states"[444].

These initiatives became real with the beginning of the operating of the Nord Stream[445]. The Nord Stream pipeline project or 'North European Gas Pipeline' is a new offshore pipeline running from Vyborg (Karelia) in Russia to Greifswald in Germany, which began operating in 2011. There are built two parallel pipes delivering 27.5 billion cubic meters (bcm) per year to Europe; the first pipe is to be built in 2010-2011 and the second in 2011-2012. The project is managed by German BASF and E.ON, with each holding 20% of the shares; the Dutch gas company N.V. Nederland's Gasunie with 9% of the shares; and Russian Gazprom with remaining 51%.[446] The estimated cost of the project was €15-16 billion, which the companies were ready to pay after the latest Russia-Ukraine gas crisis of to secure future energy supplies from Russia. Nord Stream is a strategic additional to Yamal 1 gas pipeline to such EU member states as Germany, Denmark, the UK, the Netherlands, Belgium, France, the Czech Republic.[447]

However, Estonia as well as Poland opposed greatly to the project, labeling it "a waste of European consumers' money"[448]. Despite some hostility to the project inside Europe, the project commenced operating thanks to Sweden and Finland's recent decision to join the project after being assured that environmental damages would be limited.

[444] Transneft website, www.transneft.ru, accessed July 17, 2013
[445] Nord Stream http://www.nord-stream.com/ru/o-proekte/ accessed October 15, 2013
[446] Paillard, op. cit. p.74
[447] Nord Stream http://www.nord-stream.com/ru/ accessed October 15, 2013
[448] EuAractive, "Nord Stream is a 'waste of money', Says Poland," EurActiv, 11 January 2010, http://www.euractiv.com/en/energy/nord-stream-waste-money-poland/article.... accessed October 11, 2013

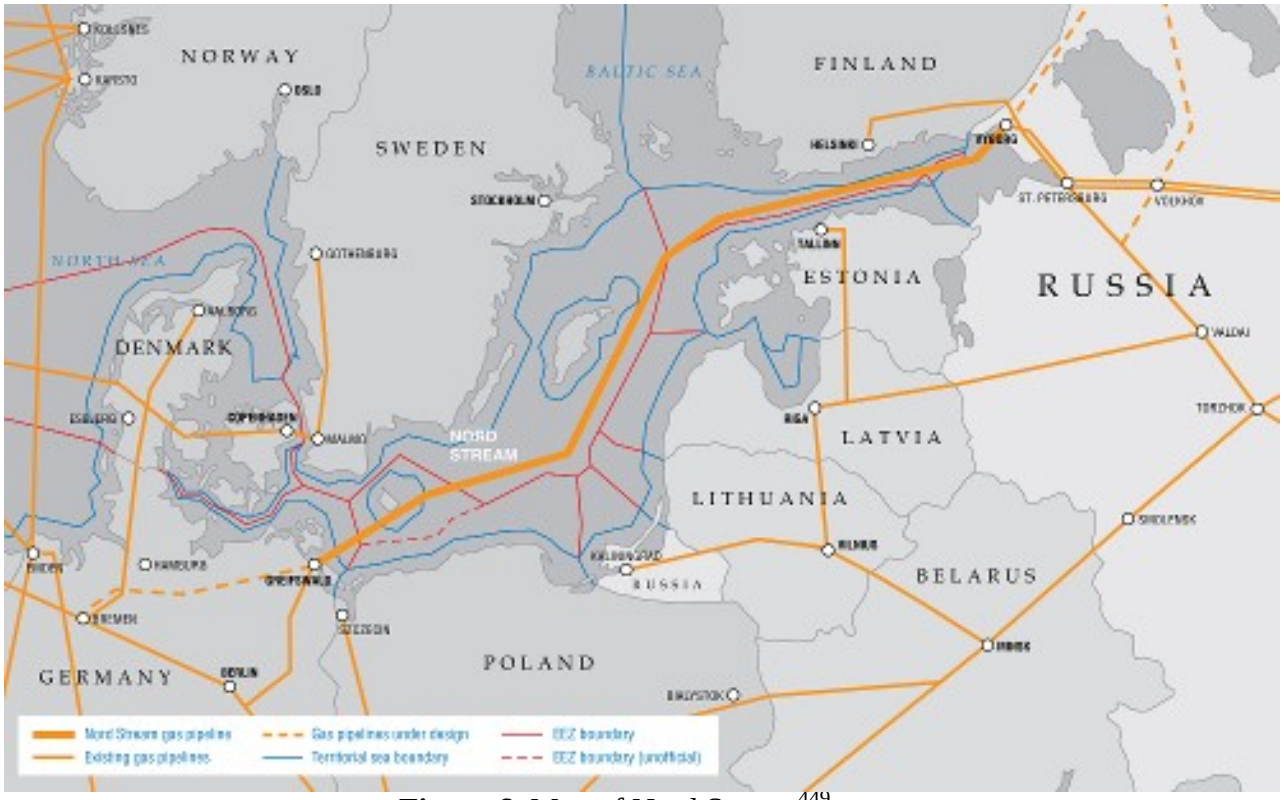

Figure 6: Map of Nord Stream[449]

Source: Gazprom webpage

The South Stream pipeline is another Russian-backed project. South Stream will transport Russian natural gas through the seabed of Black Sea of economic zones of Russia, Turkey, and Bulgaria. The onshore part of it will cross Bulgarian, Serbia, Hungary, and Slovenia ending in Italy.[450] The consortium for this project is South Stream AG: a joint company comprised of Gazprom and ENI and Italy's main oil company. The South Stream project is planned to carry 63 bcm of natural gas per year.

This project being another step of Russia towards its gas routes diversification is aimed at strengthening Europe's energy security. While the first gas supplies are expected by 2015, doubts have arisen regarding the project's feasibility: many member states view South Stream as a rival to Nabucco. Russia, for its part, claims that there is not enough gas to fill Nabucco, unless Iranian gas is used, which is unlikely due to political instability there, and insists that South Stream's gas is safe and ready to be delivered to Europe.

[449] Gazprom Pipeline Projects, http://www.gazprom.com/about/production/projects/pipelines/nord-stream/ accessed October 11, 2013
[450] South Stream http://www.south-stream.info/ accessed October 11, 2013

Figure 7: Map of South Stream[451]

Source: Gazprom webpage, http://www.gazprom.com/about/production/projects/pipelines/south-stream/ accessed October 17, 2013

The Nabucco project is the one proposed without any direct Russian participation and, therefore, is seen as a rival to the other ambitious Russian projects. It is planned to run from Erzurum in Turkey to Baumgarten an der March in Austria to diversify Europe's current natural gas suppliers and delivery routes, creating a southern corridor free and bypassing Russia. In 2002 the consortium of the project included six companies: OMV of Austria, MOL of Hungary, Bulgargaz of Bulgaria, Transgaz of Romania, BOTAŞ of Turkey, and RWE of Germany.

[451] Gazprom, Pipeline Projects http://www.gazprom.com/about/production/projects/pipelines/south-stream/ accessed October 17, 2013

Figure 8: Map of Nabucco [452]

Source: Eurodialogue webpage, http://eurodialogue.org/Nabucco-Map , accessed October 17, 2013

Many European Union states, Turkey, Georgia, and the United States back the project, but there were doubts about the viability of its supplies. Except for Russian reserves Eurasia's main gas reserves are concentrated around the Persian Gulf, making Iran necessary as a major partner. Iran is not stable region with divergent to European views on oil and gas. The main supplier was expected to be Azerbaijan, in cooperation with Turkmenistan, Iraq, and Egypt, but recently, Azerbaijan chose another pipeline project, Trans Adriatic Pipeline (TAP)[453], running from Azerbaijan, to Greece, Albania, and Italy. For this reason, plans for the Nabucco pipeline, expected to be operational by 2015, are seem overly optimistic for sure.

Nabucco is seen as more strategic project that TAP because its gas delivering capacity is more than its new rival. But the member states have different interests and some of them support South Stream, while the rest of them are for Nabucco. However, the decisions are taken in Baku, not in Brussels, and, thus, J.M. Barroso's speeches are so friendly to the authoritarian G. Aliyev.[454] Nevertheless, to supply Montenegro, Croatia, and Bosnia Herzegovina, Azeri gas will be not enough, the pipeline should start from Turkmenistan

[452] Eurodialogue webpage, The Proposed Nabucco Gas Pipeline http://eurodialogue.org/Nabucco-Map accessed October 17, 2013
[453] TAP Project, http://www.trans-adriatic-pipeline.com/tap-project/concept/ accessed October 9, 2013
[454]Gerald Hosp, "Nabucco poterpel krah" June 28, 2013, **Neue Zuercher Zeitung,** Sweden, (translated by INOSMI) http://www.inosmi.ru/world/20130628/210481118.html accessed October 12, 2013

crossing the Caspian Sea. To do so, TAP project should receive approval from either Russia, or Iraq.

The majority of the member states' interests are in Caspian region to avoid Russia. The member of European Commission, Andris Pielbalgs, said that if Europe did not construct Trans-Caspian pipeline network connecting the EU and Kazakhstan, Turkmenistan, and Uzbekistan that gas would go to China or Russia.[455] Besides, Russia, Turkmenistan and Kazakhstan are projecting a new Pre-Caspian gas pipeline bringing Turkmen gas to Russia passing Kazakhstan. If this project comes to life, there would be no gas for Nabucco but for Iranian one.

The divergence inside the EU led to the competition between the European-planned pipeline, Nabucco, and Russia's South Stream pipeline. Opponents of South Stream try to tie up supplies from Azerbaijan to make their projected pipelines economic viable.[456] However, it is uncertain in the current economic situation with fuel prices being unstable, how quickly construction of the proposed projects could commence.[457] Thus, it is obvious that choosing the route for pipeline depends on many factors; the most important of them are political and geostrategic. The new Baltic pipelines bypass 'upset' Poland and the other former Soviet satellites in the Baltic. In the Caspian case, problems are even more complex, with a choice of routes between Iran, Iraq, Georgia, or Turkey, because each country brings its own set of political considerations and interests.

Apart from pipeline conflict, a possible extraction of shale gas in Europe can be another stumbling block in the energy relations between the member states and Russia.[458] However, it should be mentioned that Russia is also trying to diversify its consumer base. Most recently Russia and China opened a branch pipeline from Skovorodino in Eastern Siberia to Daqing in Northeastern China, designed to pump 300,000 barrels of oil daily to

[455] Andirs Pielbalgs cited by Andrew Rettman in "EU likely to roll back Uzbekistan sanctions", Rettman A., 2006 in Euobserver, http://euobserver.com/foreign/22775 accessed October 9, 2013

[456] Harris, op. cit. p. 176

[457] Bozhilova, Hashimoto, op. cit. p. 631

[458] Borovskiy, op. cit. p. 199 (my translation)

China in the next 20 years.[459] But it will take time before China's market develops to the same scale as European one.

Owing to the fact that energy (and gas in particular) is the only economic sector in Russia that is reasonably efficient, it has no other option but to sell its oil and gas at a price high enough to protect Russia's domestic stability.[460] Energy is now "a question of life or death for Russian revitalization and prosperity"[461]. As far as Europe is concerned, taking into account its fuel poverty, an access to energy is crucial to its future economic success. This probably explains why Europeans are so cautious in responding to any crisis in Ukraine or around the Black Sea, as they want Russia to continue supplying them with oil and gas for the foreseeable future at least. Summing up, these conflicts have in fact an impact on European energy policies, which are now a mixing of panic, bilateral alliances and distrust.

3.4.2. Disputes over Legislation

The absence of a two-side legal binding framework document affects, first of all, the EU, because Russia maintains dialogues and chooses energy projects with those member states, whose political stance is favourable for Russia's foreign or domestic interests. In addition, the EU being separated and divergent over energy issues is reluctant to let the European Commission to decide on the member states' energy fates. Consequently, it prevents the EU to establish an integrated energy market within the timetable, proposed by the third energy package, and, simultaneously allows Russia to take advantage of such a situation to gain more and more petrodollars needed for functioning its highly resource-based economy.

3.4.2.1. Disputes over EU Third Energy Package

The third energy package should have been adopted by the national parliaments in 2011, yet, not all the member states realized it. The main subject to criticism is the provision on gas and electricity market liberalization, i.e. the separation of integrated energy firms' production assets from their transmission assets. In doing so, Brussels hopes to increase competition, and to decrease energy prices. Moreover, the so-called "reciprocity clause" was added to the legislation. Under the proposed clause, any company from a third country has to

[459] Dettke, op. cit. p. 129
[460] Paillard, op. cit. p. 73
[461] Ibid.

"demonstrably and unequivocally comply with the same unbundling requirements as EU companies do". A further clause stipulates that "third-country individuals and countries cannot acquire control over a Community transmission system or transmission system operator unless this is permitted by an agreement between the EU and the third country".[462]

Russian reaction on this was quite negative. The then Prime-Minister Vladimir Putin said: "This document should be reconstructed at least."[463] The Russian Minister for Foreign Affairs, Sergei Lavrov, assured that the adoption of the package, being nothing more than "expropriation", would lead to the loss of foreign investment appeal in Russia.[464] The Russian government is trying to oppose the adoption of document, addressing to European energy national champions to support Gazprom in the disputes. But European energy leaders, as German E.On and Italian Enel, have recently reconstructed their companies according to the third energy package demands.[465] The thing is that the adoption of this package suggests the refusal to comply with earlier long-term bilateral agreement of the EU's member states and Russia, in other words, to contract discrepancy meaning dissonance between the long-term agreements and the natural gas pipeline access agreement.[466] Moscow is also accusing Brussels in violating the PCA provision guaranteeing mutual protection of capital investments. For Russia, it also means the uncertainty about South Stream project. However, the EU wants to control energy market and favours spot markets instead of long-term agreements, though sport markets lead to possible uncontrolled risks, and price volatility. Russia, as a consequence, faces two variants of further action either to yield, or to manoeuvre expertly preserving its interests.

[462] EurActive, "'Gazprom clause' issues Russia ultimatum for energy corruption", September 20, 2007 http://www.euractiv.com/energy/gazprom-clause-issues-russia-ult-news-218748 accessed October 7, 2013
[463] Sergei Kulikov, "Gazprom spotknulsa o tertiy energopaket", October 17, 2011, **Nezavisimaya**, http://www.ng.ru/economics/2011-10-17/4_gazprom.html accessed October 7, 2013 (my translation)
[464] Sergei Lavrov, "Russia-EU: prospects for partnership in the changing world", *Journal of Common Market Studies*, Annual Review, 2013 http://www.mid.ru/brp_4.nsf/0/B769A8BF9D89820044257BC6006008F6 accessed October 7, 2013 (my translation)
[465] Dmitry Lanin, "Gazprom gotovitsa k bitve za trubu v Evrope", **BMF, Rossiisky Delovoi Internet Portal**, September 24, 2013 http://www.bfm.ru/news/229151?doctype=article accessed October 7, 2013 (my translation)
[466] Andrei Konoplyanik, "Umenshit riski i neopredelennosti tretyego Energopaketa ES", *Neftegazovaya Vertikal*, #7/2012, Politika I Upravlenie, p.79 http://www.konoplyanik.ru/ru/publications/articles/503_Umenshit_riski_i_neopredelennosti_Tretego_Energopaketa_ES.pdf accessed October 5, 2013, (my translation)

The most important result can be derived from these disputes that such an emergent appearance and the adoption of this document can affect the EU's main energy supplier, as it will require long time for Russia to reconstruct its economy and Gazprom particularly according to new 'European rules of a game'. Underinvestment in Russia can result in significant decrease of natural gas exploration, and, thus, threaten European energy security.

Nowadays, it seems like fear in Europe of losing control over the gas sector outweighs the ideal of free competition.[467] Though Europe seems like liberalizing its energy markets, in doing so it tries to protect the interests of its citizens, acting with accordance to its security concerns, because energy is an essential and integral part of human life.

3.4.2.2. Disputes over the Energy Charter Treaty

Signed in 1991 the ECT is perceived to be one of the most important measures at supranational level designed to guarantee energy security. The aim of the Treaty is to establish a legal framework to promote long-term cross-border cooperation in the energy sector.[468] The ECT copied many provisions of the WTO. Owing to the fact that the member states are the members of the WTO, WTO law has been fully incorporated into European law. That is why, the EU promotes the expansion of membership of the ECT to cover the most important energy-producing countries, including Russia. The EU considered the implementation of the ECT of "fundamental importance to Europe's future and its security".[469] In practice, however, this security is undermined by the realities of the energy world.

The ECT and its Transit Protocol offer a legal framework, including dispute resolution procedures, under which transactions can take place between consumers, producers and transit states. It ensures equal treatment for foreign and local investors and has provisions on the non-discriminatory transport flow. However, in December 2006 Russia stated that it would not ratify the ECT nor adhere to the Transit Protocol. There are two factors complicating agreement between the EU and Russia in this field. First, the Commission insists on an REIO

[467] Kaveshnikov, op. cit. p. 592
[468] European Energy Charter, http://europa.eu/legislation_summaries/energy/external_dimension_enlargement/l27028_en.htm accessed October 2, 2012
[469] Haghighi, op. cit. pp.187-189

clause[470], which undermines the principle of non-discrimination, as one of the essential rights in the IIAs[471]. Second, and more fundamentally, Russia strives to maintain its monopoly on gas exports[472], and, therefore, is not likely to let a third country to control even partially its pipeline networks.

The ECT has nothing new about regulating of possible conflicts, except for applying usual peaceful settlement procedures with regards energy. For example, with accordance to Article 7 of the Treaty, if transit disputes take place, a mediator of the conflict is supposed to determine timetable for energy delivery, and to fix the volumes of deliveries within a period of ninety days.[473] During the gas crisis of 2009 Russia disagreed to resolve the conflict on these conditions and withdrew from the ECT application regime. It should be noted that the relations between Russia and Ukraine in the field of trade are regulated by bilateral political agreements without regard to the ECT provisions. The member states and Russia also have bilateral interstate agreements. Evidence as Ukrainian crisis showed that it is impossible to transport Russian gas to Europe without a parallel supply contract with Ukraine.[474]

From Moscow's viewpoint, the ECT takes the EU's side while suppliers and transit countries simply obliged to transport and distribute energy resource. In 2009 Dmitry Medvedev presented the Conceptual Approach of international energy cooperation with the aim to develop a new international legal basis for energy cooperation. The idea a new legally binding document on energy security definitely means an attempt to offer an alternative to the ECT, and, therefore, was met with a standoff in the EU.[475] The core principles of the document were: indivisibility of global energy security including suppliers, consumers and transit countries; absolute national sovereignty over national energy resources; providing assess on international energy markets on a non-discriminatory basis.[476] Notwithstanding this fact, the markets inside Europe are already formed according to certain principles, and Russia's desire to frame Europe according to its rules is not productive, and, probably, useless.

[470] A Regional Economic Integration Organization is an exception in International Investment Agreements (IIAs).
[471] UN Conference on Trade and Development "The REIO Exception in MFN Treatment Clauses", New York, Geneva, 2004 'http://unctad.org/en/docs/iteiit20047_en.pdf accessed October 5, 2013
[472] Meulen, op. cit. p. 852
[473] Beliy, op. cit. p. 102
[474] Zelenovskaya, op. cit. p. 4
[475] Kaveshnikov, op. cit. p. 592
[476] Borovskiy, op. cit. p. 98

Despite the initial consensus on the need for a multilateral regime of controlling energy issues related to investment and transit, conflict erupted as a result of a clash of values, based on differences views on how should look like international system of energy security.

Overall, the specific mode in the energy sector depends on such variables as politicization and securitization of investment, trade and transit.

3.5. THE APPLICATION OF THE THEORIES

The EU is a very good example of integration including closer economic and political co-operation in a region where national conflicts were taken as a given. The EU can be characterised as an entity with liberal values as *democracy, equality before the law, political freedom, and liberty* of individuals, expressed by the Copenhagen criteria[477]. The single market program marked a turning point in European integration with free movement of goods, services, people, and money. Generally, the EU seems to act as a good administrator, regulator, and promoter of good governance rather than a strategic ally in the wide range of issues.[478] However, energy is a unique field of cooperation. Energy sources cannot be substituted for other commodities or replaced by them. Besides, they require labour, investment, and long time before entering the world market.

To create *complex interdependence* between European countries pooling of coal and steel industries were chosen as the first step. Although the EU evolved out of the ECSC, the concept of comprehensive integrated European energy policy came with the Lisbon Treaty only in 2007. As it was mentioned earlier, prior to the Lisbon Treaty, the EU energy legislation had been based on the EU authority in the area of the common market and environment.

Despite the existence of the internal market of the EU and free movement of goods, energy still remains outside the single market with dominance of *national control* of the member states over supranational institutions. The main reason for that is rooted in strategic nature of energy item itself. It means that when it comes to energy, there is no liberal market

[477] The Copenhagen Criteria, http://europa.eu/legislation_summaries/glossary/accession_criteria_copenhague_en.htm accessed October 3, 2012
[478] Krok-Pazskowska, Zielonka , in Motyl, Ruble, Shevtsova (Eds.), op. cit. p.166

within the EU. There is no integrated common energy policy within the Union *per se*, instead there are various measures at the supranational level, such as the attempts to complete the internal energy market of electricity and gas, Green and White Papers, other measures of the environmental policy; and measures at the intergovernmental basis as bilateral agreements with energy exporters.

It will be a quite difficult or even impossible task to create European energy policy especially with external dimension in the foreseeable future for numerous reasons. The Neorealist theory seems to have a relatively high explanatory power over the energy milieu in the EU. Some characteristic elements of neorealism, such as "states as unitary actors", "dominance of the insecurity atmosphere", "external threat perception", " self-help logic", "anarchical environment", "state survival" exist in this milieu.

First, energy issues are still not within the competence of the European Commission. If there is no common competence, there could not be any energy policy at the supranational level *a priori*. It means that member states as *unitary actors* determine energy mix of their countries and chose external routes to obtain necessary energy resources, because EU countries are not abundant with energy resources and the reserves are observed much depletion. Consequently, the member states need to ensure greater energy security and better regulation of energy supplies, which makes energy a highly politicised issue.

Second, energy security term was born out of *insecurity* and risks concerning energy supplies importing from Russia in this case. And this sense of insecurity is still felt. For example, energy exports dependent on economic situation in the world; infrastructure as pipelines, tankers; political stability of the region; terrorist attacks; natural disasters. Possible risks occurring from import and agreements are perceived as *external threat* from the third countries. There is actually no solidarity between the member states concerning this topic, they tend to support each other only in the face of external threats, as the gas disputes, for example, between the exporter, Russia, and the transit country, Ukraine. If there were no threats as gas shortages in the middle of the winter, the member states probably would not come up even with separate measures to overcome these instabilities and would not ally with each other.

Third, European states have adopted divergent and disorganized strategies towards Russia in the last ten years, while Russia has clearly pursued the goal of dividing Europe in energy issues, because bilateral agreements are of much benefit. Russia might not view the EU as the political and economic order of Europe, and there is no guarantee that it will be deeply integrated. The internal dichotomy between the energy interests among the member states hampers the possibility of a joint action.[479]

Even the energy crises of 2006 and 2009, caused by Russia-Ukraine gas disputes, did not unify Europe. The energy interests of all member states are divergent due to the difference of the energy mixes, geographical positions, the relations with Russia, and the volumes of energy consumption; and a French-German partnership on energy does not exist. These conflicts have affected the EU, energy policies of member states can be characterized as distrustful and favouring bilateral alliances with suppliers.

For example, Russia has built the Blue Stream pipeline network[480], which supplies gas to Turkey. Gazprom wanted to extend the line to Hungary, which depends on Russian gas for 80 %, and link it to Italy's system. Thus, Nabucco would be sidelined. When the Hungarians, relatively newcomers to the EU were accused of undermining the EU's energy policy, Budapest answered that one cannot undermine something that does not exist.[481] Moreover, Germany, one of the opponents of Nabucco, claimed that this pipeline project should not be backed up by the EU's budget.[482]

None of the member states is ready to entrust its energy fate, thus, economic prosperity and live standards, to another one. In this *self-help system*, the member states are nothing more than *self-interested actors*, who are not eager to help each other. If they do not help themselves, they will fail to prosper, they will suffer.

Therefore, they do not seem like giving competence over energy issues to one of the supranational institutions of the EU. Given *self-help logic* of the member states, *self-help system* is, therefore, a natural way for the member states to conduct their affairs with Russia.

[479] Neuman, op. cit. p.341
[480] Blue Stream Significance, http://www.gazprom.com/about/production/projects/pipelines/blue-stream/ accessed February 3, 2013
[481] Struemer, op. cit. p. 147
[482] EurActive, "No EU Funding for Nabucco Says Merkel", March 3, 2009 www.euractiv.com/en/energy/en-funding-nabucco-merkel-article-179883 accessed September 5, 2012

For instance, during the gas ‘disputes between the Slavs’, the EU reacted quite cautiously despite the fact that its citizens were left without gas in the winter.

Besides, the EU officials did not accentuate the problem of human rights in Russia, military operations in the Caucasian region or military intervention in Georgia during numerous EU-Russia summits. Europe had to forgotten about its liberal values and its Copenhagen criteria for the sake of friendly political dialogue with Russia, and the stability and prosperity of the member states.

Fourth, the relations between the EU and Russia exist in *anarchical environment* on the large scale. The energy milieu in the EU as well as the energy relations between the EU and Russia are not regulated by a set of rules. There is only one legally-based agreement of 1994, which is outdated and needs modifications taking in consideration all the developments happened up to current time. This anarchic structure determined the behaviour of the unitary actors. The lack of *regulatory mechanisms* could be perfectly demonstrated with the Ukrainian crises, when none could prevent Russia from changing gas prices from country to country and cutting gas flows to Europe. Worse, there was no power to force Ukraine to pay its gas debts to Russia.

In general, Russia and Ukraine violated their obligations, and there is still no mechanism to prevent such a possibility in the future. The ECT is the only legally-binding document with energy conflicts regulation mechanisms, which has not been ratified by Russia, and the provisions of which have been violated by Ukraine. Those crises have demonstrated how Russia used the EU leverage over Ukraine to make the latter to pay its debts to deal with this despairing situation.

Hence, the existing bilateral arrangements and multilateral legally-binding norms, governing international energy relations *de jure*, have failed to prevent and resolve disputes. The international realm is characterised not only with *conflicts* and *suspicion*, but also with *competition* between different European energy companies to sign agreements with Russian *monopolistic* Gazprom.

In spite of the *anarchic atmosphere* in the relations between the member states and Russia, there is still order in the form of long-standing cooperation between the actors for the

sake of *state survival*, being always in question, but it does not undermines influence of anarchy on the bilateral relations.

Fifth**,** the relations between the member states and Russia are productive and very close. The two parties cooperate on a wide range of issues, including economy, politics, terrorism, education, medicine, technology, environment, etc. Nevertheless, neither the EU nor Russia aims at the integration process with subsequent prospect of membership.

The reason for such close partnership lies in the existing *interdependence* between Russia and the EU, which stems from geographical proximity, Russia's huge oil and gas reserves for the future generations to come, the EU's lack of energy resources and depletion of reserves, historical economic and political ties, and, finally, the fact that the EU is Russia's biggest trade partner, while Russia is a major energy provider for Europe. One should not underestimate the fact that the lion's share of Russia's federal budget comes from oil and natural gas export revenues.

Therefore, there is certain interdependence of economies of the EU and Russia. For instance, Europe is increasingly dependent on natural gas export from Russia. Russia turns to be a key player in supplying gas to European countries, especially those, who refrain from nuclear energy, such as Germany and Italy.

At the first glimpse, it may seem that the energy dialogue between the parties stretches deep into the realm of energy-market liberalisation, and that the parties are not as much self-helpful and due to *mutual dependence* gain more through interdependence. Yet, Europe is an unavoidable partner for Russian energy companies, whereas Russia is an irreplaceable energy exporter for the EU not only because of Russian huge fossil energy reserves, but also due to the existing infrastructure between the parties, which is very costly to construct and conduct.

Thus, there is *a lack of freedom of choice* of routes, sources and energy partners. Consequently, there is a deficit of competition not only in the energy links between the parties, but also within the EU.

Furthermore, trade with such monopolist Gazprom, which still regulates gas prices, cannot be of pure liberal nature. To deal with these two problems, the Commission made an attempt to foster competition inside the EU through the Third Energy Package, which should

have been incorporated into national law in 2009, however, a few states succeeded to do so. Meanwhile, Gazprom still waits for several exceptions for it, because the transition from long-term agreements to spot market will put Gazprom's revenues at risk, and thus, Russian.

For better or worse, the fate of this Package is still uncertain. In this case, Russia accuses the EU with *expropriation*, i.e. taking private property from European energy companies for a public interest, even if the owner of the property is not willing to sell it, which is a clear characteristic of neorealism. In addition, the third Energy Package means the EU's direct violation of previous bilateral agreements, with no international institution or regime being able to prevent it.

Sixth, there are so-called 'pipeline wars'. Even the notion 'war' indirectly refers to realist logic. Although the parties deny the nature of such a phenomenon, there are certain disputes over pipeline networks between the member states and Russia. For Russia, the diversification of its energy routes, as natural gas pipelines in the direction of China, external investment, labour, and time are required, thus being very difficult to achieve in a short time.

As far as Europe is concerned, the EU tries to diversify gas export sources with the help of so-called the Southern Gas Corridor, i.e. buying natural gas from Caspian and Middle Eastern regions. However, Russia using all its leverage in its Asian FSU countries, as Turkmenistan, Kazakhstan buys their cheap natural gas through long-term agreements and tries to gain partial control over pipeline networks, thus, preventing the EU's diversification of energy sources, which is nothing more than *territorial conquest* in terms of energy. Using Asian gas is also a tactic applied by the Russian government to save Russian energy resources for later use, in other words, to contribute to the Russian energy strategy[483], which a clear signal of *self-help logic*.

For example, Russian giants as Lukoil, Rosneft, also TNK-BP, and Surgutneft already own energy assets abroad and aspire to widen their property in third countries. Moreover, Gazprom takes part in managing Moldovan and Belorussian gas distribution networks. All attempts of Gazprom to take control over Ukrainian pipeline networks failed though. Russian gas monopoly is planning to purchase gas distribution assets of European countries and the

[483] Meulen, op. cit. p. 850

USA.[484] However, several measures, as the Third Energy Package, of the EU have been designed to prevent such a 'conquest'. At the same time, Russia has concerns over its 'energy sovereignty'. Under new rules, private investors have to seek permission from a committee chaired by the Russian prime-minister to take more than 50% stakes of companies in strategic sectors, including energy industry.[485]

The EU is not silent about this issue either. The Paper 'An External Policy to Serve Europe's Energy Interest' contains a sentence on the importance of the access to export pipelines of third countries.

The physical control of key infrastructure and oil/gas routes are of vital importance, therefore, certain member states and Russia do their best to achieve it.

The rivalry of the Nabucco project and the South Stream project is perhaps the best example do demonstrate that existing interdependence between the parties is not purely based on coincidence of mutual interests, but on compulsion. Otherwise, they the diversification of energy routes of one partner will be achieved without preventing another partner to do the same. Without freedom of choice of the trade partners, energy market cannot be named liberal. Besides, the EU cannot boast about its unity in the pipeline issues.

It is imperative to note that energy issues probably will not exist in a political free zone. For instance, a state, which permits resource exploration on its territory, is often given various preferences not related with energy sector: soft loans, investments, and even political support. All of these are done in order to gain access to foreign mineral resources. Further, the beginning of the XXI century was marked with the renaissance of *'resource nationalism'*. Unprecedented price rise of oil, consequently of the other energy resources, made resource-rich countries the holders of strategic goods.[486] For example, Russia was bankrupt in 1998; nowadays it became the fifth rich country in the list of gold and foreign currency reserves[487],

[484] Borovskiy, op. cit. p. 35
[485] Ibid. p. 48
[486] Borovskiy, op. cit. p.27
[487] Russia is the fifth country in this list after China, Japan, the EU, Saudi Arabia. Central Intellegence Agency, "The World Factbook" https://www.cia.gov/library/publications/the-world-factbook/rankorder/2188rank.html accessed August, 6 2013

and became an authoritative leader in G8[488]. UN Resolution on Syria and Putin's personal direct appeal[489] to the American people over the Syrian crisis could be a good proof of it

Overall, there are six main reasons explaining why energy security issue in the energy links between the EU and Russia cannot be analysed with the help of neoliberal institutionalism, but neorealism. Despite the EU's attempts to promote integrated energy policy within the union, there is certainly no common energy policy with external dimension both *de facto* and *de jure*. As far as energy sphere is concerned, the member states and Russia are unitary actors acting with accordance to self-help logic and resource nationalism in the anarchic environment lacking regulatory mechanisms. Despite mutual economic dependence of the actors, there is evident absence of freedom of choice concerning routes and energy markets and even elements of territorial conquest, when the actors compete with each other to gain control over exporting infrastructure networks. Thus, neorealism explains the relations between the two actors, namely, the EU and Russia, with regard to energy security better than neoliberal institutionalism.

[488] The Group of Eight is forum of the world's most powerful nations focused on world economics and politics.
[489] BBC News, "Syria crisis: Russia's Putin issues a plea to US for Syria", September 12, 2013 http://www.bbc.co.uk/news/world-middle-east-24058529 accessed August, 6 2013

CONCLUSION

The main aims of this thesis are to examine the EU's relations with Russia in the field of energy, and to analyze these relations from the perspective of 'energy security'. In this context, the energy policies of the EU and Russia are also examined. The study reveals the indispensable link between both partners (the EU and Russia) with respect to energy security issue. Basically, the EU is as the biggest Russian trade partner and Russia is the most significant energy partner for Europe. The study also argues that a reliable energy policy integrates multidimensional approach (suppliers, consumers, transit countries) and international cooperation.

Chapter 1 tries to define energy security concept highlighting that security of supply prevails over security of demand in the political discourse. Since the concept appeared in consumer countries, it is usually defined as easy access without risks of disruptions in time at reasonable prices. The chapter analyses the relevant factors to be considered in designing an energy security policy to guarantee security of energy supply and demand, such as reserve depletion, the structure of supply contracts. The chapter includes several proactive policies aiming at prevention of interruptions in energy supply, such as diversification of energy sources and export routes, the principle of resilience or "security margin", security of energy transit, sustainability of technology and infrastructure, energy efficiency, and transparent information. The next section of this chapter provides a historical overview of the ways through which energy security were dealt with since the inception of the European Community, highlighting the turning point for energy security concept development, i.e. the 1973 oil crises. Then, Chapter 1 proceeds with key assumptions of neorealism and neoliberal institutionalism to apply them to the relations between the EU and Russia in energy sector. Since there is no single acceptable definition for energy security concept, with both actors understanding it in a different manner, it is, therefore, quite a difficult task to pick one theory to analyze the relations between the actors.

Chapter 2 questions whether the EU has the capacity to deal with energy issues at the supranational and external levels, and, thus, analyses the official documents, including Treaties, on the division of competences in the sphere of energy between the European

Commission and the member states. There are numerous official documents having non-obligatory, soft nature, i.e. having no legally binding force, such as Green Papers of 2000, 2006, 2013, White Papers of 1995, 19997, the Action Plan of 2007, the Energy Strategy 2020, the Energy Roadmap up to 2050; all of them, in general, aim at initiating a coherent European energy policy. The Lisbon Treaty of 2007 containing two articles (Article 12, Article 194) on energy and the Third Energy Package designed to integrate European gas and electricity markets can be regarded as recent attempts to create an Integrated Energy Market within Europe. However, the adoption of a common energy policy means *de facto* yielding state sovereignty to the European Commission and to the European Parliament; accordingly, the pieces of legislation of the Third Energy Package are still not incorporated in the national laws of the member states. This chapter also presents the current energy situation of the EU, which highlights the ongoing and increasing dependence on imported energy resources, especially from Russia, which naturally makes vulnerable European energy security.

Chapter 3 begins with the examination of Russia's energy policy, its oil and gas sectors, which concludes that Russian economy is highly dependent on exported energy resources, especially natural gas and oil, hence, Russian federal budget is very much vulnerable to changing world oil prices. Such documents as the Energy Strategy for the period up to 2030 and Energy Security Doctrine were designed by the Medvedev-Putin tandem in order to avoid "a resource curse", to develop its economy based on new technologies, and to diversify the source of income. The Chapter then presents the historical background of the relations between the two actors from the period of Cold War up to the present time, including the analysis of Energy Dialogue, Common Four Spaces under the PCA framework, and Partnership of Modernization. The difficulty of achieving energy security in the relations between the EU and Russia is rooted in the difference of the viewpoints of the two actors on an energy producing-consuming process. This can be demonstrated by the first Ukrainian Crisis happened on January 1, 2006, which caused an uproar in Europe. As the conflict demonstrated, to achieve energy security between the participants of energy importing-exporting process, namely, consumers, suppliers and transit countries, not only diversification of routes and sources is required, but also a new international legal basis, which will guarantee the security of supply for consumers and transit countries, and the security of demand for suppliers, otherwise, energy security will be nearly impossible to achieve. The

Chapter further groups various difficulties in the relations between the actors into two main groups: pipeline disputes and disputes over legislation. The first group of disputes can be observed in the debates over new pipeline projects, when South Stream backed up by several member states and Russia is viewed as a rival to Nabucco partially supported by the EU. The so-called the Southern Gas Corridor being of strategic significance for the EU faces Russian intervention in a political sense. It becomes obvious that choosing the route for infrastructure which will be working for generations to come depends on political and geostrategic factors. Apart from pipeline conflicts, Russian refusal to ratify old-fashioned the ECT and open opposition to the "reciprocity clause" and other tenets of the Third Energy Package prevent the actors to cooperate on the basis of mutual interest and respect in order to achieve energy security. The last section of Chapter 3 undertakes the study of the application of the theories, which helps to support our hypothesis. It should be mentioned that such characteristics of neorealism as "states as unitary actors", "dominance of the insecurity atmosphere", "external threat perception", "self-help logic", "anarchical environment", "state survival", "the lack of regulatory mechanisms", "suspicion", "the lack of freedom of choice", and even "territorial conquest", observed in so-called "pipeline wars", take place in this milieu.

Regarding the topics covered, this thesis reached three main conclusions, which support the hypothesis on the concept of energy security in the relations between the EU and Russia presented in the Introduction section.

First, in order to view energy security as a common advantage, the interests of all parties concerned – consumers, suppliers and transit countries – have to be integrated. Such understanding leads to more balanced sharing of profits and risks. If there is a clash of those profits, the parties have to enjoy suboptimal benefits. Thus, energy security can be defined not only as an easy access to energy resources at affordable prices, uninterrupted energy supply, reflecting consumers expectations, but also as adequate investment in infrastructure, diversification of resources, and routes, energy efficiency, and environmental friendliness. The thorough analysis of a political discourse on this topic revealed the differences in acknowledgement of the concept among consumer and supplier countries, which are presented in the table 3.

Table 3

Energy Security[490]

consumer logic (the EU)	supplier logic (Russia)
security of supply and transit	stable prices and ongoing demand
diversification of routes	efficiency of extraction and export infrastructure
flexibility of national energy infrastructure	energy sovereignty
energy efficiency, energy saving, alternative energy resources	diversification of export routes and reliable transit
access to information on world energy situation	adequate foreign investment in national energy infrastructure and resource extraction technology
environmental friendliness	restructuring of resource-based economy

As it is seen from the table, energy security is easier to preach than to practice, because this concept comprises numerous elements of long- and short-term measures, such as diversification of routes, energy saving, foreign investment, restructuring of resource-based economy, efficiency of extraction, which, in turn, prevent insecurity in an energy production – delivery – consumption chain. Energy security may be achieved between the diverging interests of suppliers, consumers and transit countries. Table 3 demonstrates that there is a certain difference in understanding of energy security concept between the two actors, namely, the EU and Russia. The EU as a consumer accentuates measures related to security of supply, while another actor, Russia as a supplier seeks to ensure security of demand and security of its natural resources. As it has been stated above, in order the two actors can enjoy energy importing and exporting process and benefit from them, and integrated approach is required. If the expectations of any of the participants are neglected insecurity for energy will occur.

[490] Adapted from Borovskiy, op. cit. p. 18

Second, though the EU attempts to create an Integrated Energy Market, for example, by imposing such reactive measures as “unbundling models”, “reciprocity clauses” on the member states, the existence of the energy policy of the EU with an external dimension cannot be proved, first of all, due to the absence of Commission’s competence over energy issues within the union. In general, it means that energy disputes or issues cannot be resolved or discussed on behalf of the European Commission when it comes to the international energy affairs. Moreover, the difference in energy mix and geographical positions of the twenty-eight member states, and, ultimately, the difference of the relations with the major energy supplier prevent Europe “to speak with one voice”. It is imperative to note that solidarity over energy issues in the EU is currently lacking, and its emergence remains a prerequisite for future European energy security.

Finally, the relations of the EU and Russia in the field of energy is more likely to be explained by neorealist perspective. Neorealism refers to the policies with no role for norms in decision-making process and where the structure dictates the behaviour of the actors. The relations between Brussels and Moscow are in a legal vacuum. As a supplier and a consumer they are locked in a mutually dependent embrace. The European Commission gives an impression that it has taken a course toward the liberalization of its still incomplete internal electricity and gas markets, which is odds with the Kremlin’s economy policy, based on strengthening of national energy monopolies, as Gazprom and Rosneft. Given the growing global energy deficit of oil and natural gas and increasing dependence of consumers on certain suppliers or transit countries, energy and energy security, in particular, will continue to be viewed in the context of geopolitics. Ongoing disputes over legislation and diversification of the routes between the two actors are good examples of a high level of politicization of the energy security concept. Energy discourse is overwhelmed with such terms as “energy tool”, “energy blackmail”, “resource egocentrism”, “well-oiled diplomacy”, etc. These notions are closely connected to neorealist tenets as ‘survival’, “self-help logic”, “territorial conquest”, and “insecurity” and “anarchy”. Despite the mutual interdependence of the energy markets of Europe and Russia, the existence of integrated and liberal market not only between the two actors, but also within the EU is not likely to be declared at least for the foreseeable future.

To conclude, in the modern world there is a need for creating a new universal and acceptable for all actors, regardless of resource abundance, system for cooperation in the field

of energy. However, the possibility of the formation of such a system is complicated by the high level of antagonism between the leading actors in the world. Therefore, a scenario where supplier, consumer and transit countries continue to look at the problems from their own perspectives, not from commonly agreed points of view, is likely to be accepted by the actors.

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