

**The effect of energy security on future Common Security
and Defence Policy (CSDP) missions and operations.**

Essay

created for the CSDP Olympiad 2020
in Dubrovnik - Croatia

Author:

kpr. pchor. Bartłomiej SZYMAŃSKI

Student of

The Military University of Technology,

Poland, Warsaw

December 2019

Abstract

Due to the fact that The European Union relies mainly on energy import, the article addresses an important topic related to the energy security of the European Union by ensuring energy security for the countries that transit it. The Author outlines two significant states intermediating in the energy supply – Belarus and Ukraine. Furthermore, factors affecting energy security are presented, with details of phenomena such as political crises, civil, armed and economic conflicts. The author writes about the subjective, objective and spatial aspect of energy security. He also presents a document which orders the EU to act to ensure mentioned energy security. In the following part, planes are to be noted when organizing Common Security and Defence Policy missions and operations. The way in which the energy security of transit countries should be supported is also described, especially concerns political stability, diversity of supply, intensifying integration with Western Europe and making common effort in the technological issues. Factors listed above are to be considered in order to create future CSDP course of action.

Keywords: energy import, energy security, transit countries, Belarus and Ukraine, future CSDP course of action

1. Table of contents

1. Table of contents.....	1
2. Preface.....	3
3. Introduction.....	4
4. The current state of research	6
4.1. Lisbon Treaty.....	6
4.2. CSDP current missions and operations	7
4.3. Impact of instability on energy production.....	8
5. Research gap	10
6. Research questions.....	11
7. Methodology	12
8. Research and results of research	13
8.1. European dependence on energy import	13
8.2. Ukraine and Belarus role as transit countries.	15
8.2.1. Ukraine's role in energy transit should be decreased.....	16
8.2.2. Belarus' role in energy transit should be increased.....	17
8.3. Deepening EU's relations with Belarus and Ukraine.	18
8.3.1. European Union's current relations with Ukraine are constantly improving.....	19
8.3.2. Are European Union's relations with Belarus neglected?	19
8.4. Energy sector in Belarus and Ukraine and its threats.....	20
8.4.1. Energy sector in Ukraine and its threats.....	20
8.4.2. Energy sector in Belarus and its threats.	22
8.4.3. Dealing with treats for transit countries energy security.....	24

9.	Discussion of results and personal conclusions	25
9.1.	EU Challenges	25
9.2.	EU Answers	25
9.3.	Road toward security	25
10.	Annexes	26
10.1.	List of figures	26
10.2.	List of pictures	26
10.3.	List of tables	26
10.4.	List of literature	27
10.4.1.	EU Documents	27
10.4.2.	Papers	27
10.4.3.	Web pages	28
11.	Affidavit	30

2. Preface

Nowadays everybody needs facilities like electricity, the Internet and transport based on fuel-powered vehicles, thus cutting off energy supplies would have a devastating effect on every human being's life from the individual to the large organizations. The future shape of the European Union depends, among others, on energy security, which has always had vital effect on many aspects of functioning of every country since energy security is becoming a key element of foreign policy. With the increase in demand and prices of energy, consumers are trying to conduct an effective and long-term strategy for the energy procurement. European countries suffer from a lack of energy resources on their territory, that is the reason why both EU and the Member States are coming up with some activities focused on fulfilling own economies' power shortages mainly by import.

Matching needs of the industry are converted into creating financial emancipation as well as conducive to the development surrounding for each citizen. Achieving energetic safety leads through Common Security and Defence Policy (CSDP) missions and operations. These are centred on the idea of a comprehensive approach – taking into consideration a range of surfaces - political, economic and social factors to take care of security in various areas in the world. Accomplishing targets of the CSDP strategy should guarantee energy security for the EU and its Member States.

3. Introduction

European energy security is a complex definition and includes political, economic and ecological conditions, especially when the EU multidimensional character is investigated. It is often analysed as a component of economic security - can be understood as a situation in which the economy of a country is provided with the necessary supply of production factors for their functioning and development, including energy sufficiency¹. Thus, the energy sector directly affects the efficiency and competitiveness of Member States' economy².

The economic dimension of energy security relates mainly to the costs of obtaining energy and continuity of supply³ since energy is a specific product because it must be available continuously, also in several political or economic situations and crises⁴ countries associated in the EU are facing. Lack of permanence in energy delivery is associated with high costs on the grounds of this the energy sector plays a fundamental role in shaping the efficiency and competitiveness of the economy, directly and indirectly affects the citizens' quality of life⁵. Thus, energy resources are treated as a strategic product. Intensified competition on the international market, the importance of the price of energy, which determines the level of customer's life, industrial competitiveness and economic growth, are continuously increasing⁶. Accordingly, the EU adopted conclusions on the priorities and principles for shaping policies that would lead to an energy transformation resulting in the creation of an affordable, secure, competitive, reliable and sustainable energy system⁷. It is widely agreed that the Union must operate also through CSDP to streamline the entire process of ensuring energy security for Member States.

¹ E. Haliżak, *Ekonomiczny wymiar bezpieczeństwa narodowego i międzynarodowego, bezpieczeństwo narodowe i międzynarodowe u schyłku XX wieku*, Warszawa 1997, p. 78 – 82

² *Energy Security and CSDP: Energy Factor in the EU Military Missions and Operations*

³ A. Gradziuk, W. Lach, E. Posel-Cześćnik, K. Sochacka, *Co to jest bezpieczeństwo energetyczne państwa? Kryteria bezpieczeństwa międzynarodowego państwa*, Warszawa 2003, p. 76.

⁴ *Ibidem* p. 71.

⁵ *Ibidem* p. 71.

⁶ *Ibidem* p. 76.

⁷ <https://www.consilium.europa.eu/pl/policies/energy-union>

There are numerous challenges which the EU and its CSDP are facing in terms of energy security, some of them are:

- Energy security of Ukraine and Belarus as transit countries⁸
- Preventing Russia from monopolizing the market of energy⁹
- Stabilization on the Middle East¹⁰
- Normalization of relations with Iran¹¹
- Boosting African's states ideas of producing renewable energy¹²
- DSQ - Chinese transformation of Africa's energy(impact on CSDP)
- NordStream I and Nordstream II as cutting off possibilities for Easter EU states

This paper will not cover all of mentioned above difficulties in energy security matter, however it is advised to focus and provide proper solution to at least one.

⁸ Z. Ślusarczyk, *The Energy Security of Countries*, Siedlce 2012, p. 117-119.

⁹ Ibidem p. 114.

¹⁰ Ionuț Alin CÎRDEI, East Land Forces Academy Review Vol. XXII, No 2(86), *Aspects regarding the energy security in the Middle East*, Sibiu, Romania 2017

¹¹ <https://www.reuters.com/article/us-iran-europe-usa/iran-urges-europe-to-normalize-economic-ties-with-it-or-face-consequences>[01.12.2019]

¹² <https://www.irena.org/africa>[01.12.2019]

4. The current state of research

4.1. Lisbon Treaty

Legal acts of the EU are determining the importance of energy security in the CSDP. Crucial meaning of ensuring energy efficiency and distribution, developing renewable sources of energy as well as promoting new energy networks favours CSDP initiative among other ways of conducting foreign politics¹³. According to the Lisbon Treaty main responsibility and control of national energy policy is being transferred from the national government to the EU. The other initiative is to include energy as one of the “shared competences” – Member States can operate only on policy areas that the Union has determined not to.¹⁴



Picture 1: Photo of heads of state, heads of government and ministers extensive proceedings after the signing ceremony (Lisbon, Portugal, December 13, 2007)¹⁵

¹³ *Lisbon Treaty* (articles 42.2, 42.3, 194)

¹⁴ http://www.inforse.org/europe/eu_table_lisbon.htm [01.12.2019]

¹⁵ Archives of the Chancellery of the President of the Republic of Poland - www.prezydent.pl [01.12.2019]

4.2. CSDP current missions and operations¹⁶

- ALTHEA/BiH – European Union Force in BiH
- EU NAVFOR Somalia – Countering Piracy off the coast of Somalia
- EUAM Iraq – support of security sector reform in Iraq
- EUAM Ukraine - support of security sector reform in Ukraine
- EUBAM Libya - European Union Border Assistance Mission in Libya
- EUBAM Rafah - European Union Border Assistance Mission in Rafah
- *EUCAP Somalia* - European Union Capacity Building Mission in Somalia
- EUCAP Sahel Mali - European Union Capacity Building Mission in Mali
- EUCAP Sahel Niger - European Union Capacity Building Mission in Niger
- EULEX Kosovo - European Union Rule of Law Mission in Kosovo
- EUMM Georgia - European Union Monitoring Mission in Georgia
- EUNAVFOR MED Operation Sophia - disrupting the activities of immigrant smugglers and human traffickers
 - EUPOL COPPS/Palestinian Territories - the EU Coordinating Office for Palestinian Police Support
 - EUTM RCA – Military training mission in Republic of Central Africa
 - EUTM Somalia - Military training mission in Somalia
 - EUTM Mali - Military training mission in Mali

¹⁶ <https://eeas.europa.eu/topics/military-and-civilian-missions-and-operations/430/military-and-civilian-missions-and-operations> [01.12.2019]

4.3. Impact of instability on energy production

It is a commonly known fact that stabilization always has a positive impact on the economy, transit of resources and energy production. What is more, safe neighbourhood helps to conduct long-term strategies if the energy is examined too. Although none of Common Security and Defence Policy operations and missions is targeted mainly at solving energy supply issues – many of them contribute a lot to global and regional security¹⁷. Another advantageous effect flowing from CSDP activities in preventing armed conflicts or limiting range and repercussions already existing. Military conflicts have always been believed as destructive to one economy and demography, limiting the country's development¹⁸. Figures posted below show what conflict, unrest and lack of stability administers to energy production and GDP.

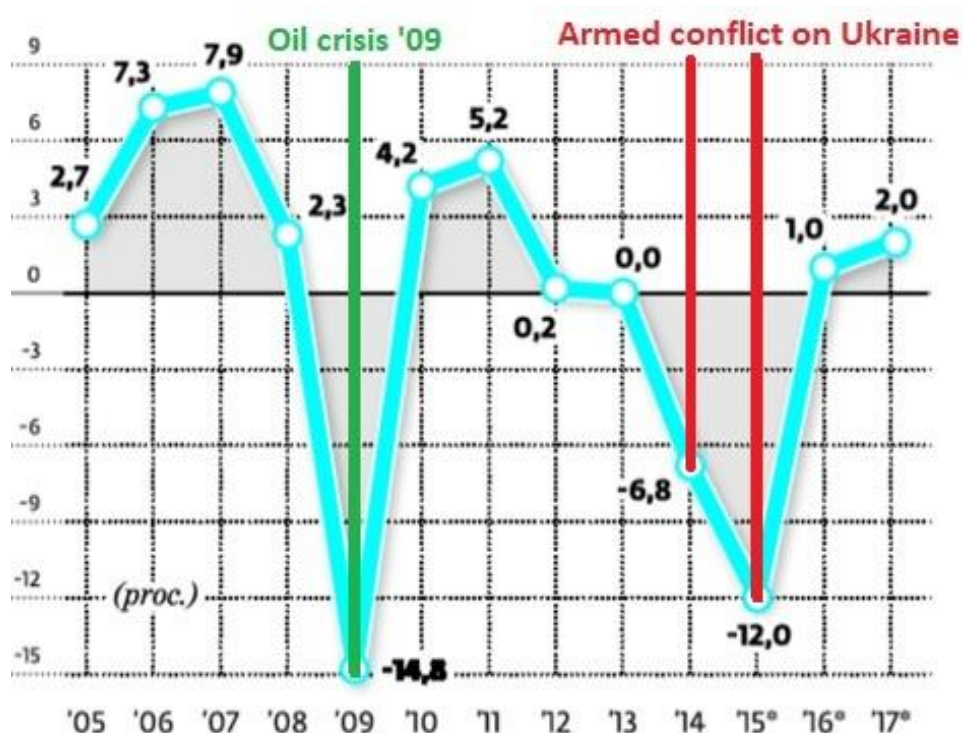


Figure 1: Graph of GDP growth dynamics in Ukraine¹⁹

¹⁷ R. H. Ginsberg et al., *The European Union in Global Security* © Roy H. Ginsberg and Susan E. Penksa 2012

¹⁸ <https://www.rp.pl/Gospodarka/306019988-Ile-na-wojnie-traci-gospodarka-Ukrainy.html> [01.12.2019]

¹⁹ <https://www.imf.org/en/Countries/UKR>

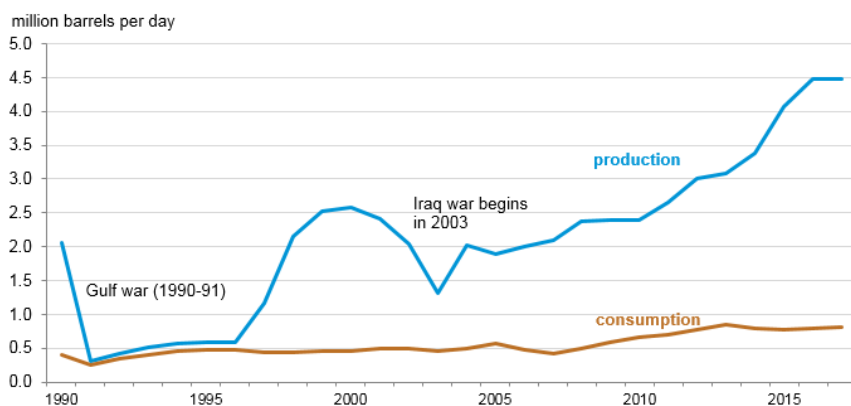


Figure 2: Iraq’s total petroleum and other liquids production²⁰

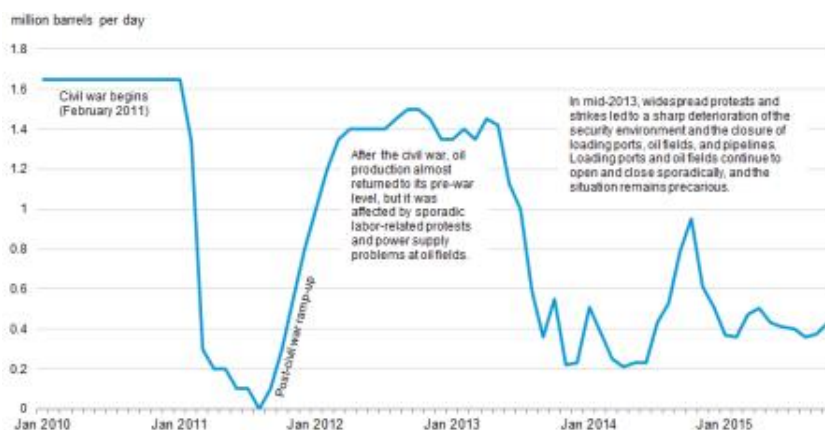


Figure 3: Libya’s total petroleum and other liquids production²¹

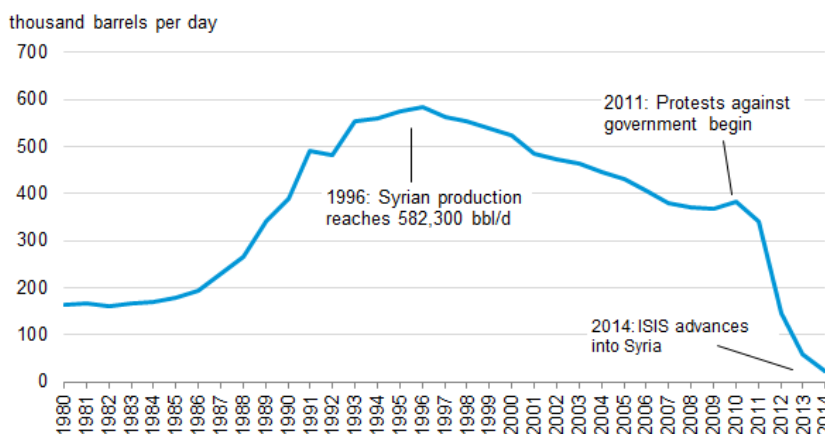


Figure 4: Syria’s total petroleum and other liquids production²²

²⁰ <https://www.eia.gov/beta/international/analysis.php?iso=IRQ>

²¹ <https://www.eia.gov/beta/international/analysis.php?iso=LBY>

²² <https://www.eia.gov/beta/international/analysis.php?iso=SYR>

5. Research gap

Common Security and Defence Policy (CSDP) main principle is a comprehensive approach, thus a complex energy strategy is required to provide proper work of the EU's industry. The strategy's executive body could cooperate and rely on CSDP missions and operations to ensure the energy security of the Union. There are some missions and operations focused indirectly on energy supply matters, therefore it is highly recommended to consider what steps should be taken to maximize the positive influence on EU energy security by its CSDP.

6. Research questions

This article tries to – based on the current impact CSDP missions – predict the most efficient and necessary directions where in the course of ensuring the EU's energy security. Moreover, it is targeted to predict which directions CSDP should turn to achieve the greatest benefits in the field of ensuring energy security for the Member States of the EU. Since there are plenty of solutions in this dimension – this paper will be focused on a few of them. This document has to provide answers to the following questions:

- ✓ How to provide energy security for Ukraine and Belarus?²³
- ✓ What is the condition and main treats for the energy security of transit countries?
- ✓ How to prevent interruptions of energy import?²⁴

The proper respond to problems mentioned above will reassure enough data to forecast how future CSDP missions and operations should look like in order to boost energy security throughout the European Union.

²³ Łukasz Wojcieszak *Polska, Ukraina i Białoruś wobec problemu dostaw i tranzytu rosyjskiego gazu*
Bielsko-Biała 2013

²⁴ <https://science.sciencemag.org/content/211/4489/1379>

7. Methodology

In order to provide answers to questions mentioned in the 6-th part of this paper, the author uses data from various sources like the CSDP analyses, documents published by the European Commission, CSDP and Eurostat. To ensure the greatest possible data diversity and avoid subjectivity this essay also contains a variety of information published on the Internet as well as publications gathered in the Military University of Technology's library.

8. Research and results of research

8.1. European dependence on energy import

Member States rely in most cases on the import of the energy, thus ensuring safe supply is a matter of the highest concern. Likewise, the process of losing energy self-reliance is proceeding, therefore the EU course of action should include securing its import routes to prevent situations of being cut off energy. Such situations would have a destructive effect on the economy.²⁵

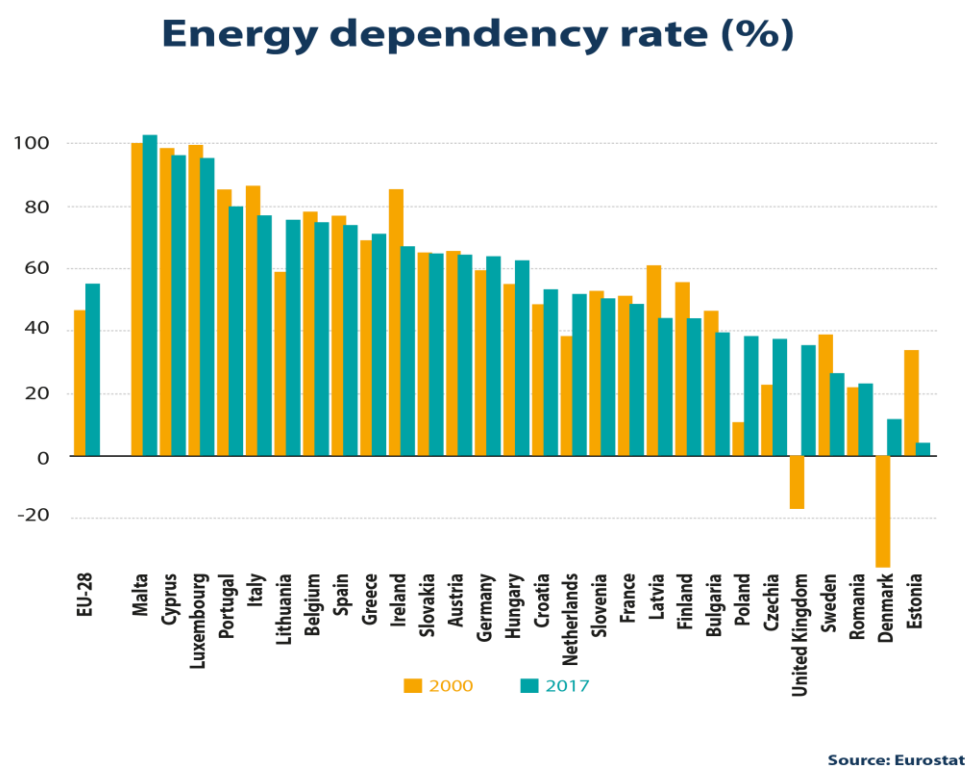
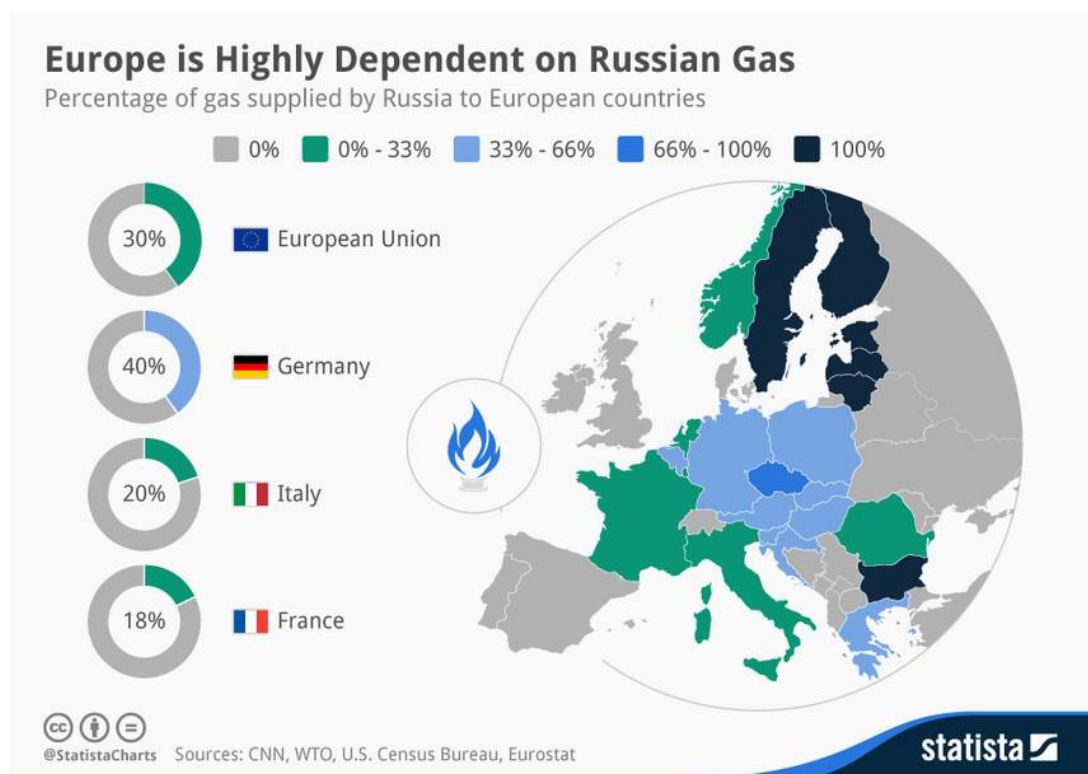


Figure 5: EU states energy dependency rate(%)²⁶

²⁵ http://www.ensec.org/index.php?option=com_content&view=article&id=183:energy-security-as-national-security-defining-problems-ahead-of-solutions1&catid=92:issuecontent&Itemid=341

²⁶ <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

One of the most important indicators to be assessed the country's energy security is an indicator of energy self-sufficiency, and therefore the largest are the possibilities to cover the country's energy needs through own extraction, the greater energy security. The opposite is true when using the import dependency indicator, the higher the indicator, the huger dependence on external energy supplies, As a result less energy security of the state. As Europe relies on Russian Gas CSDP course of action should include securing allocations routes.



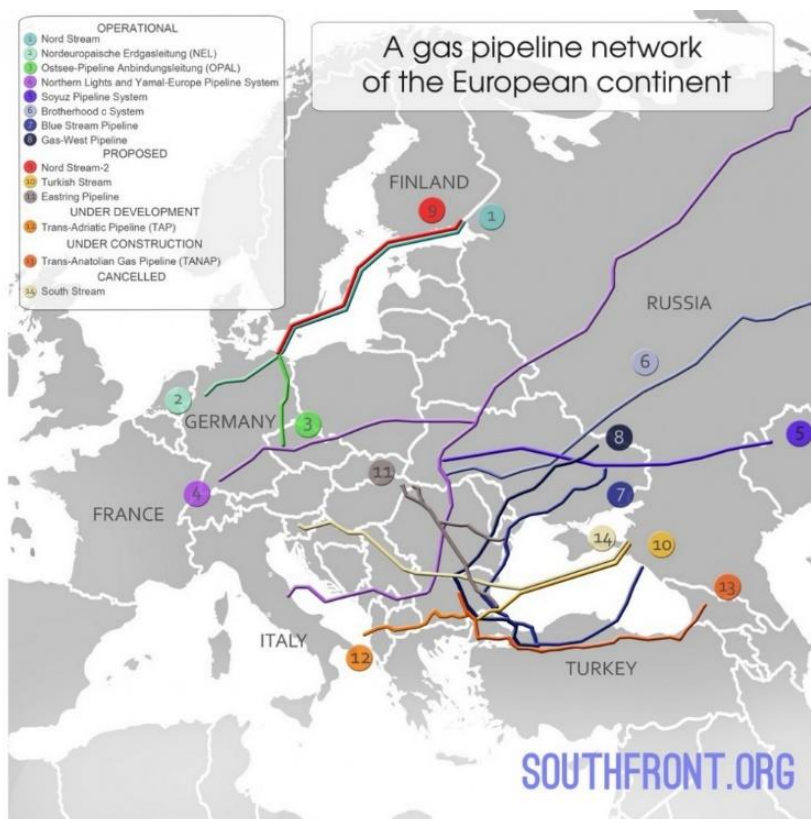
Picture 2: Western Europe countries dependency on Russian gas.²⁷

²⁷ <https://www.weforum.org/agenda/2017/07/why-ukraine-is-central-to-europe-s-energy-security/>

8.2. Ukraine and Belarus role as transit countries.

Yamal, Soyuz, Northern Lights and Brotherhood currently are the most significant pipelines as the energy security of Europe is considered. Listed connections are crossing Ukraine and Belarus both countries are believed to have a major impact to ensure safe import of primary energy from Russia to Europe. As a consequence the EU relies mostly on gas and oil, it is advised to monitor the policy and stability of transit countries.²⁸

EU cannot negate the key role of Belarus and Ukraine in the process of supplying the European energy market.



Picture 3: A gas pipeline network of the European continent.²⁹

²⁸ <https://biznesalert.pl/pgnig-opal-tsue-gaz/>

²⁹ <https://Southfront.org>

8.2.1. Ukraine's role in energy transit should be decreased.

Ukraine is one of the most important countries transiting gas to Europe because of owning several pipelines. The *Northern Lights* and *Yamal-Europe* are two main elements of providing energy from Russia to Europe. The summed capacity of these connections is estimated at 84 billion cubic meters per year. Facilities contributing much to European energy security due to being main energy import routes to Western Europe are also pipelines *Soyuz* and *Brotherhood* as their total capacity is believed to reach 150 billion cubic meters per year.³⁰ It is widely agreed that alternative pipelines are not sufficient to manage the transport of enough amount of fuel powering Member States economies. That makes Ukraine a key player in the energy market. Being an unstable state in the same time creates risk in the energy security.

Table 1: Russian gas exported to Europe - transit dependence on Ukraine (billion of barrels per year)³¹

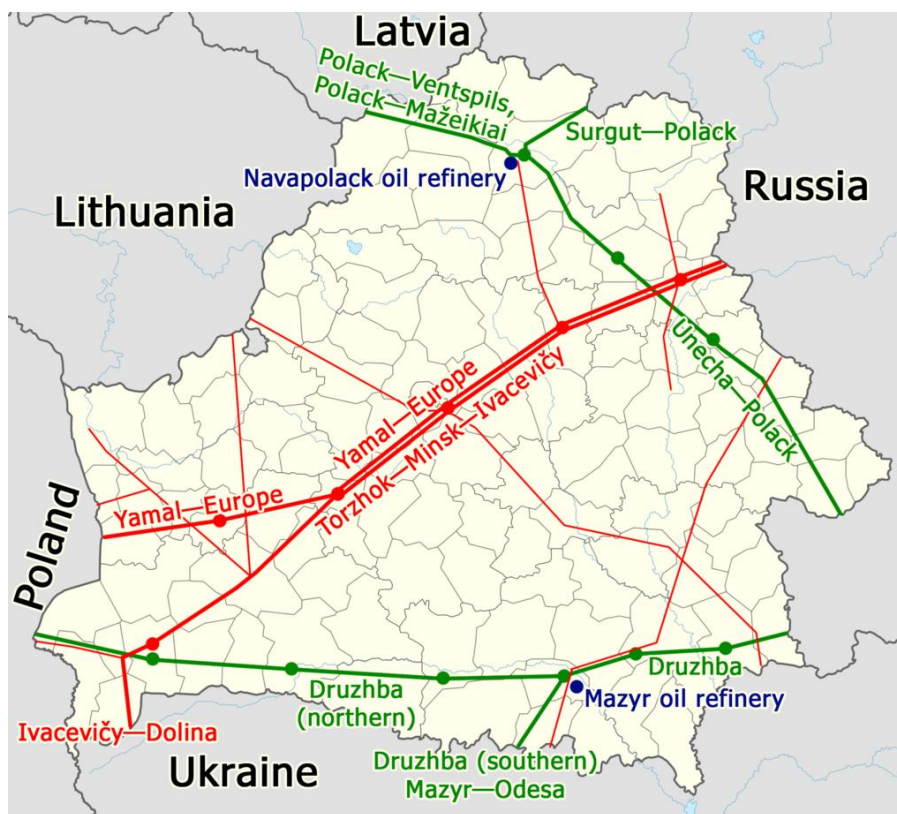
Russian gas exports to Europe: transit dependence on Ukraine by country (2013-14)			
Countries	Exports, 2013 (Total)	Exports, 2014 (Total)	Exports, 2014 (LTSCs)
<i>Countries receiving all their Russian gas imports via Ukraine</i>			
Italy	25.3	21.7	21.7
Austria	5.2	4.2	3.9
Greece	2.6	1.7	1.7
Bulgaria	2.9	2.8	2.8
Hungary	6.0	5.4	5.4
Romania	1.4	0.5	0.3
Slovakia	5.5	4.4	4.4
Czech Republic*	7.9	4.76	4.76
Slovenia	0.5	0.4	0.4
Croatia**	0.2	0.2	0.2
Serbia	2.0	1.5	1.4
FYROM	0.1	0.1	0.1
Bosnia & Herzegovina	0.2	0.2	0.2
Sub-total	59.8	47.86	47.26
<i>Countries receiving some of their Russian gas imports via Ukraine</i>			
France***	8.6	7.6	7.1
Poland	12.9	9.1	9.1
Turkey	26.7	27.3	27.3
Sub-total	48.2	44	43.5

³⁰ <https://thesaker.is/a-network-of-power-gas-pipelines-of-the-european-continent-infographics/>

³¹ Simon Pirani and Katja Yafimava, *Russian Gas Transit Across Ukraine Post-2019: pipeline scenarios, gas flow consequences, and regulatory constraints*, The Oxford Institute for Energy Studies, 2016

8.2.2. Belarus' role in energy transit should be increased.

Rights to control the energy transmitting infrastructure were sold to Gazprom in 2011³² thus it is difficult to anticipate the real value of Belarusian role in energy supply. Russia by its companies uses pipeline *Yamal-Europe*, which capacity allows transport about 20 percent of Russia's gas to the EU. Gazprom was willing to sell gas to Belarus for just \$0,165 per cubic meter starting in 2012, while EU and Ukraine's customers were charged twice more. The same volume average sale price was then \$0,4 in Western Europe. Although all these difficulties mentioned above Belarus still can cut the flow of fuels off, since the pipeline is located on its territory.³³ A role of CSDP is to deepen integration with Belarus – mainly by selling technology, sending experts and relieving energy security risk.



Picture 4: Oil refineries, oil and gas pipelines in Belarus³⁴

³² <https://www.france24.com/en/20111125-russias-gas-deal-power-putin-belarus-pipeline-ukraine-lukashenko-moscow>

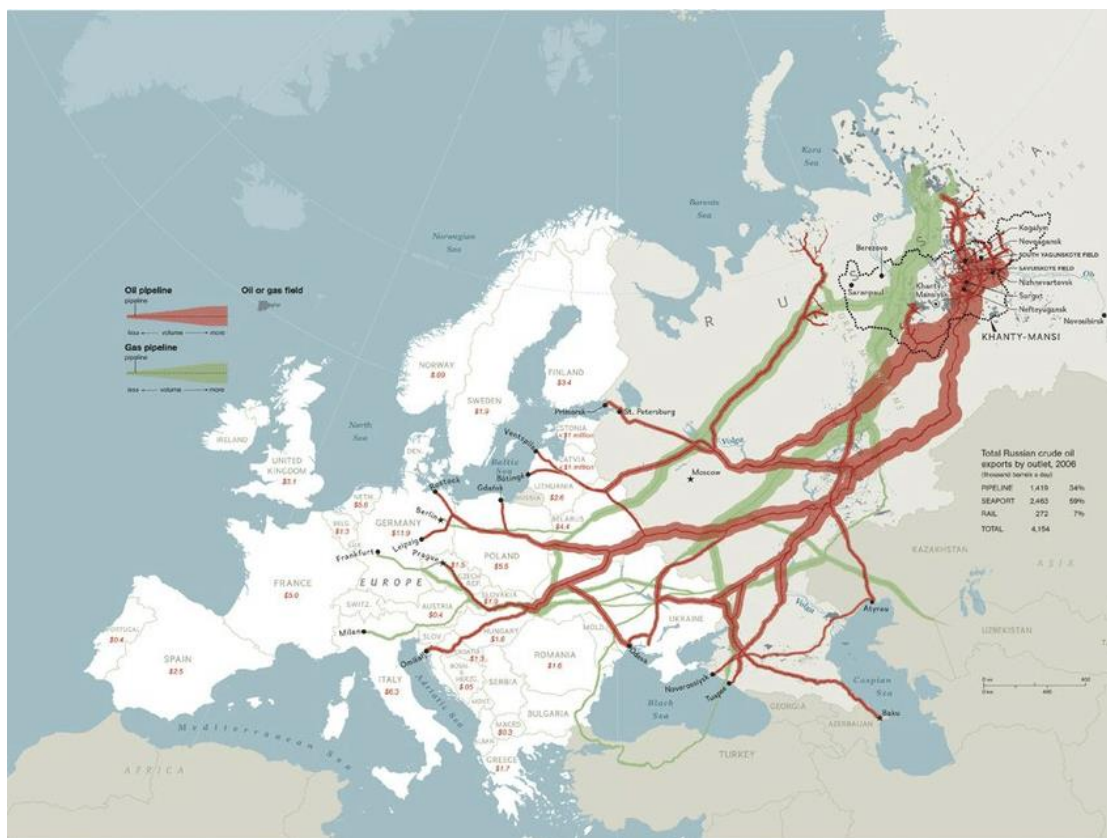
³³ <https://www.nytimes.com/2011/11/26/world/europe/in-deal-with-belarus-russia-gets-control-of-yamal-europe-pipeline.html>

³⁴ Wikipedia.pl - Homoatrox own work

8.3. Deepening EU's relations with Belarus and Ukraine.

Both the Union and Member States relations with two countries presented above are areas of the largest impact while energy supply is considered. Maintaining proper diplomacy with transit countries could be an influent factor of energy security.³⁵

Future CSDP missions and operations are to be focused on the matter of building trust among EU and transit countries.



Picture 5: Major pipelines leading to EU with its flow³⁶

The map posted above shows the importance of transit countries and possible loss of energy supply for the EU in case of cutting off the flow by Belarus or Ukraine.

³⁵ http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.desklight-d4140d71-7a04-462c-b15e-bf76222e91ad/c/02_31.pdf

³⁶ https://www.researchgate.net/figure/Oil-and-Gas-Pipelines-from-Russia-note-approximately-half-go-through_fig5_326426407

8.3.1. European Union's current relations with Ukraine are constantly improving.³⁷

Bilateral relations of EU and Ukraine are centred around the idea of the association agreement, which came into force on 1st September 2017, means tightening both political and economic bonds but also respecting each other values, history and culture. The deep and comprehensive free trade area (DCFTA) offers an option for Ukraine's economy and trade. EU-Ukraine Summit as a tool to advance in mutual commitment includes planning the future and evaluating past activities on the various areas. There are several ways to assist Ukraine, some of them are already active:

- Financial support
- Introduction autonomous trade rights
- CSDP mission to help Ukraine reform civilian security system
- The imposition of sanctions on Russia due to annexation of Crimea

8.3.2. Are European Union's relations with Belarus neglected?³⁸

The Republic of Belarus is a part of the Union State of Russia and Belarus.³⁹ EU is making an effort to foster its relations with Belarus by a variety of assets, but there is yet a long road ahead. Main principles are focused on deepening democratic standards as well as taking restrictive measures targeted to limit suspicious activities like unresolved disappearances, interrupting free elections or abusing human rights.⁴⁰ Methods taken into consideration to improve relations with Belarus include:

- Multilateral technical cooperation
- Supporting democratic reforms
- Dialogue including technical issues
- Launching negotiations on visa and a mobility partnership
- CSDP missions including sending experts to develop technology

³⁷ <https://www.consilium.europa.eu/en/policies/eastern-partnership/ukraine/>

³⁸ <https://www.consilium.europa.eu/en/policies/eastern-partnership/belarus/>

³⁹ <http://mfa.gov.by/en/courtiers/russia/>

⁴⁰ <https://www.consilium.europa.eu/en/press/press-releases/2016/02/25/belarus-sanctions/>

8.4. Energy sector in Belarus and Ukraine and its threats.

It is advised to present both Belarusian and Ukrainian energy sector data as it could help to anticipate if a CSDP mission is needed. If so – what should be the main aim of such a mission and what would be the prospect effect of deploying a mission.

8.4.1. Energy sector in Ukraine and its threats.

The energy sector is an important industry of Ukraine, a set of subsystems used to convert, distribute and use all types of energy resources. Its purpose aims to ensure the production of energy by converting primary, natural energy into secondary, for example, into electric or thermal energy. It is based on the use of traditional types of thermal and hydroelectric power plants, with a deviation from global statistics towards greater use of nuclear power plants. Most of the existing energy facilities were created by the efforts of energy specialists of the Ukrainian SSR and currently requires modernization. The development of the electric power industry stimulates the creation of new industrial units. Some industries are geographically close to sources of cheap electricity, for instance, non-ferrous metallurgy. Electricity in Ukraine is generated mainly at thermal power plants, hydroelectric power stations, PSPs and nuclear power plants.⁴¹

⁴¹ <https://www.eia.gov/beta/international/analysis.php?iso=UKR>

Areas of the largest risk considering Ukrainian energy security are mentioned below:

- Matters related to the Ukrainian Crisis in 2014⁴²
- Corruption among national companies⁴³
- The physical condition of the pipelines⁴⁴
- Unstable government⁴⁵
- Phenomenon of “reversed flow”⁴⁶

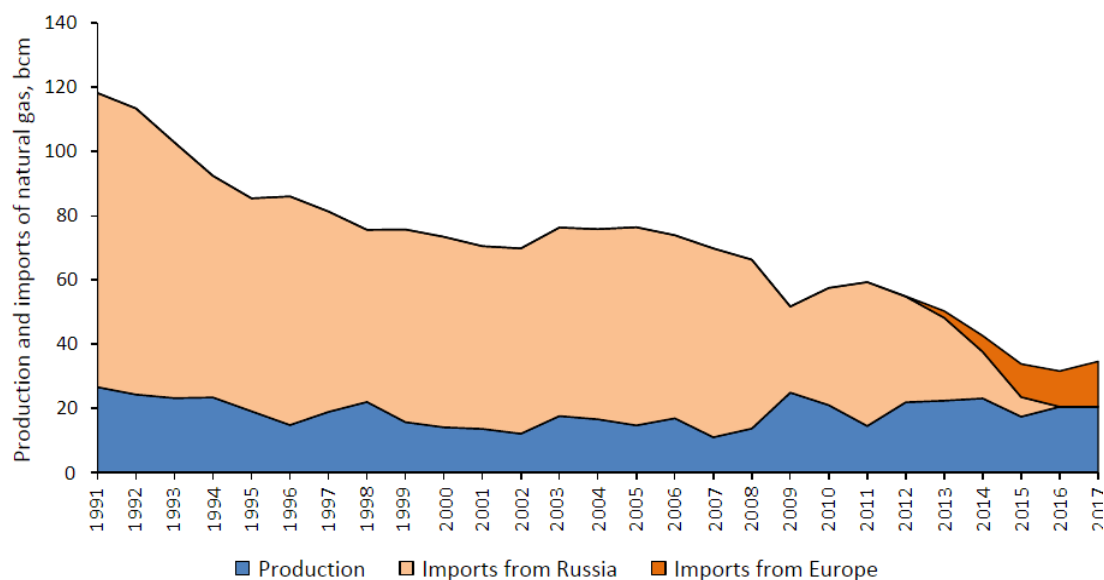


Figure 6: Consumption and imports of natural gas by Ukraine⁴⁷

⁴² https://en.wikipedia.org/wiki/Ukrainian_crisis

⁴³ <http://www.antykorupcja.gov.pl/ak/analizy-i-raporty/rankingi-korupcji/13083,Indeks-Percepcji-Korupcji-2018.html>

⁴⁴ <https://www.oxfordenergy.org/publications/russian-gas-transit-across-ukraine-post-2019-pipeline-scenarios-gas-flow-consequences-and-regulatory-constraints/?v=9b7d173b068d>

⁴⁵ <https://www.obserwatorfinansowy.pl/forma/rotator/ukraina-na-progu-totalnej-prywatyzacji/>

⁴⁶ <https://www.dw.com/en/slovakia-opens-reverse-flow-pipeline-to-carry-gas-to-ukraine/a-17895333>

⁴⁷ <http://www.naftogaz-europe.com/> [1.12.2019]

8.4.2. Energy sector in Belarus and its threats.

Belarus has very limited energy sources, both mineral (oil, natural gas, peat) and renewable (wood, biomass, water and wind energy). There is practically no natural gas, crude oil is found in trace amounts. Therefore, Belarus must import hydrocarbons - entirely from Russia. Annually, it is over 20 million tons of oil and nearly 20 billion m³ of gas. Over 90% of the energy consumed by Belarus is provided by imported hydrocarbons. Own sources - approximately 10% - it is wood, lignite, peat and water (hydroelectric plants). Belarus has maintained its economic stability and steady growth for many years to the low costs of energy and gas imported from Russia. It is the reduction of these concessions by Moscow - which was additionally compounded by the global economic crisis - that causes the condition of the Belarusian economy since 2007-2008 to deteriorate constantly.⁴⁸

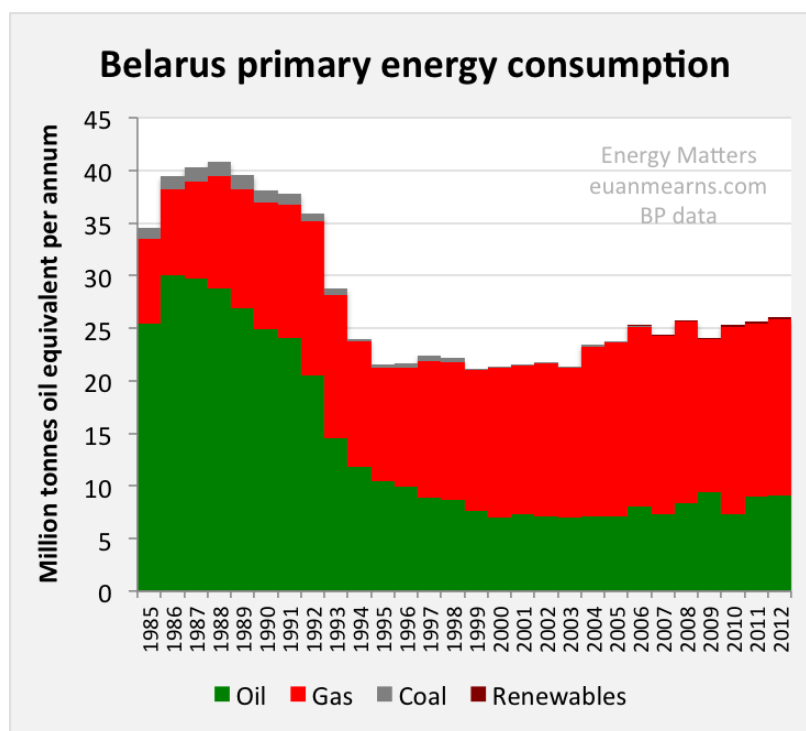


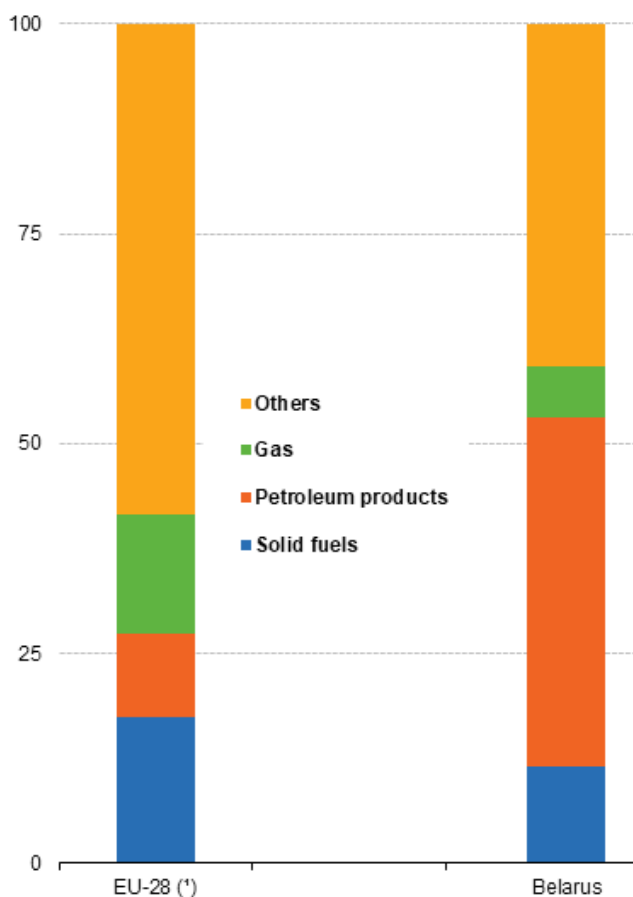
Figure 7: Belarus primary energy consumption.⁴⁹

⁴⁸ <https://www.cire.pl/item,118694,2,0,0,0,0,0,sektor-energetyczny-bialorusi.html>

⁴⁹ <http://euanmearns.com/belarus-grows-while-ukraine-withers/>

Main threats that Belarusian energy sector has to face have long-term character, thus there is a need to create a patient approach to maximize energy security. CSDP missions should consider helping Belarus in cases such as:⁵⁰

- Low geopolitical diversification of energy import
- Possible restrictions of energy import from Russia due to political factors
- The emergence of alternative energy supply routes
- Relying mainly on natural gas
- Poor per capita specific electricity production
- Increased imbalance due to launching a nuclear power plant consumption



Picture 6: Structure of primary energy production by-product in 2017.⁵¹

⁵⁰ A. Mikhalevich, I. Filiutich, *Monitoring of energy security of the Republic of Belarus* Institute of Power Engineering, Laboratory of Energy Security, Minsk, Belarus

⁵¹ https://ec.europa.eu/eurostat/statistics-explained/index.php/European_Neighbourhood_Policy_-_East_-_energy_statistics

8.4.3. Dealing with treats for transit countries energy security.

A crucial threat to the energy security of the EU is the fact that the main, and often the only supplier of energy from the eastern direction is Russia through pipelines through Ukraine and Belarus. Coping with the problem of providing energy security of both transit countries should assume, above all, increased integration with Western Europe, help in reforming civil security services, dealing with the problem of corruption and undemocratic governance. As for Belarus, the issue of neutralizing political tools for Russia's influence on it is another important platform for strengthening the security of supply. An essential element of the comprehensive effort for energy security in the European Union should also include the solution to the problem of low diversification of supply - for example, by developing renewable energy sources in Belarus or nuclear energy.

Considering Ukraine - this state requires stabilization, calming the unrest and stopping the armed conflict in the eastern part of the country. Due to situation with the Russian Federation EU should make some effort to work out new longterm contract offered to Ukraine.⁵² The assistance should also include offering technology to Ukraine to use its gas deposits.⁵³

⁵² <https://www.reuters.com/article/us-ukraine-gas-russia/ukraine-wants-long-term-gas-transit-deal-with-russia-idUSKBN1WO1KQ>

⁵³ <https://energypost.eu/increasing-production-of-gas-in-ukraine/>

9. Discussion of results and personal conclusions

9.1. EU Challenges

The EU has been energy dependent for many years, as a significant part of its energy comes from imports - mainly via pipelines through Ukraine and Belarus. This fact carries a lot of threats, as no European institution has direct control over what happens with energy in the countries that transit it. The European Union and CSDP face a serious challenge of ensuring energy security for the Member States through the energy security of the countries that transit this energy - Ukraine and Belarus. Moreover, these countries are far from being reliable partners in democratic dimension, not to mention relying on them in the energy security of Western Europe - and thus also the lives of every EU's citizen.

9.2. EU Answers

The idea of the Eastern Partnership, under which the EU conducts its policy towards its eastern neighbors, leads to closer relationships, building trust and economic ties, also helps to deal with threats to the stability of transit countries. Energy security as a pillar of European Security and Defence Policy is supported by missions and operations that will have a positive, long-term effect on ensuring the continuity of energy distribution to Europe. Along with the diversification of energy sources, ensuring security for suppliers will contribute to the balanced development of every branch of the economy in the member states of the European Union.

9.3. Road toward security

The key importance of energy security is a well-known and well-developed topic both globally and locally. Constant access to energy allows almost every industry to operate. The European Union and its organs work to ensure energy security for the organization and individual Member States. CSDP missions and operations take into account the increased stability of transit countries, the diversification of energy supplies, counteracting restrictions on energy imports, as well as the threats arising from the possible termination of energy supplies due to random factors.

10. Annexes

10.1. List of figures

Figure 1: Graph of GDP growth dynamics in Ukraine	8
Figure 2: Iraq's total petroleum and other liquids production	9
Figure 3: Libya's total petroleum and other liquids production	9
Figure 4: Syria's total petroleum and other liquids production	9
Figure 5: EU states energy dependency rate(%)	13
Figure 6: Consumption and imports of natural gas by Ukraine	21
Figure 7: Belarus primary energy consumption.....	22

10.2. List of pictures

Picture 1: Photo of heads of state, heads of government and ministers extensive proceedings after the signing ceremony (Lisbon, Portugal, December 13, 2007)	6
Picture 2: Western Europe countries dependency on Russian gas.	14
Picture 3: A gas pipeline network of the European continent.	15
Picture 4: Oil refineries, oil and gas pipelines in Belarus.....	17
Picture 5: Major pipelines leading to EU with its flow	18
Picture 7: Structure of primary energy production by-product in 2017.....	23

10.3. List of tables

Table 2: Russian gas exported to Europe - transit dependence on Ukraine(billion of barrels per year)

10.4. List of literature

10.4.1. EU Documents

- Energy Security and CSDP: Energy Factor in the EU Military Missions and Operations
- *Lisbon Treaty* (articles 42.2, 42.3, 194)

10.4.2. Papers

- E. Halizak, *Ekonomiczny wymiar bezpieczeństwa narodowego i międzynarodowego, bezpieczeństwo narodowe i międzynarodowe u schyłku XX wieku*, Warszawa 1997, p. 78 – 82
- Gradziuk, W. Lach, E. Posel-Cześcik, K. Sochacka, *Co to jest bezpieczeństwo energetyczne państwa? Kryteria bezpieczeństwa międzynarodowego państwa*, Warszawa 2003, p. 76.
- Z. Ślusarczyk, *The Energy Security of Countries*, Siedlce 2012, p. 117-119.
- Ionuț Alin CÎRDEI, *East Land Forces Academy Review Vol. XXII, No 2(86), Aspects regarding the energy security in the Middle East*, Sibiu, Romania 2017
- R. H. Ginsberg et al., *The European Union in Global Security* © Roy H. Ginsberg and Susan E. Penksa 2012
- Łukasz Wojcieszak *Polska, Ukraina i Białoruś wobec problemu dostaw i tranzytu rosyjskiego gazu*, Bielsko-Biała 2013
- Simon Pirani and Katja Yafimava, *Russian Gas Transit Across Ukraine Post-2019: pipeline scenarios, gas flow consequences, and regulatory constraints*, The Oxford Institute for Energy Studies, 2016
- Mikhalevich, I. Filiutsich, *Monitoring of energy security of the Republic of Belarus* Institute of Power Engineering, Laboratory of Energy Security, Minsk, Belarus

10.4.3. Web pages

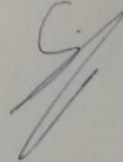
- <https://www.consilium.europa.eu/pl/policies/energy-union> [01.12.2019]
- <https://www.reuters.com/article/us-iran-europe-usa/iran-urges-europe-to-normalize-economic-ties-with-it-or-face-consequences> [01.12.2019]
- <https://www.irena.org/africa> [01.12.2019]
- http://www.inforse.org/europe/eu_table_lisbon.htm [01.12.2019]
- Archives of the Chancellery of the President of the Republic of Poland - www.prezydent.pl [01.12.2019]
- <https://eeas.europa.eu/topics/military-and-civilian-missions-and-operations/430/military-and-civilian-missions-and-operations> [01.12.2019]
- <https://www.rp.pl/Gospodarka/306019988-Ile-na-wojnie-traci-gospodarka-Ukrainy.html> [01.12.2019]
- <https://www.imf.org/en/Countries/UKR> [01.12.2019]
- <https://www.eia.gov/beta/international/analysis.php?iso=IRQ> [01.12.2019]
- <https://www.eia.gov/beta/international/analysis.php?iso=LBY> [01.12.2019]
- <https://www.eia.gov/beta/international/analysis.php?iso=SYR> [01.12.2019]
- <https://science.sciencemag.org/content/211/4489/1379> [01.12.2019]
- http://www.ensec.org/index.php?option=com_content&view=article&id=183:energy-security-as-national-security-defining-problems-ahead-of-solutions1&catid=92:issuecontent&Itemid=341 [01.12.2019]
- <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do> [01.12.2019]
- <https://www.weforum.org/agenda/2017/07/why-ukraine-is-central-to-europe-s-energy-security/> [01.12.2019]
- <https://biznesalert.pl/pgnig-opal-tsue-gaz/> [01.12.2019]
- <https://Southfront.org> [01.12.2019]
- <https://thesaker.is/a-network-of-power-gas-pipelines-of-the-european-continent-infographics/> [01.12.2019]
- <https://www.france24.com/en/20111125-russias-gas-deal-power-putin-belarus-pipeline-ukraine-lukashenko-moscow> [01.12.2019]
- <https://www.nytimes.com/2011/11/26/world/europe/in-deal-with-belarus-russia-gets-control-of-yamal-europe-pipeline.html> [01.12.2019]

- Wikipedia.pl - Homoatrox own work [01.12.2019]
- http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.desklight-d4140d71-7a04-462c-b15e-bf76222e91ad/c/02_31.pdf [01.12.2019]
- https://www.researchgate.net/figure/Oil-and-Gas-Pipelines-from-Russia-note-approximately-half-go-through_fig5_326426407 [01.12.2019]
- <https://www.consilium.europa.eu/en/policies/eastern-partnership/ukraine/> [01.12.2019]
- <https://www.consilium.europa.eu/en/policies/eastern-partnership/belarus/> [01.12.2019]
- <http://mfa.gov.by/en/courtiers/russia/> [01.12.2019]
- <https://www.consilium.europa.eu/en/press/press-releases/2016/02/25/belarus-sanctions/> [01.12.2019]
- <https://www.eia.gov/beta/international/analysis.php?iso=UKR> [01.12.2019]
- https://en.wikipedia.org/wiki/Ukrainian_crisis [01.12.2019]
- <http://www.antykorupcja.gov.pl/ak/analizy-i-raporty/rankingi-korupcji/13083,Indeks-Percepcji-Korupcji-2018.html> [01.12.2019]
- <https://www.oxfordenergy.org/publications/russian-gas-transit-across-ukraine-post-2019-pipeline-scenarios-gas-flow-consequences-and-regulatory-constraints/?v=9b7d173b068d> [01.12.2019]
- <https://www.obserwatorfinansowy.pl/forma/rotator/ukraina-na-progu-totalnej-prywatyzacji/> [01.12.2019]
- <https://www.dw.com/en/slovakia-opens-reverse-flow-pipeline-to-carry-gas-to-ukraine/a-17895333> [01.12.2019]
- <http://www.naftogaz-europe.com/> [01.12.2019]
- <https://www.cire.pl/item,118694,2,0,0,0,0,0,sektor-energetyczny-bialorusi.html> [01.12.2019]
- <http://euanmearns.com/belarus-grows-while-ukraine-withers/> [01.12.2019]
- https://ec.europa.eu/eurostat/statistics-explained/index.php/European_Neighbourhood_Policy_-_East_-_energy_statistics [01.12.2019]
- <https://www.reuters.com/article/us-ukraine-gas-russia/ukraine-wants-long-term-gas-transit-deal-with-russia-idUSKBN1WO1KQ> [01.12.2019]
- <https://energypost.eu/increasing-production-of-gas-in-ukraine/> [01.12.2019]

11. Affidavit

I declare that I have written the present essay independently and on my own. I have clearly marked any language or ideas borrowed from other sources as not my own and documented their sources. The essay does not contain any work that I have handed in or have had graded as a previous scientific paper earlier on. I am aware that any failure to do so constitutes plagiarism. Plagiarism is the presentation of another person's thoughts or words as if they were my own – even if I summarize, paraphrase, condense, cut, rearrange, or otherwise alter them. I am aware of the consequences and sanctions plagiarism entails. Among others, consequences may include nullification of the essay, exclusion from participation in the CSDP Olympiad. These consequences also apply retrospectively, i.e. if plagiarism is discovered after the essay has been accepted and graded. I am fully aware of the scope of these consequences.

kpr. pchor. BARTŁOMIEJ SZYMAŃSKI



WARSAW, POLAND, DECEMBER 2019