

Energy Security – a major EU Security Issue of the 21st Century
The Influence of the Energy Security on the EU's Security on the Example
of Romania's and Austria's Energy Security regarding the Gas Supply
during the Ukraine Crisis

Bachelor Thesis

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Abstract and Keywords in English Language

Background: Over the last years the rising energy demand among the European Union Member States made the energy security a top issue of the European security policy. The concerns related to the vulnerabilities produced by the dependency of the EU on energy imports are the backdrop of a more reliable cooperation between the Member States. In this context, the author finds it relevant to analyse how the EU Member States influence the EU's energy security.

Purpose: The purpose of the thesis is to find out how the Romanian National Energy Strategy and Austrian National Energy Strategy respond to the strategic priorities and actions of the European Union Energy Strategy, concerning the gas supplies. The cooperation between Member States is the deliberating factor in achieving safer gas supplies inside the EU's borders. The paper also aims to analyse the measures implemented after various crises.

Method: The author realises an extensive research on Romanian and Austrian efforts to improve the national energy security in order to enhance the EU's energy security and moreover, the EU's security. To reach a conclusion, the author analyses official energy security documents of the EU, Romania and Austria, and conducts expert interviews with five Romanian experts in this domain.

Conclusion: Both countries contribute to the EU's energy security substantially, having elaborated in their National Energy Strategies fields of action and measures pointing how to develop safer supplies.

Keywords: Energy security, European Energy Security Strategy, Ukraine Crisis, gas supply, national energy strategies, cooperation, resources, dependency, Russian gas, EU Member States.

Abstract und Schlagworte in deutscher Sprache

Hintergrund: Der erhöhte Energiebedarf der Mitgliedstaaten der Europäischen Union bewirkte, dass die Energiesicherheit ein Hauptthema für die europäische Sicherheitspolitik in den letzten Jahren wurde. Die Bedenken hinsichtlich der Schwachstellen der Abhängigkeit von EU-Energieimporten sind der Hintergrund für eine solidere Kooperation zwischen den EU-Mitgliedstaaten. In diesem Zusammenhang findet es die Autorin relevant, zu analysieren, wie die EU-Mitgliedstaaten die EU-Energiesicherheit beeinflussen.

Zielsetzung: Das Ziel der Bachelorarbeit ist es, herauszufinden, wie hinsichtlich der Gasversorgung die nationale rumänische Sicherheitsstrategie und die nationale österreichische Sicherheitsstrategie auf die strategischen Prioritäten und Handlungen der Energiestrategie der Europäischen Union reagieren. Die Kooperation zwischen den Mitgliedstaaten ist ein überlegenswerter Faktor, um innerhalb der EU-Grenzen eine sicherere Gasversorgung zu erreichen. Die Arbeit zielt auch darauf ab, die implementierten Maßnahmen nach diversen Krisen zu analysieren.

Methode: Die Autorin führt eine umfangreiche Untersuchung der rumänischen und österreichischen Anstrengungen zur nationalen Verbesserung der Energiesicherheit durch, welche der Zweck hat, die Steigerung der EU-Energiesicherheit und somit der EU-Sicherheit als solche weiterzuentwickeln. Um ein Ergebnis zu erzielen, analysiert die Autorin offizielle Dokumente bezüglich der Energiesicherheit der EU, Rumäniens und Österreichs und führt Experteninterviews mit fünf rumänischen Fachleuten auf diesem Gebiet.

Ergebnis: Beide Länder tragen erheblich zur EU-Energiesicherheit bei, indem sie in ihren nationalen Energiestrategien die Handlungsfelder und die Maßnahmen anführen, um sicherere Lieferungen weiterzuentwickeln.

Schlagworte: Energiesicherheit, Europäische Energiesicherheitsstrategie, Ukrainekrise, Gasversorgung, nationale Energiestrategien, Kooperationen, Ressourcen, Abhängigkeit, russisches Gas, EU-Mitgliedstaaten.

Abstract și Cuvinte Cheie în Limba Română

Cadru: Creșterea cererii de energie în rândul statelor membre ale Uniunii Europene pe parcursul ultimilor ani a făcut ca securitatea energetică să se încadreze printre problemele de vârf ale securității europene. Vulnerabilitățile generate de dependența UE de importurile de energie sunt contextul unei cooperări mai fiabile între statele membre. În aceste circumstanțe, autoarea consideră relevantă analiza modului în care statele membre ale Uniunii Europene influențează securitatea energetică a acesteia.

Scop: Scopul lucrării este de a afla cum strategia națională energetică a României și strategia națională energetică a Austriei răspund priorităților și acțiunilor strategice ale Strategiei Energetice a Uniunii Europene în ceea ce privește aprovizionarea cu gaze naturale. Cooperarea dintre statele membre reprezintă factorul deliberant în direcția realizării unor aprovizionări mai sigure cu gaze în interiorul granițelor Uniunii Europene. Lucrarea urmărește, de asemenea, să analizeze măsurile implementate după diversele crize de gaze la care statele membre au fost martore.

Metodă: Autoarea realizează o cercetare amplă privind eforturile României și Austriei de a își îmbunătăți securitatea energetică națională cu scopul de a spori securitatea energetică a Uniunii Europene și, în plus, securitatea Uniunii Europene. Pentru a ajunge la o concluzie, autoarea analizează documente oficiale ale Uniunii Europene, României și Austriei și conduce interviuri cu cinci experți români în domeniu.

Concluzie: Ambele țări contribuie în mod substanțial la asigurarea securității energetice a Uniunii Europene, având elaborate în propriile strategii de securitate energetică domenii și măsuri de acțiune care indică modalități de dezvoltare pentru aprovizionări mai sigure.

Cuvinte cheie: Securitatea energetică, Strategia Energetică a Uniunii Europene, Criza din Ucraina, aprovizionarea cu gaze, strategiile energetice naționale, cooperarea, resursele, dependența, gazul rusesc, statele membre UE.

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2. Prelude

2.1 Preface¹

The present Bachelor Thesis was created during a three month Erasmus+ exchange programme, at the Theresan Military Academy in Wiener Neustadt, Austria according to Austrian Regulations.

The author's option for choosing this topic is due to her interest in different security fields and nowadays problems of European Union's security. The recent conflicts in Europe have forced the nations to change their visions about the importance of energy security. The conflicts had, most of the time, the same answer: the fight for resources, which should encourage the countries to strengthen their energy security, in order to ensure the European Union's security. The author also chose this topic because it is a challenge to answer and find solutions to recent conflicts and crisis which may affect the resources security.

The author would like to show her deepest appreciation and sincere gratefulness to her tutor, Col Dr. Harald Gell, and also to all those who helped her in the research process and supported her to create the present thesis, specially to: Mag. Christian Thuller, Maj Mag. (FH) Moser Michael and Col Dr. Ovidiu Moşoiu, for their cooperation and guidance through the entire progress of this paper.

2.2 Preamble²

During the last decades we have been witnesses of a tremendous progress in the security fields. Nobody would have thought that 2014 would be the year characterised by a change of the geography of the European continent and even more by a danger to each citizen of the EU – the gas supply. The purpose of this thesis is to show the EU's reaction to the new crisis and threats it has to face. The preventive attitude of the EU and its Member States hinder them to not burst into an energy crisis. The implemented

1 Author's note: This chapter was created by the author unless otherwise marked.

2 Author's note: This chapter was created by the author unless otherwise marked.

measures to avoid Russian gas cut off were lessons learnt from the previous gas crises which are also described in this research.

As far as she knows, the author envisages that she is the first to have written about this specific topic.

Considering that every country continues to develop to satisfy its needs, the national energy strategies of Romania and Austria are presented within the thesis. But, by putting the information about Austria, Romania and the EU together, new measures for the future of a safe gas supply could be achieved.

It is very important to ensure the compatibility with the fundamental values of an open society and also an intensive cooperation based on solidarity on European and international level.

2.3 Introduction³

This chapter's purpose is to describe the thesis concept, the problem solved by writing this thesis and the way the problem was solved. Consequently, the author chose to divide this chapter into two sections. The first section focuses on presenting the main issue on which the thesis was created and the approach to solve it. The second section is created to describe the terms and definitions used during the entire thesis. This division is created in order to help the reader to understand it better.

2.3.1 Concept of the Thesis

Nations have become dependent on energy and resources in governing their societies, conducting business, and exercising their rights and freedoms as citizens. In order to deliver global reach and power, every nation or organisation needs safe resources or supplies.

There were many questions about the best approach to study and find solutions to the significant security issues of the EU. The author's idea was to study a specified field of security – the energy security for two specific Member States – Romania and Austria

3 Author's note: This chapter was created by the author unless otherwise marked.

and to extend these results to the EU. The goal of the thesis will be achieved after the main question is answered and the research gap is closed.

Concurrent with the increasing importance of the energy, a wealth of risks has emerged from different factors: insure supplies, political instabilities, or terrorism. Over the past few years, “*the EU’s energy security came to the top of EU agenda [...] due to increasing concerns about Russia as an unreliable supplier.*”⁴ The principal risks and threats to energy security identified over time are represented in the figure below.

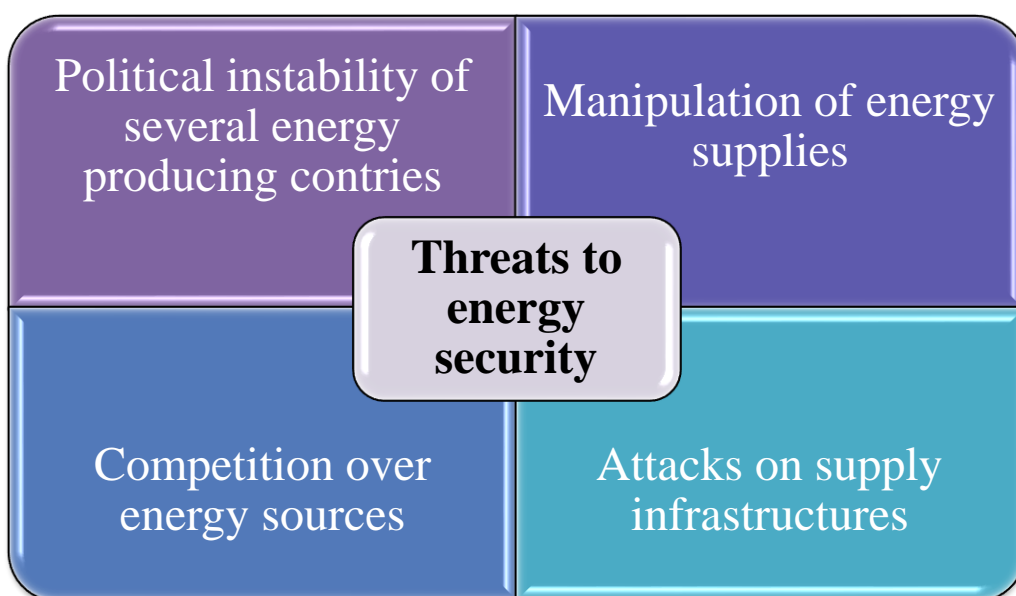


Figure 1: General threats to the energy security.⁵

Some EU Member States have already adopted an energy security strategy, needed in the process of defending against these various threats and of protecting their natural resources.

In a constantly changing environment “*Oil and natural gas are considered, nowadays, the main strategic energy resources due to the important role that they have in support of economic and social development, their rarity and near future exhaustion and lack of*

4 Homepage of E-International Relations Students. URL: <http://www.e-ir.info/2015/12/03/energy-security-in-europe-how-is-the-eu-dealing-with-it/>. [1-5-17].

5 Author’s note: Figure created by the author based on Wikipedia information about threats addressing to energy security. URL: https://en.wikipedia.org/wiki/Energy_security. [3-5-17].

viable alternatives of substitute them.”⁶ Therefore, the author considered it relevant for her study to reach the gas supplies.

Before going deeper in the research, it is very important that the dimensions of the energy security are clear to the reader, thus the author presents them in the image below.



Figure 2: The dimensions of the energy security.⁷

After obtaining a minimum level of knowledge about the energy strategies adopted at European level, the author would like to underline the main goal of the thesis which is to find out if the Romanian National Energy Strategy (RNES) and the Austrian National Energy Strategy (ANES) respond to the strategic priorities and actions of European Energy Security Strategy (EESS) concerning the gas supply. The starting point for the author is the analysis of the RNES and ANES, followed by the investigation of the EU's strategic priorities and actions during the Ukraine Crisis. As the EU's energy security can be achieved only if each Member State has a very well implemented energy strategy, the author pays special attention to this subject.

⁶ Băhnăreanu, C. (2015). Risks and threats to strategic energy resources in the contemporary world. Tîrgu Mureş. Article. P. 269.

⁷ Author's note: Figure created by the author based on URL: <https://www.iea.org/topics/energysecurity/subtopics/whatisenergysecurity/>. [1-5-17].

The paper offers special importance to the vulnerabilities produced by the high level of dependency on Russia's instable supply. The author dedicates the last chapter for future measures in order to reduce the dependency of the EU and implicitly of the Member States. New gas infrastructures and interconnectors are to be presented in the last chapter.

A comprehensive understanding of the energy relations between the Member States and the EU is vital. The paper reviews the existing literature which offers different insights on how each EU country sustain the security of supplies in Europe. The literature has not paid much attention to how the Member States have responded to the increasing effect of the EU on their domestic institutions, policies and strategies and the paper is a way to resolve this matter by studying the strategies of Romania and Austria.

2.3.2 Terms and Definitions

This sub-chapter is created to avoid possible misunderstandings which new and unclear terms are used in the present thesis. It is relevant to describe the meaning of these words and expressions, to understand the context within the thesis.

Crisis: *“a condition of instability or danger, as in social, economic, political, or international affairs, leading to a decisive change.”*⁸

Energy security: *“the association between national security and the availability of natural resources for energy consumption.”*⁹

Gas supply: *“the organized delivery and distribution of gas fuel to serve the needs of the national economy.”*¹⁰

Member State: *“a country that belongs to a political, economic, or trade organization such as the European Union.”*¹¹

Security: *“protection of a person, building, organization, or country against threats such as crime or attacks by foreign countries.”*¹²

8 Homepage of Dictionary. URL: <http://www.dictionary.com/browse/crisis>. [1-5-17].

9 Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/Energy_security. [1-5-17].

10 Homepage of the Free Dictionary. URL: <http://encyclopedia2.thefreedictionary.com/Gas+Supply>. [1-5-17].

11 Homepage of Cambridge Dictionary. URL: <http://dictionary.cambridge.org/dictionary/english/member-state>. [1-5-17].

Strategy: “A method or plan chosen to bring about a desired future, such as achievement of a goal or solution to a problem.”¹³

2.4 Linkage to Scientific Disciplines¹⁴

The world is in a continuous change – and so are challenges, opportunities, but also threats to national and global security, which require international cooperation. In order to successfully ensure a proper security at European level, the institutions should have a global view of all security fields and to counter the risks related to energy that EU is facing, a common understanding between countries, in the context of energy security is necessary.

Firstly, as the topic is directly connected to EU and its security policies, the thesis may present interest for specialised institutions in EU security and defence and for agencies like the following: European Commission, European Neighbourhood Policy, European Security Strategy, Energy Union and Centre for Energy Policy Research. Energy is the key for industrial and technological fields, so European Defence Agency could also benefit from the author’s research and conclusions.

Seeing that the problem described in the thesis illustrates gas supply in the EU, it concerns also authorities like: the Gas Advisory Council, the Central and South-Eastern Europe Gas Connectivity, the European Network of Transmission System Operators for Gas (ENTSOG).

The topic is mostly referring to Austria’s and Romania’s energy security concerning gas supplies and how those two countries, as EU Member States, which support EU’s efforts in achieving energy security, contribute to developing a strong European energy community. Both, Austria and Romania, are engaged in the Bulgaria-Romania-Hungary-Austria (BRUA)¹⁵ gas pipeline project and the author’s analyses of their

12 Homepage of Cambridge Dictionary. URL:
<http://dictionary.cambridge.org/dictionary/english/security>. [1-5-17].

13 Homepage of Business Dictionary. URL:
<http://www.businessdictionary.com/definition/strategy.html>. [1-5-17].

14 Author’s note: This chapter was created by the author unless otherwise marked.

15 Author’s note: The name BRUA comes from the Romanian initials for the fourth countries involved.

energy strategies will be very helpful for institutions in charge with this on-going project in each country, for developing and constructing this important pipeline.

Secondly, the problem presented in this thesis, addresses to persons who are interested in what the topic covers and it provides support to: Ministries for Foreign Affairs, teaching staff for security policies in both military and civilian fields and every person who wants to enrich her or his knowledge about the presented topic.

3. Body of the Thesis

3.1 Current State of Research

The purpose of this chapter is to provide an overall description of the latest developments concerning the thesis' topic. This contains basic information about the EU energy strategy. In this section, the author presents the literature review, and for a better understanding of the next chapters, a background information about the relations between EU and Russia concerning energy.

There is ample literature regarding the complexity of the EU's security institutions. Inside of this security mosaic, the energy security has a major role in defining the present higher or lower EU's security level.

Recently phenomena, like crisis, conflicts and globalisation, which have occurred on European soil, have generated important changes in the security area and emerged consequences and long-term effects onto the European community. *“But globalisation has also made threats more complex and interconnected. The arteries of our society - such as information systems and energy supplies - are more vulnerable. To respond to the changing security environment we need to be more effective - among ourselves, within our neighbourhood and around the world.”*¹⁶ According to what experts said in this important EU security document – Report on the Implementation of the European Union Strategy – Providing Security in a Changing World, the new threats require other strategies in the EU's security fields. What keeps the society going are technology and energy and they must be kept up-to-date in order to satisfy the new security challenges to which European environment is exposed. The author has also remarked in this document the important role of the EU's neighbours for a safer and stronger Europe.

*“The EU, as a combination of meanwhile 28 states with nearly 50 [sic] million inhabitants, is one of the economically most efficient regions of the world”*¹⁷ and this could be the reason why the EU should take into consideration all kind of risks, threats and vulnerabilities not only inside its borders, but also near them, securing its

16 U. a. (2008). Report on the Implementation of the European Security Strategy - Providing Security in a Changing World -. Executive Summary. Brussels. P. 1.

17 Gell, H. (2015). Crisis Management Operations. Publication of the Federal Ministry of Defence and Sports of the Republic of Austria. Chapter written by Wiedner, KH. P. 26.

neighbours. It needs a proper security strategy which should cover all the domains to protect its member states.

On its way to become a bigger power in the world, the EU meets new threats to its security architecture. The new threats the EU should defeat are:

- Terrorism and organised crime.
- Proliferation of weapons of mass destruction.
- Cyber security.
- Energy security.
- Climate change.¹⁸

Energy security has become a new challenge in the security field of the EU and therefore *“Our response must be an EU energy policy which combines external and internal dimensions.”*¹⁹ This implies creating a balance inside the EU, for all its member states *“[...] Member States should be able to fully and efficiently undertake security measures that they deem fit for the purpose of their country’s security of energy supply, but there should exist a standard European security framework, [...] for each Member State to refer to”*²⁰ but helped by other non-EU member states which are geographically or politically connected.

As many definitions for energy security have been given during history, the author chose one which incorporates most meanings, written in a volume of the United Nations publication: *“Energy security could be defined as the availability of usable energy supplies at the point of final consumption at economic price levels and in sufficient quantities and timeliness so that, given due regard to encouraging energy efficiency, the economic and social development of a country is not materially constrained.”*²¹ As the definition says, energy security should imply affordable energy supplies, not a waste of energy, but to make it more efficient according to the requirements and needs of a certain country. Taking into consideration the EU energy security, the energy supply

18 Cf.: Report on the Implementation of the European Security Strategy. (2008). Op. cit. P. 3-6.

19 Ibid. P. 5.

20 Haghighi, S. (2007). The External Legal Relations of the European Union with Major Oil- and Gas- Supplying Countries. Oxford and Portland. ISBN-13: 978-1-84113728-5. P. 27.

21 Economic Commission for Europe. (2007). Emerging Global Energy Security Risks. New York and Geneva. United Nations Publications. No. 36. P. 8.

should be the pillar of the favourable development of each member state, both economically and socially. The two visions are explained as follows:

- Economically means that energy services should be at lower prices in order to be affordable and stable prices to avoid crises.
- Socially means equal access to energy services for all member states and its inhabitants.

The need of creating an Energy Community took into account several factors “*in order to reduce stress on the state level gas and electricity systems and contribute to resolving local gas and electricity shortages*”²² and “*to create a single regulatory space for the geographic extent of the concerned product markets.*”²³

Having the role to bring together the EU’s countries, South East Europe states and the Black Sea region, the Energy Community has as components more than just the EU member states and deals with energy policy at European level.²⁴

22 Homepage of Energy Community. URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/Treaty#TitleIX. [25-3-17].

23 Ibid.

24 Cf.: Homepage of Energy Community. URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Who_are_we. [25-3-17].

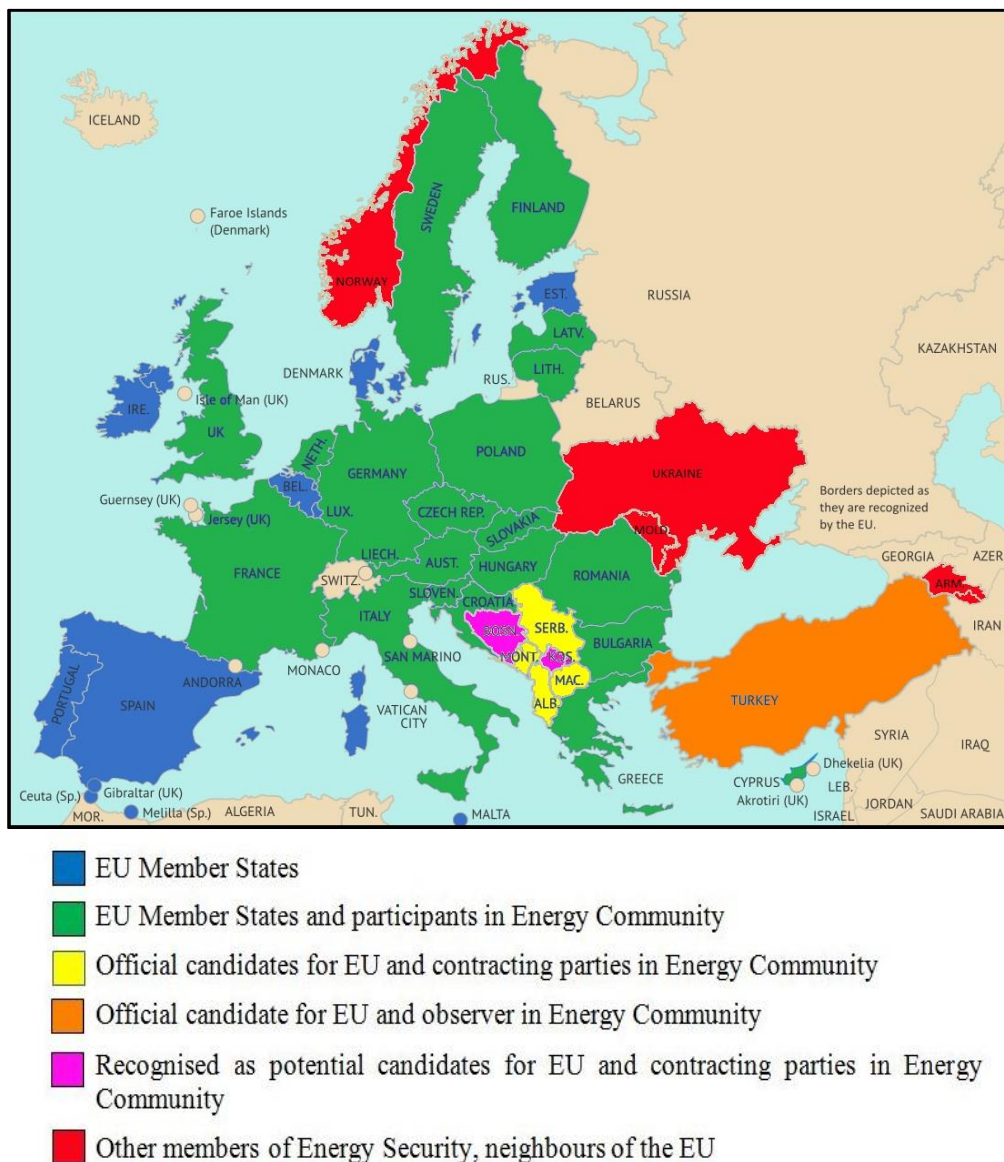


Figure 3: Map of the EU member states and the Energy Community.²⁵

By creating this map, the author wants to highlight that the majority of EU’s member states are also part of the Energy Community, but with different status and positions. It is remarked the connection between the roles played in the Energy Community by states which have the status of an official candidate or potential candidate for the EU. The link between the position towards the EU and the status given by the Energy Community is very strong.

²⁵ Author’s note: This map was created by the author based on Energy Community and EU’s original maps.

The author explains the meaning of Participants, Observers and Contracting Parties status for a better overview of the map created.

According to the Energy Community:

- “At the same time, any European Union Member State may obtain the status of a Participant. Participants have the right to take part in all institutional meetings of the Energy Community. Presently as many as 20 European Union Member States have the Participant status.”²⁶ Participants were represented on the map in green colour.
- “Observers may attend the meetings of the Ministerial Council, the Permanent High Level Group, the Regulatory Board and the Fora, without participating in the discussions.”²⁷ An observer who is an official candidate is Turkey and it was represented on the map in orange colour.
- “Contracting Parties commit themselves to implement the relevant EU energy *acquis communautaire*,²⁸ to develop an adequate regulatory framework and to liberalise their energy markets.”²⁹ Currently, the contracting parties are countries recognised as potential EU candidate – Bosnia and Kosovo – represented in violet, official candidates represented in yellow and non-EU member states like Ukraine, Moldova, Armenia and Norway represented in red.

A demand for achieving energy security by the EU is found in the book written by Haghghi in 2007 and it is very simply formulated: “One aspect of energy security is the capacity to switch freely from one source of energy to another.”³⁰ But to switch freely the EU must have more than one main source of energy, diverse suppliers and an open market with many countries or organisations. In the gas supply field, the EU is depending on few main sources, but mostly on Russian gas: “Russia is one of the EU's

26 Homepage of Energy Community. URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Who_are_we. [25-3-17].

27 Ibid.

28 Homepage of Wikipedia: *Acquis communautaire* is the accumulated legislation, legal acts, and court decisions which constitute the body of European Union law. URL: https://en.wikipedia.org/wiki/Acquis_communautaire. [27-3-17].

29 Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/Energy_Community. [25-3-17].

30 Haghghi, S. (2007). Op. cit. P. 11.

largest suppliers of energy. In 2013, it accounted for 39% of its natural gas imports.”³¹

If are taken into consideration the current state of EU and Russia relations, the dependence on Russian gas could endanger the security of many EU member states because “*A number of individual EU countries are also heavily dependent on Russian supplies for certain energy resources, in particular natural gas.*”³²

A series of shocks for the EU were the European political earthquakes caused by the disputes between Ukraine and Russia which turned into a military intervention from Russian side into Eastern Europe and in the end the annexation of the Crimean region. Those also turned into an energy security issue for the EU and its member states, as the Russian gas for Europe mostly flows through Ukraine.

The following figure underlines this statement and shows the dependence of the EU’s imports on Russian gas.

31 Homepage of European Commission. URL: <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/supplier-countries>. [25-3-17].

32 Ibid.

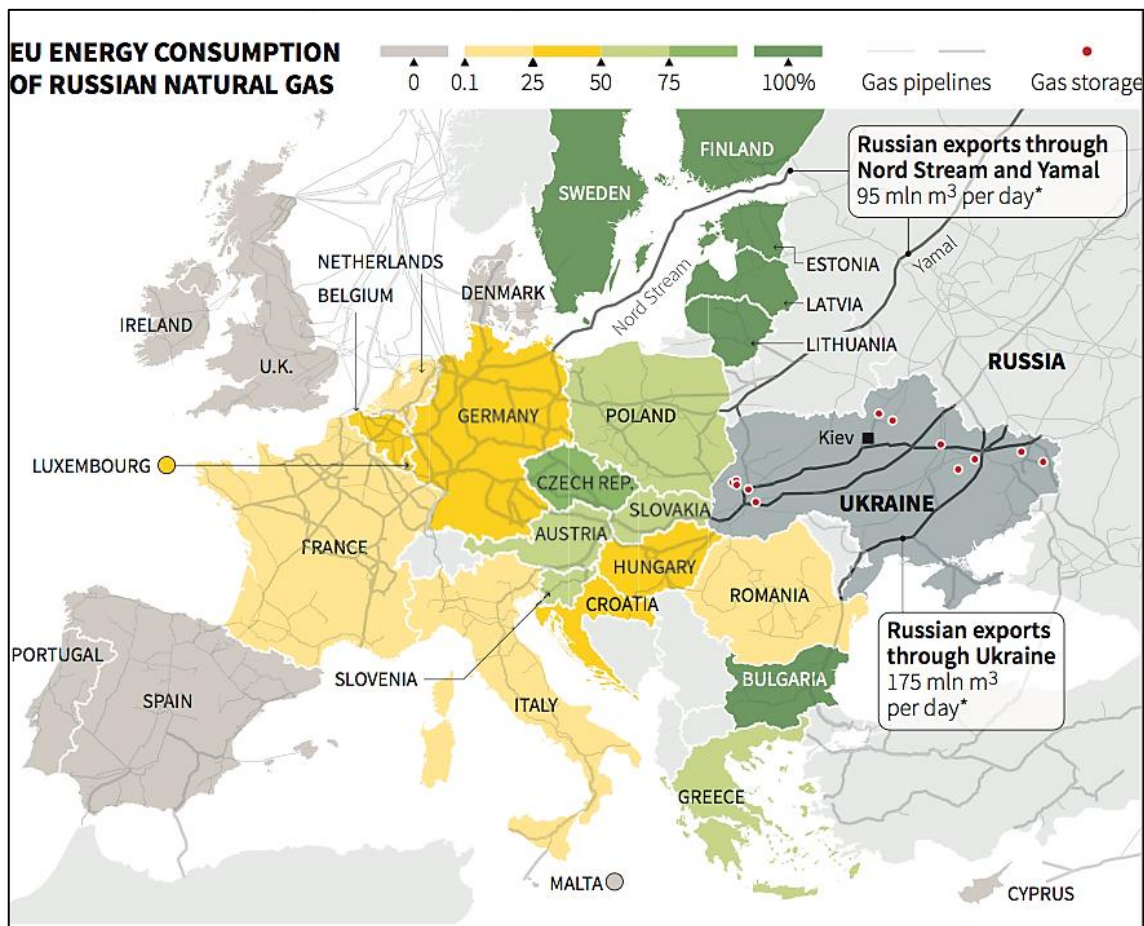


Figure 4: Russian gas supply in Europe.³³

Considering the gas supply, the EU has dealt with many problems over the past years and the Ukraine was one of the principal actors in those problems, even if it is not EU member state, but because of its fragile relations with Russia. As history has shown us, Russia was not afraid to manifest its power against Ukraine, and what is more concerning, against the EU. The author is focusing mostly on writing this current thesis on the relation of the EU and Russia because of the interest of both powers. Even if Russia is the biggest gas supplier of Europe, it is essential for Russia to sell energy to the EU, otherwise, the Russian economy could experience a considerable decrease.

³³ Homepage of Quartz Media. URL: <https://qz.com/227484/russia-is-threatening-to-cut-off-european-countries-gas-if-they-dont-do-its-bidding/>. [25-3-17].

3.2 Research Gap³⁴

*“Energy resources, specially oil and natural gases, were and are the reason of cooperation or confrontation and conflicts between the actors of any historical epoch.”*³⁵ Recent conflicts have underlined how important it is for the EU to improve and develop its energy security policies and its response to crisis situations inside the EU territory, but also at its borders. For a better understanding of actions in the energy fields, the author wants to pay attention to how every EU member country enhances the EU gas supply security.

On 16th February 2016, the European Commissioner for Climate Action and Energy, Miguel Arias Cañete, stated in his speech at the Security of Supply Package Press Conference: *“As EU markets continue to integrate, decisions taken by one Member State can have a negative impact on the security of supply in neighbouring countries or on the functioning of the EU internal energy market.”*³⁶ Thus, the author considers the example of Austria and Romania relevant in the research and the conclusion for their influence on EU energy security.

What makes the author’s thesis unique is that it bridges the gap between the EU’s security of gas supply and two certain Member States, analysing the way Romania and Austria reacted to the Ukraine Crisis, which has compromised the gas supply for many of EU’s countries. After doing a detailed research, the author has not found anything within the literature regarding the specified topic.

34 Author’s note: This chapter was created by the author unless otherwise marked.

35 Băhnăreanu, C. (2007). Arma energetică în contextul relațiilor internaționale ale începutului de secol XXI. Universitatea Națională de Apărare. București. Thesis. P. 4. ISBN 978-973-663-672-1. According to the author the title translated into English means: The Energetical Weapon in the context of international relations at the beginning of XXIst century.

36 Homepage of European Commission. URL: http://europa.eu/rapid/press-release_SPEECH-16-326_en.htm. [22-3-17].

3.3 Research Question(s)³⁷

Having in attention the topic of the present thesis and the research, the author establishes the following main question:

How does the EU Member States' energy security influence EU's security – taking into consideration both, Romania's and Austria's gas supply security during the Ukraine Crisis?

In order to reach the answer for the main question, the author formulates the following sub-questions:

1. How is EU's security influenced by the energy security of the Member States using the example of Romania and Austria?
2. What is the background of the Ukraine Crisis?
3. How has the Ukraine Crisis influenced the EU's Energy Strategy regarding the gas supply?
4. What are the measures for the future to be implemented by the EU, Romania and Austria, as a response to the Ukraine Crisis concerning the gas supply domain?

37 Author's note: This chapter was created by the author unless otherwise marked.

3.4 Methodology³⁸

When analysing the security, a very important factor is constituted by the political and economic relations between the world's powers. The expansion of the great economic powers cannot be separated from the states, thus the prominent role of the European strategies put its mark on the energy strategies of both countries.

The competition for energy resources in the contemporary world is an important source of crises and conflicts and also the globalisation made a point in the field of energy security.

Despite that the EU space is characterised by economic and social stability and mechanisms for solving and preventing disputes and crises, the EU builds its security on the basis of its Member States.

The EU has taken numerous and serious energy responsibilities, and the improvement has continued through past years.

The author's interest in the EU's security fields and the new threats which could endanger its stability led the author to choose a topic which could include both, that is why with the help of the Romanian and Austrian tutors she found the most suitable topic for her concerns. Energy resources are not just a matter of daily basis surviving of citizens, but they also characterise the state of progress of the countries.

In this sense, the author begins her research by analysing the official EU documents regarding energy security with special consideration onto Austria and Romania and how these Member States influence the EU's security. The author analyses the RNES, the ANES and she compares the results with the EESS. Thus, it could be related whether Romania and Austria's intentions to prevent threats addressing to the energy security are similar to the European priorities or not.

To answer the second sub-question, the author uses the gas crises in Ukraine in 2006 and 2009 and if the two crises were understood as a possible threat from Russia. The answer for this sub-question is meant to help the reader to distinguish the current Ukraine Crisis to which the author refers while writing the thesis from the mentioned past gas crises.

38 Author's note: This chapter was created by the author unless otherwise marked.

The research route continues with the assessment of the EU's Energy Security Strategy and focuses on the gas deliveries during the Ukraine Crisis. The possible disruptions are discussed which are expected due to the military conflict and the Russian implications in South-Eastern Europe. Analysing the strategy, the level of readiness for each EU Member State was revealed to face a gas crisis and the effects of the cooperation between EU's countries.

The research route ends with the last sub-question which aims to describe the possible solutions to be implemented for the future by the EU and by Austria and Romania. As being part of the future, the author wants to show some suggestions for a secure and more reliable gas supplies for the EU's citizens.

In order to find the answers to the sub-questions and finally to the main research question, numerous research methods were used in the research study.

The process of collecting data was a very meticulous one which implied constant planning. Using a meta-analysis of the information accumulated, the author is able to draw the conclusions and provide some suggestions for a better implementation of the new gas infrastructures.

Regarding the scientific methods used, they included collection of empirical data and the analysis of data which means that the paper is both, a quantitative and a qualitative approach. The documents which were analysed are tangible products which circumstances or measures have been recorded in. The process was not reiterating the ideas found in the documents, but make new ones out of them with the author's own ideas.

The research study includes one of the qualitative research's methods, the expert interview. In order to reinforce her opinion and to obtain reliable arguments with respect to specified issues, the author chooses to conduct interviews with five experts. When doing the literature review, the author elaborated her interview with the intent to send it to Romanian experts.

Data collected includes reflection and interpretation of text and figures, which sustain the explanation of some ideas presented in the current Bachelor Thesis.

The approach on the thesis' subject is a new one and it is based on the study and comparisons made by the author after consulting various publications, documents, books, summaries and official homepages.

The writing process started after the author understood the main concepts valid for her thesis and after the experts provided her with valuable answers concerning the thesis's topic.

In the writing process a good motivator was the participation in two International Conferences which matched the topic. When the author had some reliable results, she submitted the paper to AFASTUD, the Romanian Air Force Academy's International Conference for students and to SECOSAFT, the Romanian Land Forces Academy's International Conference for students. The fact that the papers were accepted encouraged the author to continue her work.

The information written was supported by enough evidence and by the experts' opinion. The sources used are trustworthy because most of the time the author used the official documents or homepages of important institutions such as the European Commission, the EU, Romania's and Austria's national websites for energy.

For a better understanding of the research route, the author provides the following figure, which illustrates all the steps involved in achieving the thesis' goal.

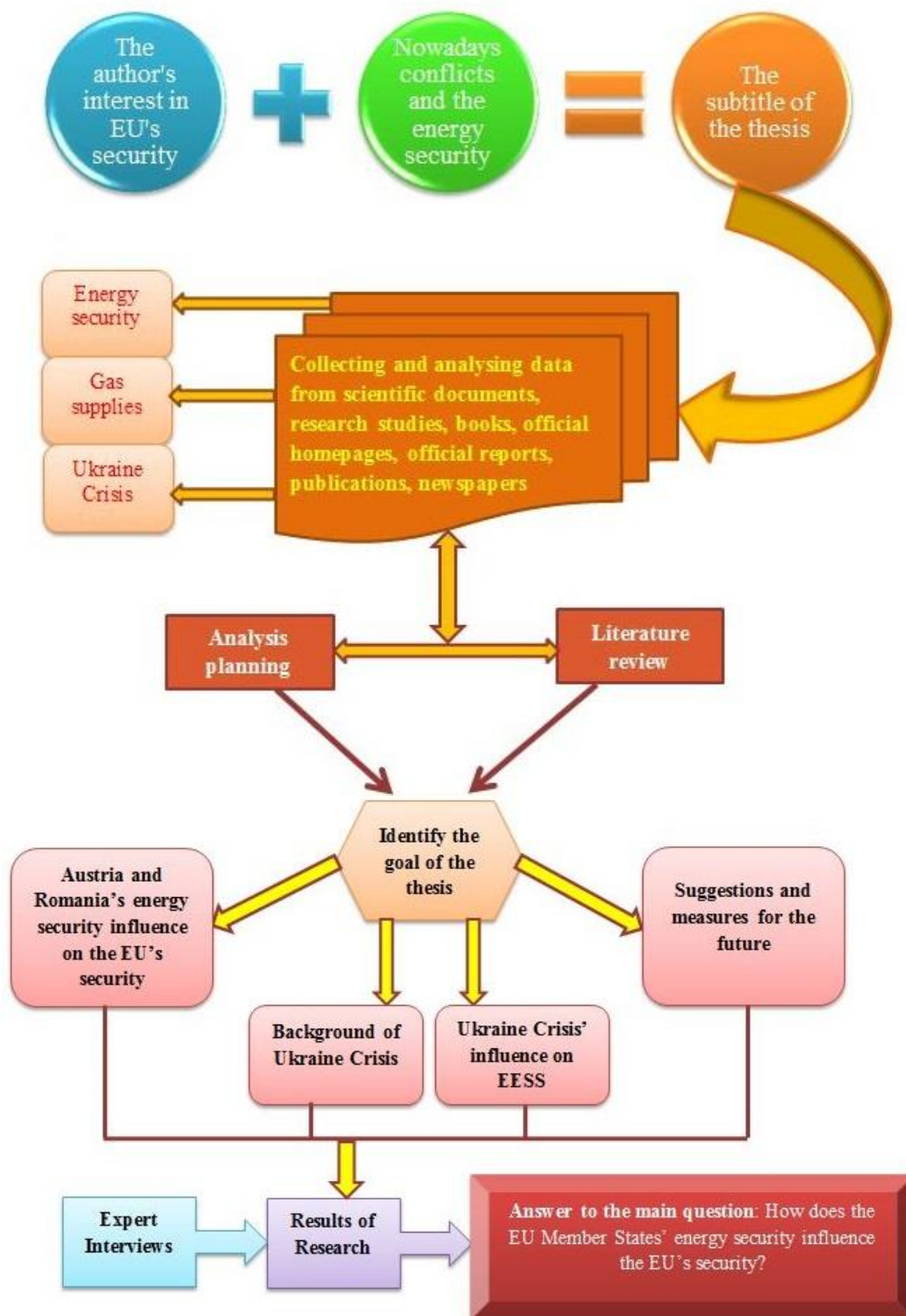


Figure 5: The research route.³⁹

39 Author's note: Figure created by the author.

3.5 Research and Results of Research

3.5.1 General Remarks

Requirements in achieving security are deeply interconnected; hence any malfunction in one of the fields could considerably influence the other plans of the security manifestation. The security is no more referring only to the national one and it is seen as on global level. According to energy security it should be perceived as a whole. For the EU, energy security means cooperation between member states, interdependency and using the resources wisely and efficiently. The crises for many EU countries regarding energy have emphasized the importance of adopting an EU's energy security strategy customized for each country need. The EU's relations with non-EU member states are also more thoughtful and are increasing the risks for the EU's member states. In order to achieve energy security, the EU should decrease its dependency or increase the number of energy sources.

The following sub-chapters represent the answers to the sub-question. The answer to the main question is reached after putting all these answers together.

3.5.1.1 The Influence of Member States' Energy Security on the EU's Security using the Example of Romania and Austria

During World War II (WWII), when the relations between European countries were tensioned, they realised that Europe should stay together and not being split by the wars and discrimination. By the end of WWII when the relations between Eastern and Western Europe had become more tensioned because of the political establishment of the Communist regimes, Europe felt the need to create a community, which could stand for itself and be stronger through its Member States.

The European Coal and Steel Community (ECSC) was the first European community to take shape after WWII and it was thought to be like an open market for coal and steel.⁴⁰

40 Cf.: Homepage of European Union. URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3Axy0022>. [12-4-17].

Six European countries took part in the ECSC and they administrated together the industry of steel and coal. Officially it was the Treaty of Paris, signed in 1951 by Belgium, Germany, France, Luxemburg, Italy and the Netherlands.⁴¹

Robert Schuman, the founder of the ECSC stated: *“It will be a Europe where the standard of living will rise by grouping together production and expanding markets, thus encouraging the lowering of prices.”*⁴² It was the first time when in Europe it was talked about an open market between the Member States, which for sure would rise the standard of living and the relations of those who participated in the project. But the bigger it became, the more threats the EU had to fight against.

The ECSC subsequently became part of the nowadays EU. The ECSC relied on a common market, common objectives and common institutions. The main reason in creating ECSC was to prevent further wars between France and Germany by making war *“not only unthinkable but materially impossible.”*⁴³ The other reason was the economic expansion, the development of employment as well as the improvement of the living standard in the participating countries through the institution, in harmony with general economy of the Member States.⁴⁴

As it is shown, the EU was created on the basis of resources market; from the very beginning they had an important role in deciding not only the European security, but also worldwide security.

The EU’s security has developed very much over the past years. In accordance with the new vulnerabilities the EU is exposed to, different strategies for security were implemented.

Being a complex subject, the EU’s security has a large variety of components: from individual security to global security in the world where the most powerful countries and unions are in the struggle for power.

41 Cf.: Ibid.

42 Schuman, R. (1950). Speech. Schuman Declaration and the Birth of Europe.

43 Homepage of European Union. URL: https://europa.eu/european-union/about-eu/symbols/europe-day/schuman-declaration_en. [26-4-17].

44 Cf.: Homepage of Centre Virtuel de la Connaissance sur l’Europe. Page Treaty establishing the European Coal and Steel Community. URL: http://www.cvce.eu/en/obj/treaty_establishing_the_european_coal_and_steel_community_paris_18_april_1951-en-11a21305-941e-49d7-a171-ed5be548cd58.html. [12-4-17].

The EU's security is a sensitive topic which depends on many other factors. An important one is energy security in each country which is part of the EU *"Energy security has become a key priority in EU policy."*⁴⁵

Most of the time, the major threats and burden situations which could affect the states in terms of energy and energy security are

- destroying the national infrastructures,
- the emergence of political disputes,
- corruption and its expansion into the area of energy interest,
- the economy produced by illegal energy resources,
- creating and accentuating energy dependencies and
- depending on only one source of supply.⁴⁶

The EU's security depends on many issues that EU has to face as a community on a daily basis. But it should also be taken into account that each EU's Member State has an influence on the EU in every field, including also security.

For the moment none of the states in the entire world has ever succeeded to solve by itself the energy related issues, therefore it is necessary to approach and solve the energy problems of each country or the continents from a wider, global perspective as the EU does for the European countries.⁴⁷ This statement is an argument for the following figure. This figure is based on the experts' answers to the interview.

45 Baibarac, I. (2017). Expert Interview No. 1. Question 1.

46 Cf.: Ibid.

47 Cf.: Baibarac, I. & Marin, G. & Barbu V. (2010). Securitatea energetică. Dimensiuni euroatlantice. Centrul tehnic editorial al armatei. București. P. 19. According to the author, the title translated into English means: Energy security. Euro-Atlantic dimensions.

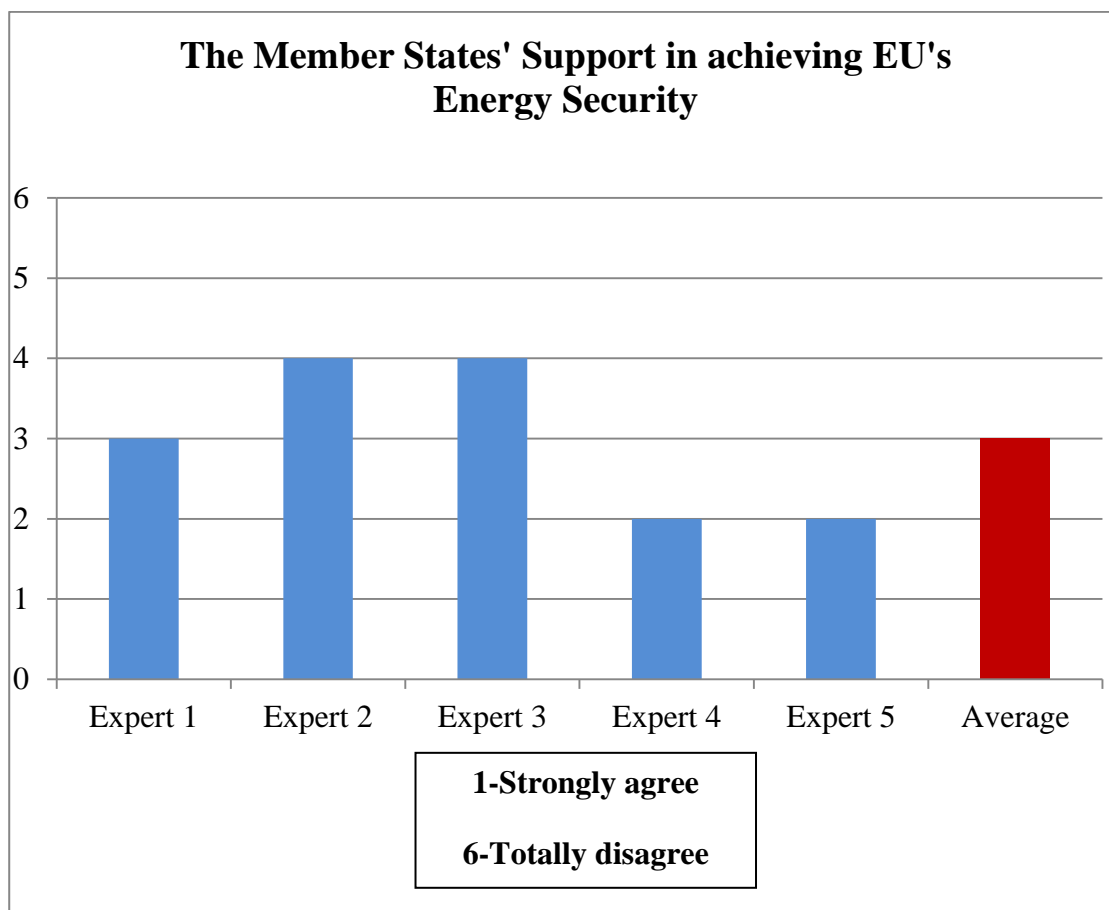


Figure 6: Experts' opinion concerning the benefit of the Member States to EU's energy security.⁴⁸

In agreement with the Figure 6, the experts' answers led to a positive estimation of the efforts made by Member States to achieve energy security of the EU, even if the experts did not share exactly the same view regarding the problem exposed. It is obvious that every Member State participates in a way or another to build a flawless European energy security, for the national interests which almost always resonate with the European ones.

Being aware of its threats, each country manages the risks and builds an appropriate prevention and an effective collaboration on European level. This is essential in developing a safer Europe from the energy point of view.

⁴⁸ Author's note: Figure created by the author based on the answers given by the experts to the interview.

For the EU to deal with changes inside the European continent and ambiguity of the environment successfully it is vital to focus on each country and each country has to focus onto the main interest of the Union, to make Europe grow and compete with the powers of the world.

To provide reliable results, the author uses the example of Romania and Austria in her study. The example of Romania and Austria demonstrates how the two EU countries influence the development of safer resources and also how Austria and Romania carry out important and helpful strategies from the perspective of energy security.

Furthermore, it is presented how Romania and Austria respond to the EU's requirements for a safer supply.

Romania considered first that energy security is a very important dimension of its national security in 2007 when it was adopted the National Energy Strategy which was supposed to be valid until 2020, but "*the Romanian Ministry of Energy has published a draft of its Energy Strategy 2016-2030, including an outlook until 2050.*"⁴⁹

The new Romanian National Energy Strategy (RNES) released for public debates on 16th November 2016 defines the Romania's new goals for the energy field. It analyses in detail the national visions for its development by the year 2030 and it looks even further to the 2050s' perspectives.

The Romanian state encourages the investment in the energy sector with the EU's funding support and has started to take advantages of the opportunities given by the resources. These new favourable chances urge Romania to track new paths for the development of the energy security.

In the RNES, five key strategic goals for the national energetic sector are mentioned and discussed, which are put into practice by a set of operational objectives.⁵⁰ The author considers relevant for the demonstration of her point of view and the achievement of the purpose of her work the explanation of the operational objectives referring to security.

49 Homepage of the Global Solar Thermal Energy Council. URL: <http://www.solarthermalworld.org/content/romania-energy-strategy-2016-2030-focus-gas-supply-and-district-heating-upgrades>. [14-4-17].

50 Cf.: U. a. (2016). *Strategia Energetică a României 2016-2030, cu perspectiva anului 2050*. Ministerul Energiei. București. According to the author, the title translated into English means: *Romanian Energy Strategy 2016-2030, with the prospect of 2050s*. Document for public debates. P. 47.

The objectives related to consumers, climate change, governance are not discussed because, basically, are linked with a safe energy supply.

Romania's energy security and the implementation of the EU's aims in the RNES are seen as a very important matter, being analysed in the National Strategy Defence Guide for the Country for the period 2015-2019, released by the presidential administration.



Figure 7: Key strategic goals of the RNES.⁵¹

Energy security is the fundamental objective of the strategic planning of the energy domain.⁵² The five key strategic goals of the RNES are composed of 25 operational objectives, nine of them targeting the energy security. The nine operational objectives are further explained and interpreted in accordance with the EU's purposes for energy security introduced by Romania in the new strategy which is about to be adopted in the first decade of 2017.

⁵¹ Author's note: Figure created by the author based on the Executive Summary of RNES. P. 2.

⁵² Cf.: RNES. (2016). Op. cit. P. 28.

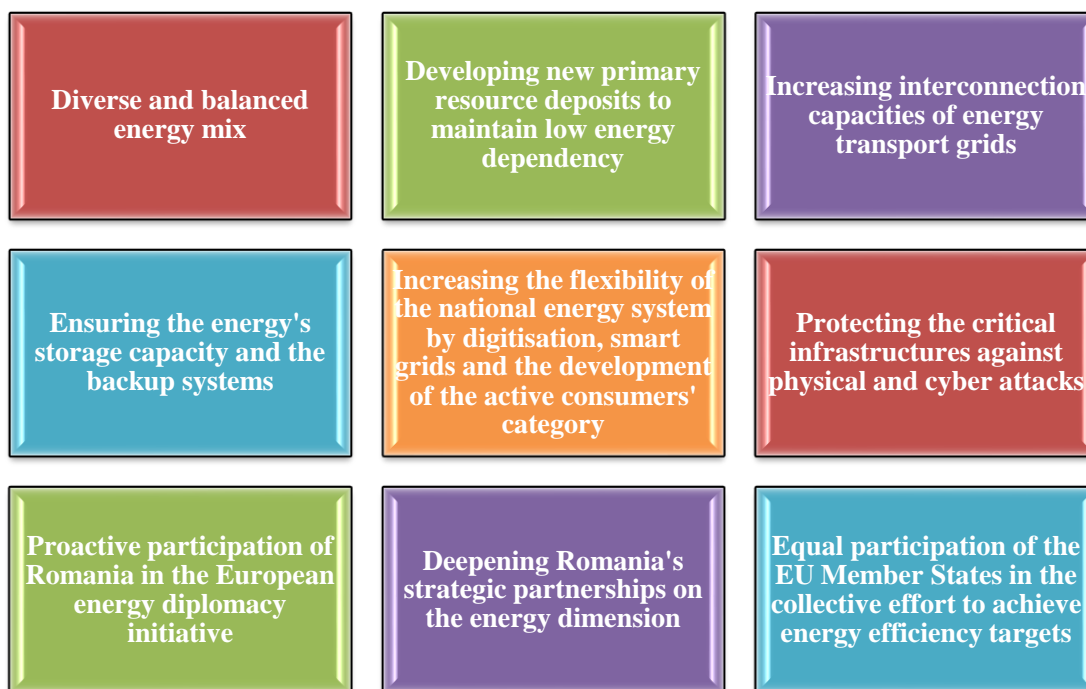


Figure 8: RNES's operational objectives referring to energy security.⁵³

Even if Romania is the third EU country least dependent on energy imports,⁵⁴ the diverse and balanced energy mix discussed in the RNES includes reducing or diversifying more the imports and continue the sustainable exploitation of all the country's resources by adopting new technologies and supporting the strategic partnership development.⁵⁵

Developing new primary resources deposits is a fresh opportunity for Romania to maintain low energy dependency and to stimulate the investment environment not only for the exploration and expansion of oil and gas deposits, but also for the recovery degree of the mature fields.⁵⁶

53 Author's note: Figure created by the author based on RNES 2016-2030, with the prospect of 2050s. P. 47-50.

54 Cf.: Homepage of Vocea.biz. Page of Economic News. URL: <https://vocea.biz/economic/2017/feb/25/cat-de-dependenta-e-romania-de-importurile-de-energie-analiza/>. [14-4-17].

55 Cf.: RNES. (2016). Op. cit. P. 47.

56 Cf.: Ibid. P. 48.

The new reserves, recently discovered in the Black Sea, are very important for decreasing even more Romania's dependency⁵⁷ and consequently reducing the EU's big amounts of imports from non-EU Member States.

Increasing interconnection capacities of energy transport grids are ensured by

- providing funding sources for the development of bidirectional flow interconnection capacities and related components of national energy transmission systems,
- coordinating the financial and the exploitation of the international energy infrastructures projects to be made on time and
- facilitating regional energy flows in and from energy national transport systems.⁵⁸

Ensuring the storage of energy and backup systems is a part of a safer energy because establishing mandatory stocks of all the resources⁵⁹ can prevent a crisis on the Romanian territory which can imply a crisis at European level.

The concerning increased number of terrorist attacks inside the European borders are also taken in account by the Romanian authorities. International cooperation and strengthening the relations between Member States help Romania and the EU protecting the critical infrastructures against possible terrorist attacks and also against cyber-attacks addressing to energy system networks.⁶⁰

On one hand, a part of Romania's participation in the EU's energy initiatives is to configure solidarity mechanisms in order to ensure energy security in crisis situations of energy supply. On the other hand, it is to contribute to the incipient stages of elaboration of European normative and strategic documents. Romania starts diplomatic steps to join the Economic Cooperation and Development Organization and to be involved in the International Energy Agency (IEA).⁶¹

Romania participates in the efforts made by the EU Member States in the collective endeavour to achieve energy efficiency targets. Romania has demonstrated until now

57 Cf.: Ibid. P. 56.

58 Cf.: Ibid. P. 48.

59 Cf.: Ibid. P. 48.

60 Cf.: Ibid. P. 48.

61 Cf.: Ibid. P. 48.

that it can achieve the collective targets imposed by the EU for guaranteeing energy security and a competitive European energy market.⁶²

To strengthen that Romania takes part in the EU's active struggle for a secure energy, the author deepened the experts' answers and concluded them into a chart.

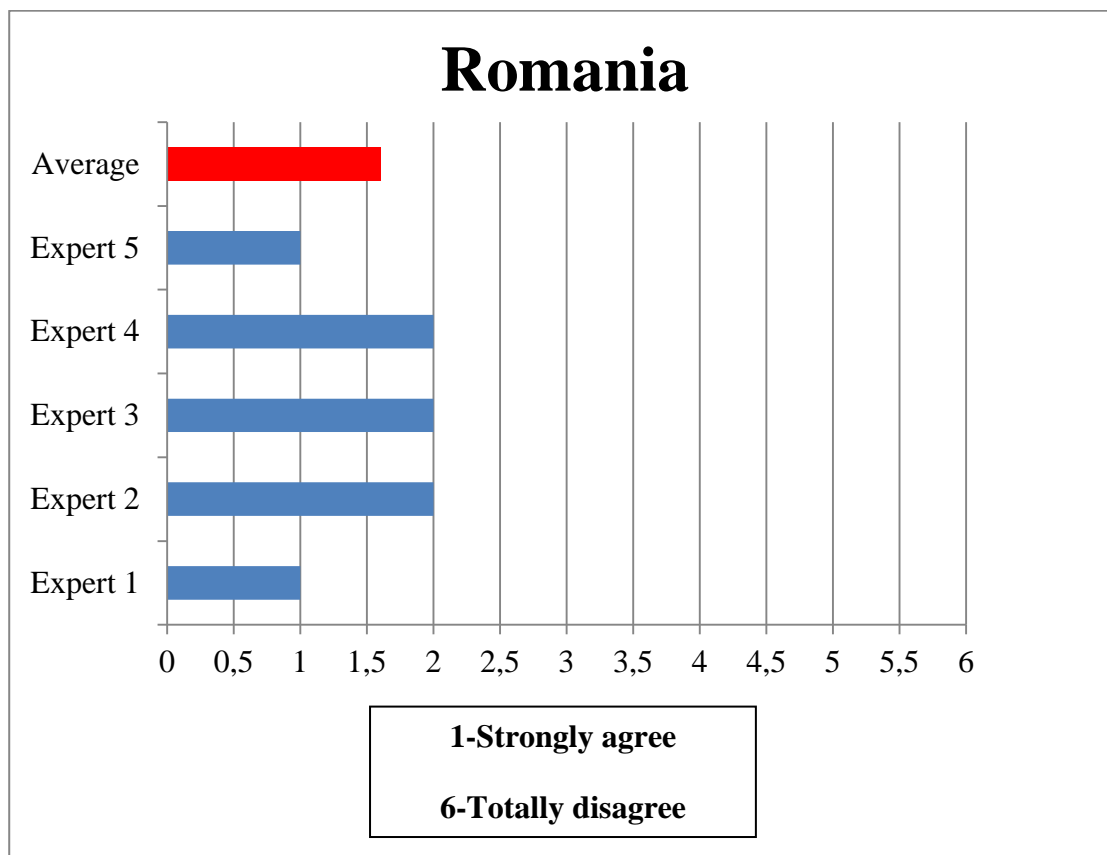


Figure 9: Experts' answers regarding Romania's contribution in EU's energy security.⁶³

The experts' replies, as shown in the chart, are not very different from each other, varying between one and two, which means that they all agreed on the question. The average calculated proved that many directives of the RNES cover the EU's needs for building a stronger energy security. The experts' marks to the interview show that Romania's contribution to the EU's energy security is essential. As an EU Member State, Romania participates in an active way to accomplish the EU's goals regarding the energy sector.

⁶² Cf.: Ibid. P. 50.

⁶³ Author's note: Figure created by the author based on the answers given by the experts to the interview.

Concluding, Romania, as a Member State, has a good approach in sustaining the efforts made by the EU⁶⁴ to prevent the lack of energy supplies inside its borders and influences in a good way the security of the EU.

Austria bases its actions in the security domain on the European security framework and the EU's priorities offer a strong foundation for the Austrian security process.

The second Member State under the study of the EU's security of supply is Austria. It is "a net importer of energy"⁶⁵ and "with respect to energy security this is a relevant issue."⁶⁶

As Romania does, Austria and its energy policy "meet the goals of the EU growth strategy Europe 2020"⁶⁷ and it rests on three pillars as presented in the figure.

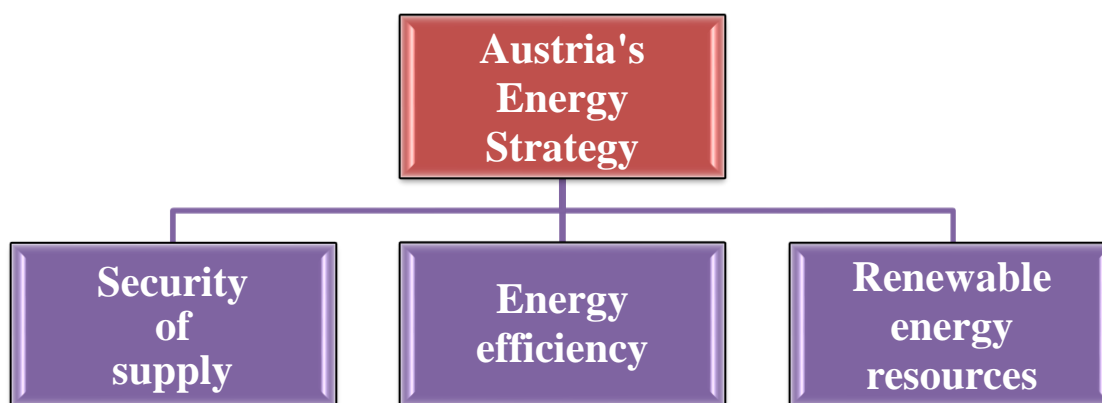


Figure 10: The pillars of the ANES.⁶⁸

The ANES consists of three major objectives, the most important of them being the security of supply, due to the fact that Austria is importing more than half of its energy. The imports exceed 63% of its energy use.⁶⁹

64 Cf.: Topor, S. (2017). Expert Interview No. 5. Question 9.

65 Pohoryles, R. (2015). Energy Security – The Case of Austria. Unknown Location. Technical report. P. 5.

66 Ibid. P. 5.

67 Ibid. P. 2.

68 Author's note: Figure created by the author based on the ANES.

69 Cf.: Homepage of Trade Economics. URL: <http://www.tradingeconomics.com/austria/energy-imports-net-percent-of-energy-use-wb-data.html>. [15-4-17].

Energy efficiency and renewable energy are also seen as a matter in the safety of supply and those three steps made by Austria are presented further from a European perspective.

The core objective of ANES is ensuring the energy security by implementing the EU's rules and normative. The energy security is still an issue for the Austrian authorities and the government is seeking for solutions to reduce the dependency on Russian gas.

Another objective of the ANES focuses on energy savings with accent on the renewable energy. Since Austria is not able to guarantee its own supplies, the cooperation with the EU Member States is essential in achieving energy security. International energy relations represent an integral part to successfully accomplish its own goals with respect to secure delivery.

The solutions found by the government were to participate actively in the EU's actions and to collaborate with the Member States for implementing new infrastructure projects.⁷⁰ The solution for Austria to reduce its dependency on non-EU Member States is the team work between EU's countries. The diversification of the sources is the best way to improve a safer energy.

A part of Austria's participation in the EU's energy security initiatives is to create safer and sufficient storage deposits of resources. Because of the risks, Austria is exposed to by not using its own energy and counting more on the imports, the storages should be taken into consideration as a disposal for possible crises: *“Although Austria does not have government gas stocks, it does have large gas storage capacity of commercial stocks.”*⁷¹

Taking into account to serve the national interests, Austria guarantees the security of supply by contributing to resolve global issues of the EU as far as its resources and infrastructures allow.

The advice of the Romanian expert fits perfectly to the EU's requests for Austria *“Austria should continue to explore the benefits of increasing flexibility and diversity of supply options so as to increase the resilience of energy security.”*⁷²

70 Cf.: U. a. (2014). Energy Supply Security 2014. Part 2. Publication. P. 93.

71 Ibid. P. 95.

72 Baibarac, I. (2017). Expert Interview No. 1. Question 8.

The experts' opinion fortifies the data presented about Austria and its contribution as an EU Member State to secure the resources in Europe.

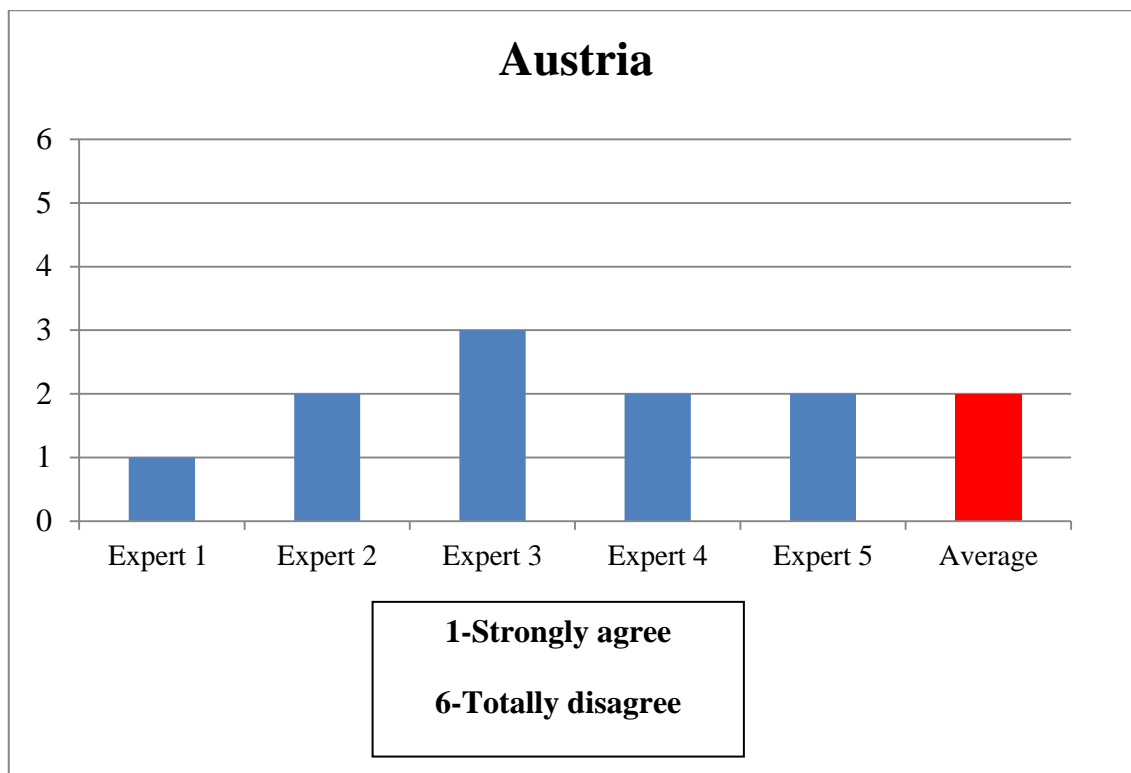


Figure 11: Experts' answers regarding the Austrian contribution to the EU's energy security.⁷³

The experts' marks given to the question, whether Austria contributes in achieving the energy security at European level, are positive and most of the experts agreed that Austria still needs to improve its strategies in order to ensure energy improvement safely. The chart shows that Austria operates confidently with the other EU Member States for a collective solution to the energy issues.

The average proves the importance of Austria to build a flawless Europe, with open markets between Member States and with a considerable economic growth.

Finalising, a stronger Europe can be grown through its countries in order to *"form a United States of Europe."*⁷⁴

⁷³ Author's note: Figure created by the author based on the answers given by the experts to the interview.

⁷⁴ Homepage of Council of Foreign Relations. URL: <http://www.cfr.org/europe/churchills-united-states-europe-speech-zurich/p32536>. [2-5-17].

3.5.1.2 The Background of the Ukraine Crisis

The frame of the global security has experienced profound transformations in recent years. The tensions which the Cold War left behind are still relevant for explaining the ultimate major crisis at the EU's borders with involvement of changing the political administrative geography on the European continent.

The crisis in Ukraine has questioned the development of the security environment of Europe.

Generally, a crisis could be defined as an incident or a situation – tensions, difficulties, which imply the existence of a threat against a nation, against its territory, institutions, infrastructures or against its vital interests. It evolves quickly and creates diplomatic, economic, politic or military premises for military forces to intervene in order to achieve the security national objectives.⁷⁵

The concept of powerful and weak states should be mentioned in the security context “*The distinction between weak and strong states is vital to any analysis of national security.*”⁷⁶

Within weak states it happens that self-government groups gain the control over a certain territory.⁷⁷ From this point of view, Ukraine could be considered a weak state due to the fact that it was occupied by the Russians by unleashing propaganda among Ukrainians. The civil war, started by the Russians, shows the ability of this big power to influence or control other states. They imposed their own legacy and in the end it concluded with annexation of the Crimean region.

Between weak and strong countries there are relations which are a necessity for both of them. For the weak the benefit is to be helped and for the strong to show its authority power. This kind of relation existed between Ukraine and Russia. Ukraine, as not being a part of the EU, was a weak state which got more of help from Russia due to their common history and the dependency of Ukraine on Russia's support.

75 Cf.: Homepage US Department of Defense. Dictionary of Military and Associated Terms. URL: http://www.dtic.mil/doctrine/dod_dictionary/data/c/25.html. [28-3-17].

76 Buzan, B. (2007). *People, States and Fears: an Agenda for International Security Studies in the Post-Cold War Era*. Second edition. ECPR Press. ISBN 978-0-9552488-1-8. P. 93.

77 Cf.: Ibid. P. 96.

For a better understanding, the author wants to explain the difference between the gas crises from 2006 and 2009, which Ukraine was the main actor in, and the present crisis which could endanger the gas security for Europe.

After 2009, Ukraine confronted Russia again, but this time in a military conflict. It was not anymore just an economic crisis, but a war with military involvements from each side.

Before the 2000s, there were also some tensions between Ukraine and Russia regarding gas. The two countries depend on each other - Ukraine, due to the big amounts of gas imported and Russia due to its interest of gas trade with Europe, Ukraine being the main country for this trade.

During the 1990s, the relations between Russia and Ukraine met the following issues:

1. *“Ukrainian inability to pay for up to 50 Bcm/⁷⁸year which it imported from Russia, leading to very high levels of debt and unpaid bills which led to.. [sic]*
2. *reduction [sic] of Russian gas supplies to Ukraine for short periods of time, aimed at restoring payment discipline which in turn led to.. [sic]*
3. *unauthorised [sic] diversions of the volumes in transit to European countries.”⁷⁹*

The problems persisted and at the end of 2005, the gas supply from Russia to Ukraine was cut off.

The problem was seen by the media as a punishment from the Russian side to Ukraine because of the new government which was considered to be pro North Atlantic Treaty Organization (NATO) and EU and in this way Ukraine tried to move apart from the Russian influence.

If seen as a punishment, Russia also punished the EU and its member states by cutting off the gas which was floating through Ukraine. As showed in the percentage below, many EU states faced a big problem because of that.

78 Author’s note: Bcm means billion cubic meters of natural gas.

79 Stern, J. (2006). The Russian-Ukrainian gas crisis of January 2006. Oxford Institute for Energy Studies. P. 2.



Figure 12: European countries influenced by the 2005-2006 Ukraine Crisis.⁸⁰

During the 2005-2006 Ukraine and Russia disputes, the European countries saw a drop in the gas supply as showed in the figure. Some of the EU countries saw a drop of 100% which was concerning and showed the dependency of Europe on Russian gas.

On 4th January 2005, after the agreement to end the dispute, both countries signed a contract for five years,⁸¹ but the prices were set only for 6 months, which led again to an expected crisis among Europe.

The 2005-2006 crisis showed how Russia can manipulate the entire EU using the gas supply. As an argument to this statement the Russian's Prime Minister request to the

⁸⁰ Author's note: Figure created by the author based on Wikipedia information about the 2005-2006 Ukraine Crisis.

⁸¹ Cf.: Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/2005%E2%80%932006_Russia%E2%80%93Ukraine_gas_dispute. [29-3-17].

EU's authorities can be used. His request was that the EU put pressure on Ukraine to ensure the gas transit from Russia to EU member states, but the European Commissioner warned Russia that this issue can turn the EU into a hostage of its dealings with Ukraine.⁸²

The nowadays crisis was predictable because, since 2005, unknown activists have distributed leaflets calling not to buy Russian goods anymore.⁸³ An answer from Russian activists was expected and the protests were just one step away to begin.

The 2009 Crisis began in 2008 with a series of failed negotiations between the two countries. The same problem as in 2006 aroused and the Russian natural gas supplier, Gazprom, refused to sign a contract with the Ukrainian side for the year 2009. Their pressure to Ukraine was to pay the previous debts. The Russians solved the problem in the same way as they did in 2006; on 1st January 2009 they cut off the gas delivery to Ukraine. The issue became bigger and bigger and on 7th January 2009, a new crisis began.

The complete gas cut off to South-Eastern Europe and partially to other EU countries imposed a diplomatic intervention from the EU side in order to solve the crisis and the panic created by 13 days of stopped energy deliveries. The proposal from Ukraine to fully restore the supply was denied by Russian officials and the solution came from the dealing between the current president of the Russian Federation, Vladimir Putin, who was at that time the Prime Minister and his Ukrainian counterpart, Yulia Tymoshenko. They negotiated a new contract for the next 10 years.⁸⁴

Due to the new deal, the gas flows to Europe through Ukraine were restarted on 20th January 2009,⁸⁵ but the cut off affected European countries seriously and endangered the energy security of the EU.

82 Cf.: Ibid.

83 Cf.: Ibid.

84 Cf.: Ibid.

85 Cf.: Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/2009_Russia%E2%80%93Ukraine_gas_dispute. [1-4-17].



Figure 13: Russian pipelines to Europe.⁸⁶

As seen in the map, a disruption of Russian gas to Ukraine was a major issue for the EU because many of the pipelines which deliver gas to European countries flew through Ukraine. The following map shows exactly how the 2009 Crisis affected EU’s member states.

⁸⁶ Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/File:Major_russian_gas_pipelines_to_europe.png. [1-4-17].

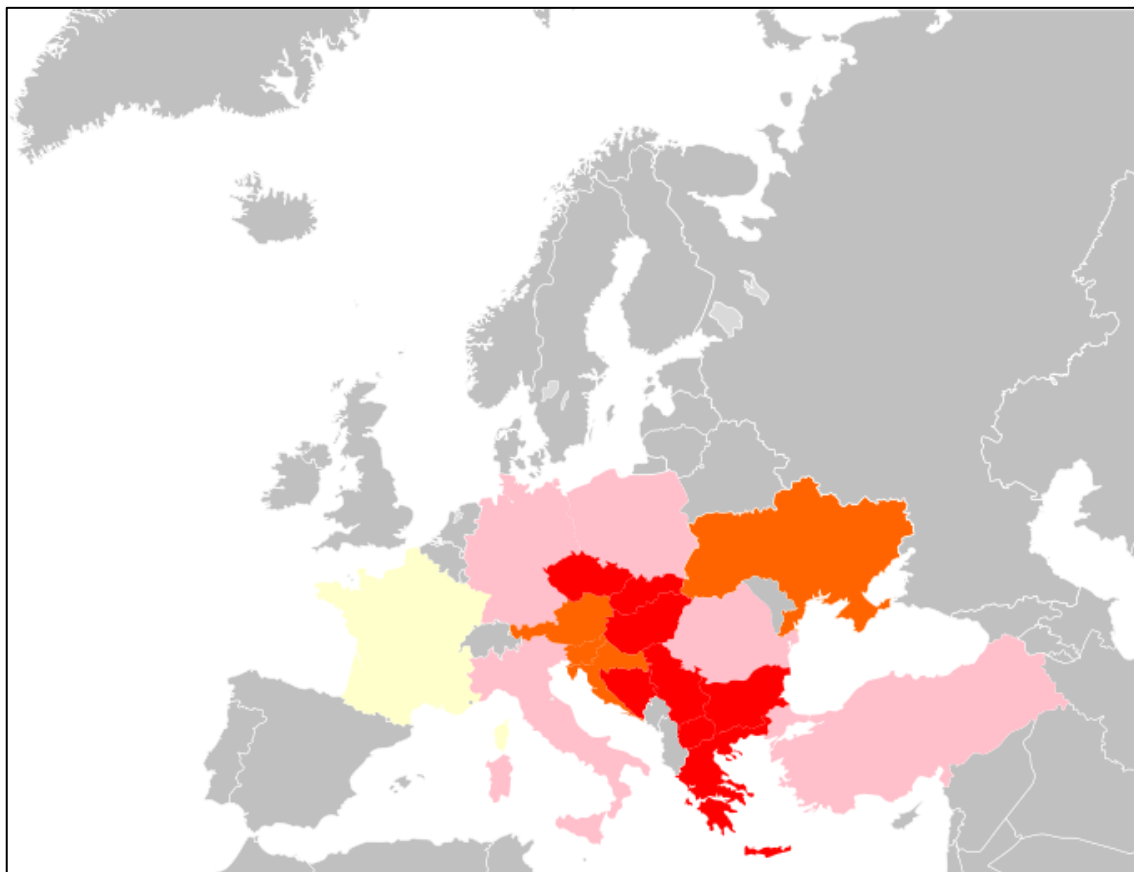


Figure 14: EU countries affected by the 2009 disruptions.⁸⁷

The map shows all the countries affected by the 2009 Ukraine Crisis. In red the countries which felt the lack of supplies more than 75% are represented. In orange, 50-75% of the gas supply was damaged by the disruption. The countries marked with pink colour were affected partially, between 25-50%. France suffered also from the cut off, but less than the others with 25%.

The next chapter shows the influence of the most recent crisis in Ukraine on the EU's energy security. It started on 21st November 2013 with the protests against the then president's decision to suspend preparations for agreements with the EU. The crisis turned into a major conflict with a military intervention and the annexation of the Crimea on 18th March 2014.⁸⁸

⁸⁷ Author's note: Map created by the author based on the URL: https://en.wikipedia.org/wiki/File:Map_of_European_countries_gas_supply_cut.svg. [1-4-17].

⁸⁸ Cf.: Homepage of Wikipedia. URL: https://en.wikipedia.org/wiki/Ukrainian_crisis. [2-4-17].

The military conflict at the EU's borders questioned the security environment of the EU and again the energy security.

3.5.1.3 The Influence of the Ukraine Crisis on EU's Energy Strategy with Consideration to the Gas Supply

*“The European Union's prosperity and security hinges on a stable and abundant supply of energy”*⁸⁹ and the only way to keep the supply stable is a good cooperation between the Member States. The EU's Energy Strategy takes into account the needs of its Member States and vice versa.

Demonstrated previously, using the example of Romania and Austria, each of both countries, when they elaborated their national energy strategies, considered also the EU's requests illustrated by the following figure.

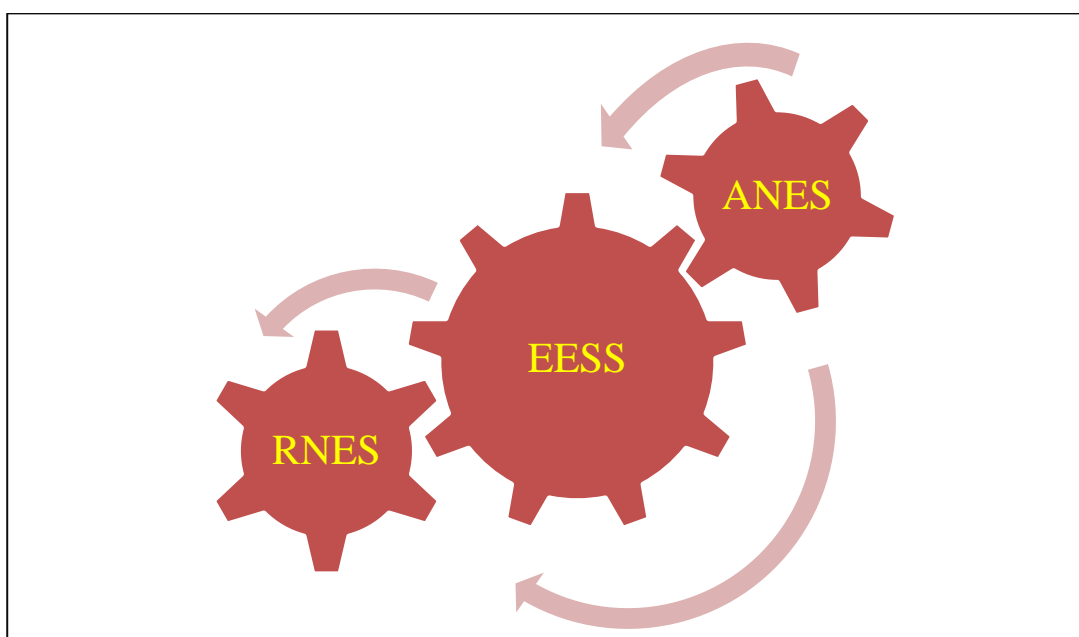


Figure 15: The relation between the EESS, RNES and the ANES.⁹⁰

The Ukraine Crisis influenced the energy relations between Member States and *“it increased the awareness of vulnerability concerning discontinuity of supply.”*⁹¹

89 U. a. (2014). European Energy Security Strategy. Brussels. P. 2.

90 Author's note: Figure created by the author.

91 Baibarac, I. (2017). Expert Interview No. 1. Question 7.

As mentioned in the chapter before, the 2006 and 2009 gas disruptions strongly questioned the EU's energy security and its capabilities to ensure a continuous flow to the Member States, if the Ukraine route for gas would be closed.

The Ukraine, facing a bigger problem than those in 2006 and 2009, was not only a real risk for the energy, but also a serious problem because of the military situation at the EU's borders. The military actions in the Crimean region and the possible Russian expansion to the Southern EU countries were a cause of anxiety in Europe.

The fact that the EU was unable to answer immediately to the gas disruptions in the past years, forced to take action before the conflict between Russia and Ukraine take the shape of an energy shock. The conflict was not anymore just a dispute between Russia and the Ukraine; it was an armed conflict, hence doubts concerning the security aroused rapidly.

The only effective approach to the energy security is the cooperation between Member States and more attention paid to the internal market than to the external one.

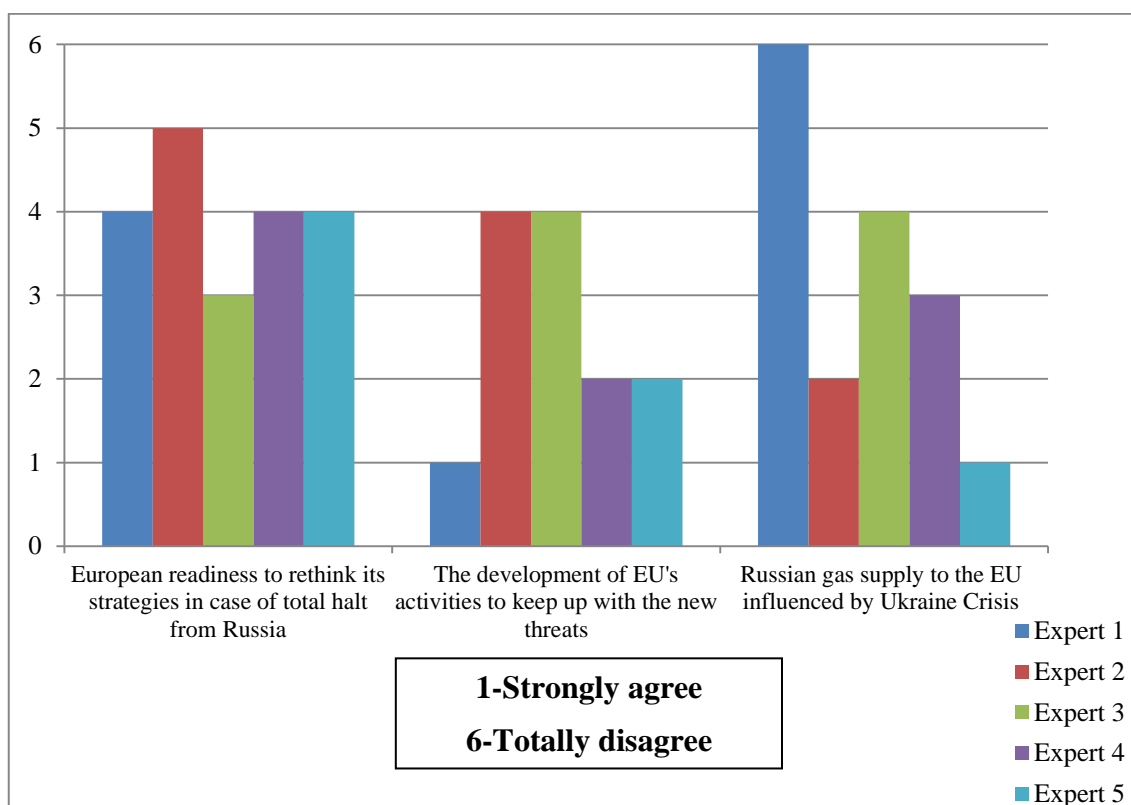


Figure 16: Russian gas and the EU activities during the Ukraine Crisis.⁹²

⁹² Author's note: Figure created by the author based on the answers given by the experts to the interview.

The precedent crises had a very positive impact on the EU's future actions and during the actual Ukraine Crisis almost none of the EU's countries suffered from gas disruptions. The lessons learnt from the 2006 and 2009 crises are objectives in the strategies adopted by the EU now.

During the Ukraine Crisis, many official meetings were held between the European Commission, Ukrainian and Russian authorities with the aim to prevent gas flow disruptions.

After the Crimean annexation, the EU launched a new EESS at the end of May 2014. A strategic thinking and acting were necessary, because the Ukraine Crisis hit Europe and uncertainties about energy supply appeared.

As shown in the chart, the experts did not have the same vision on the European issues concerning gas, but if an average of the answers is calculated it can be demonstrated that all the given responses are situated in between.

The first and the second pillars presented in the chart, resonate on one hand with the gas stress test results later analysed in the chapter and on the other hand with the new strategic thinking about gas. Europe was ready to rethink its strategies, but it takes time to implement all the measures needed.

As it could be seen in the Figure 16, the experts' opinions were different, but the interviews conducted with the experts show that due to the cooperation at European level, a major energy shock was avoided.

The main purpose of the strategy was to avoid an energy shock which could probably happen during the military conflict between Russia and Ukraine.

The new EESS was meant to guarantee a safer gas delivery caused by the Ukraine Crisis and to prepare the citizens of the Member States for possible disruptions. A productive and self-sufficient Europe lies more on the internal market and solidarity between Member States than on the external dependency.

Before the EESS was adopted, many security issues were addressed only at a national level and the interdependence of the Member States was not fully taken into account. A more collective approach for opening internal markets and reducing dependency is vital to improve the energy security.⁹³ Arguably, the measures discussed in the EESS ensure

93 Cf.: EESS. (2014). Op. cit. P. 3.

a safer energy environment if the Member States follow the measures and integrate them in their national strategies efficiently.

Energy security concerns are to be responded to the strategy's decisions. The Strategy is based on eight interconnected pillars which promote closer relations between Member States, developing internal energy production and reducing energy demands.⁹⁴

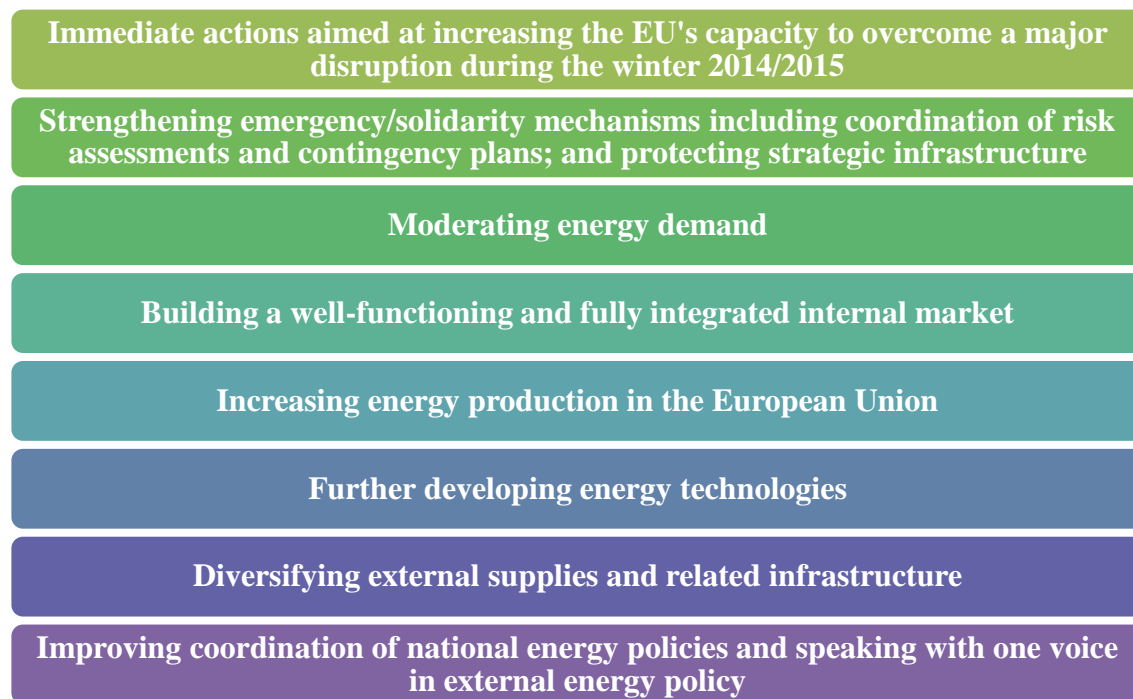


Figure 17: The key pillars of the EESS.⁹⁵

In order to enhance the development of energy security, the European Commission insured both, short and long terms measures.⁹⁶

After her research, the author found the link between the short term measures and the Ukraine Crisis. The short term measures, which addressed the gas problem for all the EU Member States, were included in a test which simulated two energy supply disruption scenarios from Russia to Europe for a period of one or six months.

94 Cf.: Ibid. P. 3.

95 Author's note: Figure created by the author based on the released in 2014.

96 Cf.: Baibarac. I. (2017). Expert Interview No. 1. Question 1.

It was the first time when “[...] such detailed European-wide analysis of the security of supply situation was carried out according to common standards and specific scenarios.”⁹⁷

The military and political tensions forced the EU to seek alternatives for Russian gas, to boost its energy security mechanisms and to find solutions for possible upcoming events.⁹⁸

Firstly, to avoid national and European instabilities during the Ukraine Crisis, the European Commission carried out a stress test regarding gas supply. Secondly, the reason why the European Commission conducted the gas stress test was to know how to act in case of potential disruptions and how to keep a continuous flow to all the citizens of the Member States.

The benefit of the stress test is that it provides stability by correcting the possible vulnerabilities before the start of a crisis.

Being considered a short term measure, but with big impact on the future actions, the stress test was mandatory for all the Member States and it was built on two possible scenarios.

- “A complete halt of the Russian gas imports to the EU.
- A disruption of Russian gas imports through the Ukrainian transit route.”⁹⁹

At the European Commission’s request, the European Network of Transmission System Operators for Gas created various models for exercising the gas disruptions. The ENTSOG described the situation in two ways. Either the Member States collaborated and they could successfully overcome the cease, or the Member States did not collaborate and a serious shortfall happened¹⁰⁰ as can be seen in the figure below.

97 U. a. (2014). Q&A on Gas Stress Tests. European Commission. Brussels. P. 1.

98 Cf.: De Micco, P. (2014). A cold winter to come? The EU seeks alternatives to Russian gas. Study. P. 1.

99 Homepage of European Commission. Page of Energy. URL: <https://ec.europa.eu/energy/node/192>. [20-4-17].

100 Cf.: U. a. (2014). Preparedness for a possible disruption of supplies from the East during the fall and winter of 2014/2015. European Commission Communication. P. 6.

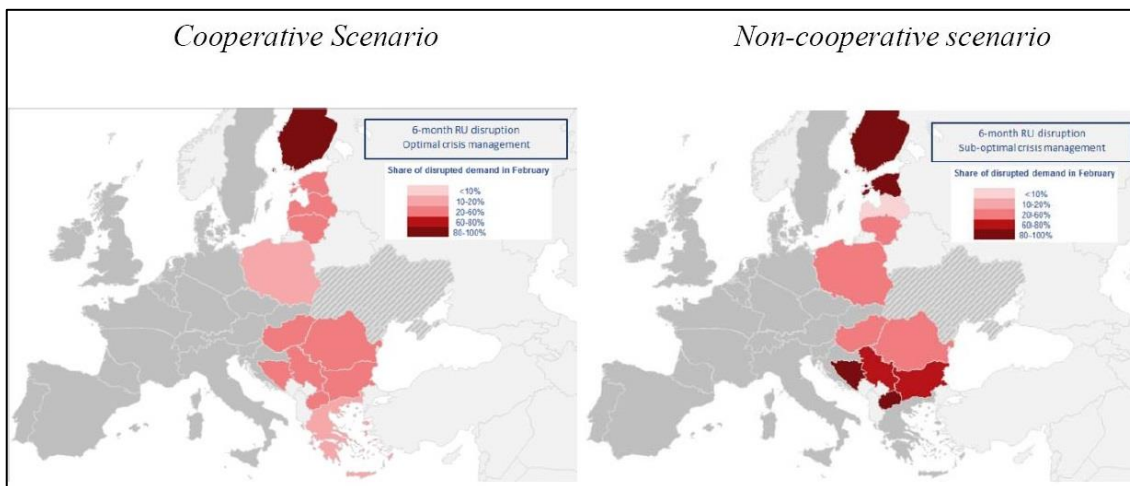


Figure 18: The impact of cooperative and non-cooperative scenarios on EU’s states.¹⁰¹

In addition, when the experts were questioned regarding the impact of the recent crises and conflicts in Europe on the energy security policies, the author found out that the answers match her opinion. The recent crises in Europe influenced the EESS and the Ukraine Crisis had good consequences on the relations between Member States.

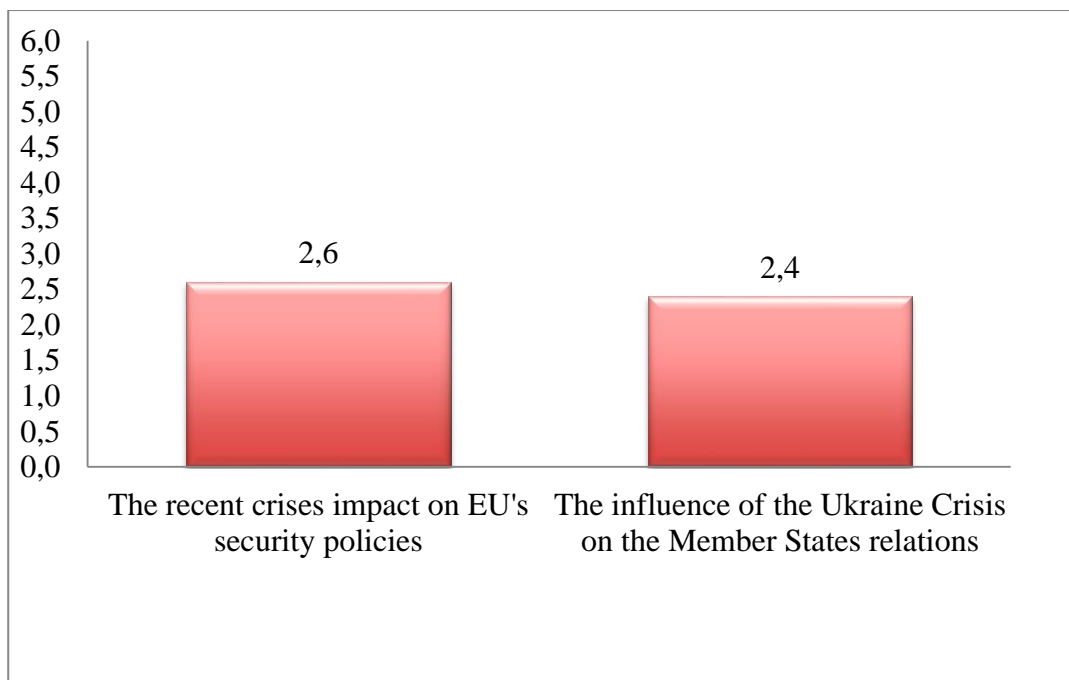


Figure 19: The impact of recent crises on the EU and its Member States.¹⁰²

101 Homepage of Bloomberg View. URL: <https://www.bloomberg.com/view/articles/2014-10-20/who-s-afraid-of-a-russian-gas-cut>. [21-4-17].

102 Author’s note: Figure created by the author based on the answers given by the experts to the interview.

The experts' answers are situated in the positive area. This induces the opinion that even if the Ukraine Crisis influenced the EESS by taking unexpected measures, it has enhanced "*the information exchange mechanism with regard to intergovernmental agreements and non-binding instruments between Member States.*"¹⁰³

3.5.1.4 The Measures for the Future implemented by the EU, Romania and Austria as a Response to the Ukraine Crisis in the Gas Domain

The geopolitical events in Europe forced the EU to seek for a safer, more efficient and more diverse supply. The events "*have kept energy high on the agenda*"¹⁰⁴ because of the on-going tensions between Russia and Ukraine. With the beginning of this crisis, new perspectives have been opened for the gas provisions yet unexploited and for the new infrastructures for transporting natural gas.

By assessing the various measures to avoid a crisis, the EU implemented, either through its strategies or through national strategies of the Member States, future solutions which focus more and more on the dependency between Member States and suppliers' diversity.

One of the measures – implemented by the EU – was to build an Energy Union which can increase the security of the resources, involving also the gas which had been a reason for anxiety due to the political changes.

The Energy Union has the goal to assure that "*Europe has secure, affordable and climate-friendly energy.*"¹⁰⁵ The Energy Union is made up of five proceedings based on mutually reinforcing objectives. The top proceeding refers to energy security and stability, mostly towards gas,¹⁰⁶ which is shown with the next figure.

103 Lucinescu, A. (2017). Expert Interview No. 4. Question 1.

104 Homepage of European Commission. URL: http://europa.eu/rapid/press-release_IP-15-6105_en.htm. [24-4-17].

105 Homepage of European Commission. URL: https://ec.europa.eu/commission/priorities/energy-union-and-climate_en. [24-4-17].

106 Cf.: Ibid.

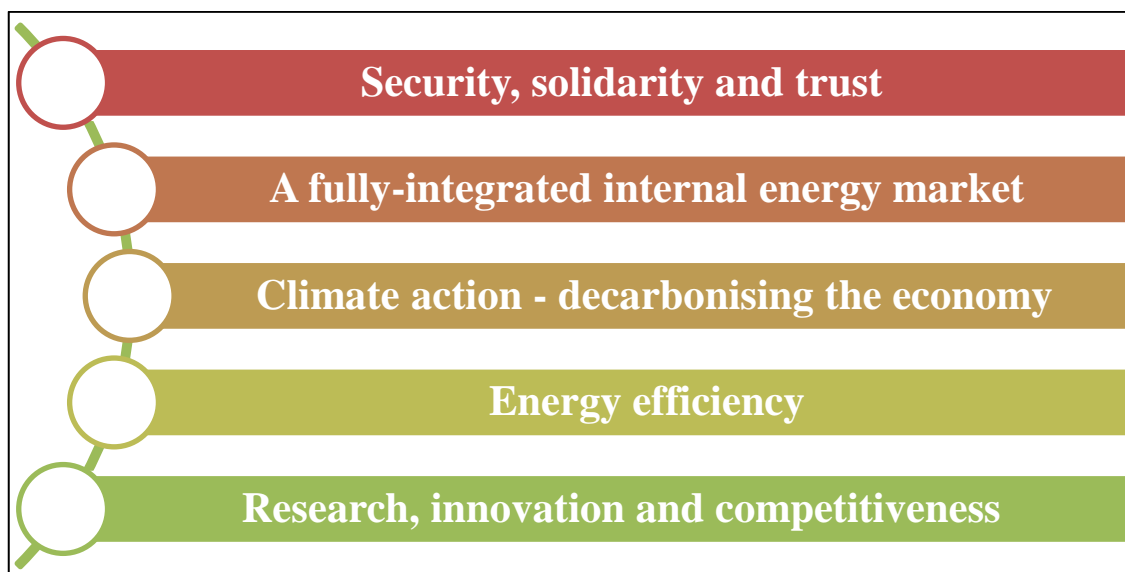


Figure 20: The five dimensions of EU's Energy Union.¹⁰⁷

Gas has always had a determinant role in the energy security policies and strategies. Thus, the new Energy Union's proposals for shoring-up a prevention of gas crises ensure a better support to EU's countries. The proposals target

- the relations between the EU Member States,
- the solidarity between the Member States and its non-EU neighbours,
- the rapid development of the liquefied natural gas global market,
- a better usage of the storages, necessary for the very dependent countries and
- diversifying the sources, so EU can quickly switch supply channels when needed.¹⁰⁸

While talking about gas, it is reasonable to consider three broad regions of Europe separately:

- South-Eastern Europe.
- Northern Europe.
- The Baltic region.¹⁰⁹

¹⁰⁷ Author's note: Figure created by the author based on the Energy Union policy areas.

¹⁰⁸ Cf.: Homepage of European Commission. URL: <https://ec.europa.eu/energy/en/news/commission-proposes-new-rules-gas-and-heating-and-cooling-strategy>. [25-4-17].

¹⁰⁹ Cf.: Roberts, J. (2016). Completing Europe Gas Interconnections in Central and Southeastern Europe-an Update. Atlantic Council. Report. ISBN: 978-1-61977-479-7. P. 9.

In order to attain European energy security, the three regions should be interconnected.

As Romania and Austria are part of South-Eastern Europe, only this region is favourable for the author's concerns.

Another step made by the EU in creating an indubitable energy environment was to start rethinking the sources of gas dependencies and to diversify them. For sure, it needs time to construct new pipelines, but the first endeavours, like identifying the sources, were initiated. One possible reliable source for developing an EU internal market is the Black Sea. In the RNES, the Black Sea is seen as a good option not only for the Romanian internal market of the gas, but also for the external one, the European level.

In the RNES the mentioned key areas of strategic intervention highlight the priorities of the Romanian state regarding the energy security and its advancement.

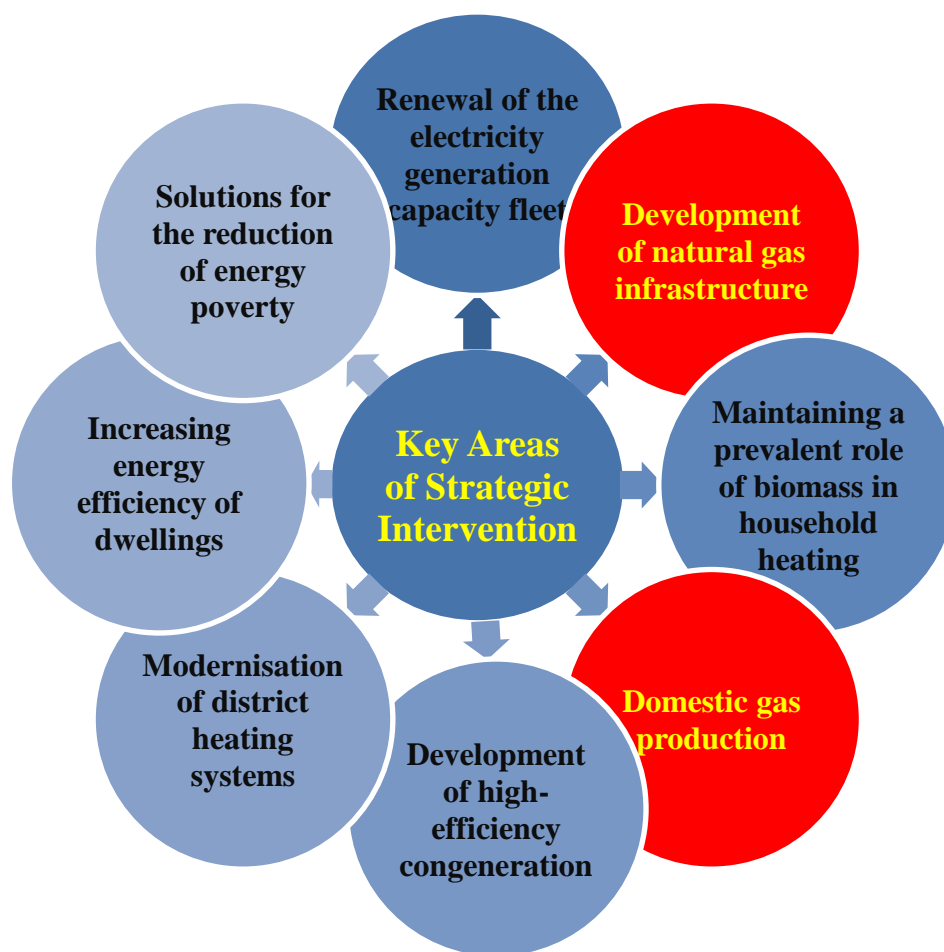


Figure 21: Key areas of strategic intervention mentioned in the RNES.¹¹⁰

The figure shows that the evolution of the gas infrastructures is an impetuous process for the Romanian future energy. Respecting also the targets of the Energy Union, exploiting gas from the Black Sea will ensure a domestic gas production and solidarity between both, Member States and non-EU countries. The natural gas flow from Romania can help countries like Bulgaria and Moldova to reduce their dependency on an unique and instable source.¹¹¹

Austria, being highly dependent on gas imports, the infrastructures and gas markets have expanded in the region. The long-term future of Austria, as a gas transit country will depend on gas export volumes and routes of Russian gas to Europe as well as the possibility to have access and transit alternatives to gas supply sources from the Caspian Sea and the Black Sea.

¹¹⁰ Author's note: Figure created by the author based on the RNES.

¹¹¹ Cf.: RNES. (2016). Op. cit. P. 19.

The geographic location of Austria is significant for the routes from Russia to Italy and southern Germany. Its transit capacity helps to secure the energy supply of its neighbours.¹¹²

*“The Backbone concept is presented as a way of upgrading existing and planned interconnections in a coordinated manner to serve both commercial purposes and the energy security of Europe as a whole.”*¹¹³ This concept refers to pipelines which have to be inter-related to serve as a mutual energy security goal for different parts of Europe.

In the map below, the Backbone concept is explained by the visualisation of Europe’s efforts in expanding the gas pipelines.

112 Cf.: U. a. (2014). Energy Policies of International Energy Agency Countries-Austria 2014 Review. P. 50.

113 Roberts, J. (2016). Completing Europe Gas Interconnections in Central and Southeastern Europe-an Update. Op. cit. P. 2.



Figure 22: Current and proposed pipelines in South-Eastern Europe.¹¹⁴

The concept ensures an alternative to countries which are dependent on Russian gas. In this regard, the BRUA pipeline project develops a system to connect the four mentioned countries by upgrading Romania's gas exploitation. A prove that BRUA is a project in progress is the interconnector between Romania and Bulgaria, which was fully operational in 2014.¹¹⁵

¹¹⁴ Ibid. P. 6.

¹¹⁵ Cf.: Roberts, J. (2016). Completing Europe Gas Interconnections in Central and Southeastern Europe-an Update. Op. cit. P. 13.

Beside the Black Sea resources, “in 2012, ExxonMobil, OMV, and Petrom discovered the offshore Domino field, with resources initially estimated at between 42 and 84 bcm.”¹¹⁶

Furthermore, “in 2015, ExxonMobil and Petrom discovered a smaller field, Pelican, with perhaps 20-25 bcm in reserves, while in October Lukoil discovered Trident, which initial studies reported as having 29.7 bcm in reserves.¹³ A Canadian company, Black Sea Oil & Gas, has also reported offshore discoveries at Ana, Doina, and Eugenia. Wood Mackenzie.”¹¹⁷

Romania’s new offshore fields’ discoveries facilitate the future for the EU’s energy security. If the authorities manage to invest in Romania, all the revealed resources are a potential substitute for a more competitive market at lower prices than Azerbaijani and Russia’s supplies.¹¹⁸

As the author mentioned the “activity in the Black Sea could dramatically influence the region’s gas supply dynamics and corporate landscape.”¹¹⁹ Romania will start the gas exploitation from Black Sea in 2018 and it will be able to become an important gas exporter for the EU Member States.¹²⁰

3.5.2 Conclusions

In the 21st century, when security risks and threats are so diverse, the energy security represents a serious concern for the EU’s burgeoning. Consequently, the EU Member States purchases in the energy sector have a great impact onto the EU.

According to the author’s research, the EU, Austria and Romania carry out important and useful strategies from the perspectives of energy security. In order to enhance the EU’s energy security, each Member State has to respond to the strategic priorities and actions of the EESS concerning the gas supply.

116 Ibid. P. 12.

117 Ibid. P. 12.

118 Cf.: Ibid. P. 12.

119 Homepage of Offshore Engineer. URL: <http://www.oedigital.com/component/k2/item/8838-all-eyes-on-black-sea-resources>. [2-5-17].

120 Cf.: Homepage of Digi24. URL: <http://www.digi24.ro/stiri/economie/romania-incepe-extractia-de-gaze-din-marea-neagra-in-2018-si-devine-exportator-670486>. [2-5-17].

To be able to answer the main question, the author created four sub-questions and after a deep research study she answered them. Accordingly, by putting the answers of the sub-questions together, the main question was also answered and the research gap was closed.

In the first research chapter the author analysed Romania's and Austria's fields of action and measures related to energy security objectives, having the following results. Both countries recognise the importance of adopting a common energy security strategy and focus on the developing the EU Member States' relations. In order to achieve its objectives, each country's strategy concentrates on establishing a specific framework which responds to the European requirements. As security in the energy domain may be achieved only through a coordinated defence policy at national and international level, both countries focus on strengthening an effective collaboration on the security of resources in Europe and worldwide.

The author used the experts' opinion to strengthen the results of her research. The conclusions resonate with their common opinion.

The knowledge of its threats, managing them and building an appropriate prevention, response capability and effective collaboration between European countries level are essential in developing the energy security.

To be able to act at present time, it is necessary to understand the past. In the second chapter information about crises regarding the gas supply from Russia is introduced for which is the main reason that the author presents in her thesis. The two crises are presented as a background for the nowadays tensions when talking about gas delivery from Russia to Europe via Ukraine.

According to the second part of the research, the gas crises in Ukraine in 2005-2006 and 2008-2009 are different from the current crisis because of the military intervention in the Crimean region and the changes produced to the European geography.

In order to answer the main question, the answer to the second sub-question has the purpose to present the influence of the 2006 and the 2009 crises.

To deal with change and ambiguity of the environment successfully and to ensure security at any level, the society needs strategic implementations to provide a rapid answer in case of disruptions.

The third sub-question was intended to demonstrate how the Ukraine Crisis influenced the EU's Energy Strategy and the gas supply to the Member States. The measures taken by the European Commission are analysed.



Figure 23: Measures taken by the EU in response to the Ukraine Crisis.¹²¹

The figure shows that the most important outcome of the crises was to create a stress test. The gas stress test had the goal to simulate two situations, which could have endangered the EU and its citizens.

The two possible scenarios were:

- “A complete halt of the Russian gas imports to the EU.
- A disruption of Russian gas imports through the Ukrainian transit route.”¹²²

The investigated results indicated that stability of the gas deliveries could be increased by cooperation between countries.

The answers given by the experts concerning the influence of the crisis on the relations between Member States and the measures implemented by them were also analysed in this chapter. This led to the last chapter, named “*Measures for the Future implemented*

¹²¹ Author's note: Figure created by the author based on her research.

¹²² Homepage of European Commission. Page of Energy. URL: <https://ec.europa.eu/energy/node/192>. [20-4-17].

by the EU as a Response to Ukraine Crisis in the Gas Domain” where the course of action to achieve a more secure energy was discussed.

Having all presented above, the author could elaborate some conclusions and suggest new measures for both countries.

Romania, having unexploited gas fields could facilitate the future energy security inside the EU. The resources need, for sure, time and money, but the results will be worth, not only at national level, but also on the European one. The Black Sea is the most reliable example in this case.

Austria, because of its high dependence on gas imports, should have as measures taken for the future to develop more and more its infrastructures and its transit capacity. Another measure is enlarging the gas sources.

Both countries take actively part in developing new routes for the gas transit on the European continent and also in helping the neighbours of the EU.

Therefore, considering all these results, the answer of the main question was already presented. The energy security has a big impact on EU’s security and, even more, each Member State’s energy security influences the European security environment. The RNES and ANES respond to the strategic priorities and actions of the EESS concerning the gas supply. In this terms both countries admit the importance of enhancing the EU’s energy security and their efforts represent a process of an ongoing improvement.

3.6 Discussion of Results (pros and cons)¹²³

The aim of this research study is to find out: “*How does the EU Member States’ energy security influence EU’s security – taking in consideration both, Romania and Austria gas supply security during the Ukraine Crisis?*” In order to answer the main question of the thesis, the author created four sub-questions. In order to stay objective the author criticises her work, by giving pros and cons.

The first sub-question: “*How is EU’s security influenced by the energy security of its Member States using the example of Romania and Austria?*” is meant to be answered by the first sub-chapter of the research part. After conducting the research, the author has

123 Author’s note: This chapter was created by the author unless otherwise marked.

found out that both, RNES and ANES have elaborated similar fields of action and measures in order to successfully attain energy security for the national state and also for the EU. To provide reliable results, the research starts with analysing the EU's energy security. In this way, the author has a clear view about the fields of action and measures related to the energy security context, and the identification process has satisfied results.

According to the research results, it is necessary to establish an energy framework because only in this way each country will have a better response in case of an emerging energy issue. The development process of energy security capabilities at the national level and interoperability between EU Member States are essential factors in attaining a high level of security for the EU. The process of interoperability should start by enhancing the communication between institutions, structures and organisations implemented at national level in order to improve the national capabilities and to have common solutions, regarding the gas supply context.

The second sub-question: *“What is the background of the Ukraine Crisis?”* is formulated to provide to the readers a basic information about the problems which the EU encountered with regard to Russian gas during the past year. This chapter's purpose is also to provide useful acquaintance in order to distinguish the current crisis in Ukraine and its consequences for the EU's gas deliveries from the past years' gas crises. Despite the author collected data with respect to Russian gas relations with the EU from different sources and from the official homepage of the EU, this fact does not exclude the possibility of an incorrect analysis from the person in cause, which can be considered as a con to her thesis.

After the author cleared which crisis refers to helped for the research for the second chapter, she continued the research in order to answer the third sub-question: *“How has Ukraine Crisis influenced the EU's Energy Strategy regarding the gas supply?”* An ideal solution for obtaining a faster answer in case of a gas crisis for the EU's citizens would be to formulate clear responsibilities for each EU country, which should concentrate only on the ways to attain strategic goals and this is what the EU did with the gas stress test after the military intervention in Crimea. The EU's solution reveals a clear overview of the main factor required in preventing, defending, and recovering in case of gas disruptions.

The last sub-question “*Which are the measures for the future implemented by the EU, Austria and Romania, as a response to Ukraine Crisis in the gas supply domain?*” brings a great contribution to the end-state of the research, because of the concrete perspective of both countries’ accomplishments in the process of strengthening the EU’s energy security. After answering the fourth research sub-question, the author’s intend is to offer possible solutions for more diverse gas sources for the European countries, which can ensure a better energy security. In order to improve the infrastructures and develop new ones, new measures have to be implemented.

Thus, having the answer of these sub-questions, the author considers that the research study reveals the current situation of the Romanian and Austrian achievements in the energy security context. According to the ongoing process of technology, the gas issue becomes more questionable; therefore, new ways and infrastructures for the improvement of gas deliveries process will be implemented in both countries, and a new vision of the situation could be emitted.

3.7 Restriction of Validity¹²⁴

The aim of the thesis is to highlight the way in which the EU Member States support the EU’s efforts in achieving energy security. In order to emphasise the problem discussed in the thesis, the author uses as groundwork only two EU member countries, Romania and Austria. The present thesis analyses only the EU’s strategic priorities and actions concerning the achievement of energy security regarding gas supplies to the Member States.

The original title of this Bachelor Thesis is: “*Energy security – a major EU security issue of the 21st century*” which the subtitle has been added to: “*The influence of energy security on the EU’s security on the example of Romania’s and Austria’s energy security regarding the gas supply during the Ukraine Crisis*” has the role to allow the author to focus on a limited zone of investigation only.

The author’s intention to narrow her area of research is the reason why these restrictions apply.

124 Author’s note: This chapter was created by the author unless otherwise marked.

Another restriction occurred when the experts did not respond to her interview so that a comparison between Romanian and Austrian experts was not possible.

The last chapter of the research – which may cover the future measures of the EU – cannot be considered as being valid at current stage. The circumstances, which may influence the exploitation of the new resources found in the Black Sea and the other gas fields of Romania are unpredictable. For sure, EU's interest in these new resources is clear because it can constitute a way for a safer EU when it comes about energy, but it needs time and money investments.

4. Concluding Chapters

4.1 Benefit for Scientific Disciplines¹²⁵

The paper seeks to identify and explain the relationship between the Member States and the European Union regarding the security of gas supplies. The author's work covers useful knowledge about the EU's security, more specific, about its energy security, thus it may present a benefit for the communities interested in European strategies for security or in the European sphere of resources.

During her approach, the author has collected qualitative information about the nowadays threats inside the EU and at the EU's borders.

Seeing the topic, the thesis addresses specialised institutions in the EU's trade relations with the main gas suppliers. The thesis illustrates the need for a common understating between the EU countries in case of any disruptions and teaches how the EU is supposed to react.

The importance of this topic addresses students who follow or want to follow studies concerning European security issues. The research provides both, theoretical and pragmatic knowledge by using the example of two Member States, Austria and Romania.

The basic information presented here can be used as a start point of new researches studies or as material for teaching. The detailed research about Romania and Austria can help citizens to fully understand the process and struggle made at national and European level in order to ensure safe gas supplies for the dwellings. Also, the teaching staff from Romania and Austria can use it.

The author's suggestions with regard to the new measures which could reduce the EU's dependency on Russian gas supplies can be very useful for those who want to invest in Romania's riches.

The results of the research are an additional support for persons interested more in the gas supply issues than on the other energy's fields. This study could also be suitable for them.

125 Author's note: This chapter was created by the author unless otherwise marked.

Institutions which support energy development at national and European level are seen as possible beneficiaries of this thesis. These institutions could be: the Gas Advisory Council, ENTSOG, the Energy Community Secretariat and the Centre for Energy Policy Research.

Romania is not a part of the IEA, therefore the information presented in the last chapter could awaken the interest for such an agency.

As Romania and Austria are EU Member States, the author considers that the most of institutions' representatives from the European level such as from the European Commission and from the European Parliament could have benefits from this research with a concrete example of how Member States implement the measures taken at European level.

4.2 Prospects¹²⁶

This research offers valuable information about the Romanian and Austrian achievements in order to enhance EU's energy security and to reduce the EU's dependencies on external sources. Seeing how the European countries reacted to a crisis during the past years could change the visions of acting when the next crises appear.

The matters discussed in this thesis could be an argument in favour of the future development and implementation of new gas infrastructures. The energy security can be researched from many points of view and it is seen as a whole only when all the topics concerning this problem are touched. Another conception about this topic and a future study could be to analyse other energy fields, except gas, and the improvements achieved by the Member States for the specific fields.

4.3 Summary¹²⁷

In the last chapter of this thesis, the author would like to summarise the most important results of the research. This thesis describes the manner in which Romania and Austria support the EU's improvements at energy security level during the Ukraine Crisis,

126 Author's note: This chapter was created by the author unless otherwise marked.

127 Author's note: This chapter was created by the author unless otherwise marked.

which started at the end of the year 2013. During the analysis, the author looks for drawing some conclusions about the implementation of new security strategies at the European level and how the two Member States took the EU's priorities into consideration when elaborating their national energy strategies.

The thesis' purpose is to find out how the EU Member States influence the energy security of the EU. This study is meant to bridge the gap between EU's actions regarding the energy of supplies and how the Member States respond to its actions. The method used is to realise an extensive research on Romania and Austria. The author focuses on analysing their national energy strategies and how these official documents respond to the EU's strategic priorities for safer gas supplies.

The author divides her work into six chapters as follows: the table of contents, the prelude, the body of the thesis, the concluding chapters, the annexes and the affidavit. The work is divided to identify the main question's answer and provides some remarks about the results.

Before starting to summarise the most important part of the thesis – the research and result of research – the author presents briefly some historical facts about how the EU was created.

The European community was split not only because of the wars, but also because of the relations between Eastern and Western Europe which had become more tensioned because of the different ideologies. In order to avoid further wars between France and Germany the industry of steel and coal should have been administrated by many countries. Hence, the European Coal and Steel Community was created and six European countries took part in the European Coal and Steel Community. The European Coal and Steel Community was thought as a common open market for coal and steel to have the developing of weapons' industry in multinational hands. The fact that the European Coal and Steel Community relied on a common market, common objectives and common institutions, encouraged the energy expansion and strengthened the trades between the member countries. The European Coal and Steel Community evolved and became the fundament of the nowadays EU.

From the very beginning the resources had an important role in deciding the cooperation between countries, so a proper security should be ensured to protect the energy relations.

The recent conflicts had a great impact on the energy relations of the EU. The global security has experienced profound transformations over the past years. The geography of the European continent was changed by the military intervention in the Crimean region and the tensioned relations between the EU and Russia questioned the energy security. Due to the fact that the EU had experienced several disruptions because of the past disagreements at the Russian-Ukrainian level, the European authorities considered this a major issue addressing the gas supplies from Russia. Studying the previous disruptions of 2006 and 2009, the author achieves basic knowledge of the gas related matters and she goes into a deeper research by analysing the EU's official documents and comparing them with Romania's and Austria's national energy strategies. After having the basic knowledge of the history, the author identified the threat: the tension between Ukraine and Russia.

The author remarks that the knowledge of the threats, managing them and building an appropriate prevention, response capability and effective collaboration between European countries are essential for developing the energy security.

The most important researched documents are: the European Energy Security Strategy, the Romanian National Energy Strategy and the Austrian National Energy Strategy. The reaction of the Member States is a positive one and the EU's priorities have become national priorities.

Romania's contribution to the EU's energy security is essential. Many directives of the Romanian National Energy Strategy cover the EU's needs for building a stronger energy security. The advancements in the gas infrastructures are highlighted in the areas of Romania's strategic intervention. The evolution of the gas exploitation is seen as an impetuous measure.

Romania's new gas fields' discoveries facilitate the future for the EU's energy security. If the authorities manage to invest in Romania, the resources found in the Black Sea and in other parts of Romania are a potential substitute for the Russian gas supplies.

The Austrian's energy security process bases on the EU's priorities in reducing its dependency on Russian gas. Being a big energy importer, Austria foresees the renewable energy as a solution to its security. Austria is a transit country for gas routes from Russia to Europe and this is a double edged sword for its energy security.

In order to avoid an energy shock, the EU elaborated the European Energy Security Strategy in 2014, when the military conflict between Russia and Ukraine was a concern. In the European Energy Security Strategy the focus is on the gas stress test. The results of the test were investigated and indicated that the stability of the gas deliveries could be increased by cooperation between countries. A productive Europe lies on its own Member States support.

After finishing the investigation, the author closes the research gap and gives the answer to the main question. International energy relations represent an integral part to accomplish successfully the goals of the EU with respect to secure delivery, which implies a stronger Europe.

The author criticise her work in the discussion of results (pros and cons) chapter and she does not exclude a misinterpreting of the Russia-EU relations. In the restriction of validity chapter, the reason for adding a subtitle to the original title of the present Bachelor Thesis is specified and how the experts who did not answer to the author's interview narrow her vision to the research.

The concluding chapters describe: within the benefit for scientific disciplines, the scientific communities which may have a benefit from the research are mentioned. The results can help not only the European authorities being responsible for energy, but also the Romanian and Austrian ones.

Even if Europe builds many gas pipelines, having a retrospective on the entire study, the author is aware that new threats are endangering the EU's energy security. But, as European Coal and Steel Community did 65 years ago to end up with the wars between powers of Europe by sharing and administrating the resources, will Europe ensure a safer environment for its citizens by improving the energy security?

4.4 Postface¹²⁸

The chance given by the Romanian commission in charge with the Erasmus+ programme was remarkable. The author did her best to represent the sending institution at the highest level by working to achieve the best outcome of the thesis. Having this opportunity, the author passes her sincerest appreciation to the Erasmus Coordinator of

128 Author's note: This chapter was created by the author unless otherwise marked.

Henri Coandă Air Force Academy, Assist. Prof., Liliana Miron PhD, to Univ. Lect. Daniela Nagy, and to LtCol Cristian Ene.

Firstly, the support offered by both, Romanian and Austrian tutors during the entire process made the result of this research. On one hand, the author passes her deepest gratitude to her Austrian tutor and Head of the International Office of the Theresan Military Academy, Col Dr. Harald Gell. His assistance guided her throughout the evolution of her work and helped her to improve it. The author will be always thankful for his support.

On the other hand, the author expresses her acknowledgement to her Romanian tutor, Col Dr. Ovidiu Moşoiu, for his supportive attitude and pieces of advice concerning the thesis.

Secondly, the author uses this opportunity to show her respect to the experts who answered the interview as follow: to Flotilla Counter Admiral (retired), Dr. Ionel Baibarac, to Senior Instructor, Cristian Ichimescu, PhD, to Univ. Lect. Dr. Alexandru Lucinescu, to the Head of Military Information Systems and Defence Information Department of the Romanian National University for Defence, Dr. Sorin Topor and to Dr. Dorin Cătană. Without their benefit to this paper the results would not been at this high quality.

Thirdly, the author would like to thank Mag. Christian Thuller, ADir RegR Kurt Berger and OStv Christian Hadek, MSc from the International Office.

5. Annexes

5.1 List of Abbreviations

ADir	Amtsdirktor (in English it is a civilian rank)
AFASTUD	Romanian Air Force Academy's International Conference for students
AGRI	Azerbaijan Georgia Romania Interconnector
ANES	Austrian National Energy Strategy
Assist. Prof.	Assistant Professor
Assoc. Prof.	Associate Professor
Bcm	Billion cubic meters
BRUA	Bulgaria-Romania-Hungary-Austria
Col	Colonel
Dr.	Doctor
ECPR	European Consortium for Political Research
ECSC	European Coal and Steel Community
EESS	European Energy Security Strategy
EMBA	Executive Master of Business Administration
ENTSOG	European Network of Transmission System Operators for Gas
ETS	Emissions Trading System
EU	European Union
FH	Fachhochschule (in English it is a university of applied science)
IEA	International Energy Agency
IGB	Gas Interconnector Greece-Bulgaria
Ing.	Engineer
ITGI	Interconnector Turkey-Greece-Italy
LNG	Liquefied Natural Gas
LtCol	Lieutenant Colonel
Mag.	Magista
Maj	Major
MBA	Master of Business Administration
MSc	Master of Science
MSD	Master of Security and Defence
Mt	Million tones

NATO	North Atlantic Treaty Organization
No.	Number
OCdt	Officer Cadet
ÖMV	Österreichische Mineralölverwaltung
OStv	Offizierstellvertreter (in English it is a Warrant Officer II)
PhD	Doctor of Philosophy
Prof.	Professor
RegR	Regierungsrat (in English it is a civilian rank)
RNES	Romanian National Energy Strategy
SECOSAFT	Romanian Land Forces Academy's International Conference for students
TANAP	Trans-Anatolian Natural Gas Pipeline
TAP	Trans Adriatic Pipeline
TPES	Total Primary Energy Supply
Univ. Lect.	University Lecturer
WWII	World War II

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5.4 Expert Interviews

The author elaborated the following interview:¹²⁹

“Dear Ladies and Gentlemen!

My name is Raluca VASILE and I am third year student of “Henri Coandă” Air Force Academy, in Romania. Currently, I am creating my Bachelor Thesis, during a three month Erasmus+ semester exchange at the Fachhochschul-Bachelor Programme Military Leadership at the Theresan Military Academy in Wiener Neustadt, Austria – tutored by Col Dr. Harald GELL, the Chairman of the Implementation Group of the “European Initiative for the exchange of young officers inspired by Erasmus”.


Being interested in European Union security fields and its response to new challenges, I chose as topic for my thesis EU’s energy security, more precisely “The Influence of Energy Security on EU’s Security on the Example of Romania’s and Austria’s Energy Security regarding Gas Supply during Ukrainian Crisis”.

Having the opportunity to conduct an interview with such an experienced person of the EU – as you are – not only the quality of my thesis will be considerably improved, but also my knowledge will enrich by deepen the experts’ answers.

*My request to you would be to fill in and answer the following questionnaire, which will **not take longer than 10 minutes for the 10 questions.***

Please insert an “X” below the number, which is mostly related to your answer. An example is shown in red colour below:”

1	2	3	4	5	6
X					
Strongly agree/ Yes					Totally disagree/ No



The author lists the five answers on the following pages.

¹²⁹ Author’s remark: The document sent to the experts was formatted in Arial font, therefore here the original format is added.

5.4.1 Expert Interview No. 1

Expert:	Dr. Flotilla Counter Admiral (retired) Ionel Baibarac, EMBA
Institution:	Steaua Română Refinery
Function:	Director
Interviewer:	Ocdt Raluca-Theodora VASILE
Date:	3 rd April 2017

In order to prove evidence, the author includes the screenshot of the e-mail received from the expert.



Figure 24: Screenshot of the e-mail sent by Ionel Baibarac.¹³⁰

The experts' answers on the following pages are the original ones. Since it is not the task of the author to correct the experts' answers, the author changed neither grammar nor spelling mistakes.

¹³⁰ Author's note: Figure created by the author.

1. Having in attention the latest conflicts and crisis the EU has faced, have they influenced EU's energy security policies?

1	2	3	4	5	6
X					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>Energy security has become a key priority in EU policy but climate change mitigation commitments live on in parallel. Today energy security has regained the centre stage in the European energy debate.</p> <p>During 2013 and 2014, Russia's more aggressive foreign policy, and conflict with Ukraine (including new gas delivery disputes), furthered the securitisation move - i.e. when the issue is considered and addressed as a security issue -in energy policy. In response to this, the European Commission was prompted to launch an EU energy security strategy in May 2014, suggesting a range of both short-term and long term measures.</p>					

2. Do you think that EU's activities, policies and structures keep up with the new threats regarding gas supplies in the EU?

1	2	3	4	5	6
X					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>The EU's Energy Union strategy is made up of 5 closely related and mutually reinforcing dimensions.</p> <ul style="list-style-type: none"> • Security, solidarity and trust <p>Diversifying Europe's sources of energy and ensuring energy security through solidarity and cooperation between Member States.</p> <ul style="list-style-type: none"> • More on an internal energy market <p>A fully-integrated internal energy market</p> <p>Enabling a free flow of energy throughout the EU through adequate</p>					

<p>infrastructure and without any technical or regulatory barriers – an efficient way to secure supply and give consumers the best energy deal.</p> <ul style="list-style-type: none">• Energy efficiency <p>Energy efficiency first - improved energy efficiency will reduce our dependence on energy imports, reduce emissions and drive jobs and growth.</p> <ul style="list-style-type: none">• More on climate action <p>Climate action - decarbonizing the economy.</p> <p>An ambitious climate policy is integral to creating the Energy Union. Actions include the EU Emissions Trading System (EU ETS), strong but fair national targets for sectors outside the ETS to cut greenhouse gas emissions, a roadmap towards low-emission mobility and an energy policy which makes the EU world leader in renewables. The EU is committed to a quick ratification of the Paris Agreement, an ambitious new global climate change agreement approved in Paris in December 2015.</p> <ul style="list-style-type: none">• Research, innovation and competitiveness <p>Supporting breakthroughs in low-carbon and clean energy technologies by prioritizing research and innovation to drive the transition of the energy system and improve competitiveness.</p> <p>Important groundwork has already been done. Europe has a policy framework for energy and climate for 2030, as well as an energy security strategy. Meanwhile, an integrated energy market for all EU countries is closer than ever before.</p>	
--	--

3. In your opinion, do EU member states support EU's efforts in achieving energy security?

1	2	3	4	5	6
		x			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
Still most of EU states are seeking direct deals with Russia practising state mercantilism.					

4. Ukrainian Crisis was one of the major conflicts at EU's borders recently. Has this crisis influenced energy relations between EU and Russia, especially gas supplies from Russia to Europe?

1	2	3	4	5	6
					x
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
			Russian economy depends on the sale of energy to Europe just as Europe depends on Russian for its fuel supplies.		

5. Which are – from your point of view – the measures implemented by the EU as a response to the Ukrainian Crisis concerning the security of gas supply? Could you please insert some key-words listed according to your priorities?

- European Energy Union
- Developing the reverse flows
- In place security of supply plans, conduct risk assessments and stress tests

6. Hypothetical, even though it is hard to imagine a total gas cut-off from Russia, in your opinion, is EU ready to rethink its energy strategies and to have an immediate answer to such a new crisis?

1	2	3	4	5	6
			x		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
			Energy infrastructure (pipes and LNG terminals) might be the major difficulty.		

7. Has the Ukrainian Crisis influenced in a good way the energy relations between EU member states?

1	2	3	4	5	6
		x			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
It increased the awareness of vulnerability concerning discontinuity of supply.					

8. Is Austria, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
x					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
Government efforts on security of supply have long focused on oil and, more recently, on natural gas. Oil is the most important fuel in Austria, accounting for 34% of TPES in 2012. Oil security is on a sound basis as the country holds oil stocks equalling more than 110 days of net imports. Also, while most oil products are imported, the sources and routes for these imports are well diversified. An exception to this diversification can be seen in Austria's sole oil refinery, the Schwechat refinery, which receives its oil supply through one					

<p>pipeline from Trieste, Italy. To improve the security of crude oil supply, the government should continue to facilitate a pipeline connection to the Slovak Republic in order to gain access to a second crude oil supply route.</p> <p>Security of a natural gas supply is a more recent area of government focus since the fuel provides around 22% of TPES. Imports cover four-fifths of gas demand, and almost all imports are physically sourced from Russia. At the same time, gas transit volumes through Austria are many times larger than domestic consumption, and the country has never suffered a major gas disruption. Adding to supply stability is Austria's ample storage capacity, which roughly equals 80% of the nation's annual gas demand in 2012 and which is capable of an output rate above peak demand on a cold winter day. In another commendable development, Austria has taken effective steps to prepare for a gas emergency, notably, by enabling physical reversibility of several pipelines with neighbouring countries (Germany to Austria and Italy to Austria) in 2011. Austria should continue to explore the benefits of increasing flexibility and diversity of supply options so as to increase the resilience of energy security.</p>	
--	--

9. Is Romania, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
x					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>Romania's proved reserves in 2012 amounted to 100 billion cubic meters (bcm) of natural gas (a fifth of the 1992 level) and 100 million tons (mt) of oil (half the 1992 level).² Romania produces annually 10.9 bcm of natural gas and consumes 13.5 bcm. The yearly crude oil production is 4.1 mt against a consumption of 8.8 mt. The aggregated depletion rate of hydrocarbon reserves is 10% per year, meaning that without supplementary sources. Romanian energy dependency is about 18%. At the same time Romania is implementing all European directives concerning energy union interconnection of gas pipes, developing of reverse flow etc.).</p>					

10. As part of EU's energy independence, the "BRUA" gas pipeline is an on-going project. How will this pipeline help to improve EU's energy security? Could you please insert some key-words listed according to your priorities?

- gas pipeline from Black Sea to European market.
- new source of gas supply for EU.
- permanent bidirectional flow of gas from Romania to Bulgaria and Hungary-Austria.
- OMV Petrom and ExxonMobil will commence to extract gas from Black Sea in 2020.

5.4.2 Expert Interview No. 2

Expert:	Prof. Dr. Ing. Dorin-Ioan Cătană
Institution:	Transilvania University Braşov
Function:	European Commission Expert in Research and Innovation
Interviewer:	OCdt Raluca-Theodora VASILE
Date:	2 nd April 2017

In order to prove evidence, the author includes the screenshot of the e-mail received from the expert.



Figure 25: Screenshot of the e-mail sent by Dorin Cătană.¹³¹

1. Having in attention the latest conflicts and crisis the EU has faced, have they influenced EU's energy security policies?

1	2	3	4	5	6
				X	
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

¹³¹ Author's note: Figure created by the author.

2. Do you think that EU's activities, policies and structures keep up with the new threats regarding gas supplies in the EU?

1	2	3	4	5	6
			X		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

3. In your opinion, do EU member states support EU's efforts in achieving energy security?

1	2	3	4	5	6
			X		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

4. Ukrainian Crisis was one of the major conflicts at EU's borders recently. Has this crisis influenced energy relations between EU and Russia, especially gas supplies from Russia to Europe?

1	2	3	4	5	6
	X				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

5. Which are – from your point of view – the measures implemented by the EU as a response to the Ukrainian Crisis concerning the security of gas supply? Could you please insert some key-words listed according to your priorities?

<ul style="list-style-type: none"> • •
--

6. Hypothetical, even though it is hard to imagine a total gas cut-off from Russia, in your opinion, is EU ready to rethink its energy strategies and to have an immediate answer to such a new crisis?

1	2	3	4	5	6
				X	
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

7. Has the Ukrainian Crisis influenced in a good way the energy relations between EU member states?

1	2	3	4	5	6
X					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

8. Is Austria, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	X				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

9. Is Romania, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	X				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

10. As part of EU's energy independence, the "BRUA" gas pipeline is an on-going project. How will this pipeline help to improve EU's energy security? Could you please insert some key-words listed according to your priorities?

- more important gas suppliers permit the growth the EU's energy security

5.4.3 Expert Interview No. 3

Expert:	Cristian Ichimescu, PhD
Institution:	Romanian National Defence University
Function:	Senior Instructor
Interviewer:	OCdt Raluca-Theodora VASILE
Date:	10 th April 2017

In order to prove evidence, the author includes the screenshot of the e-mail received from the expert.

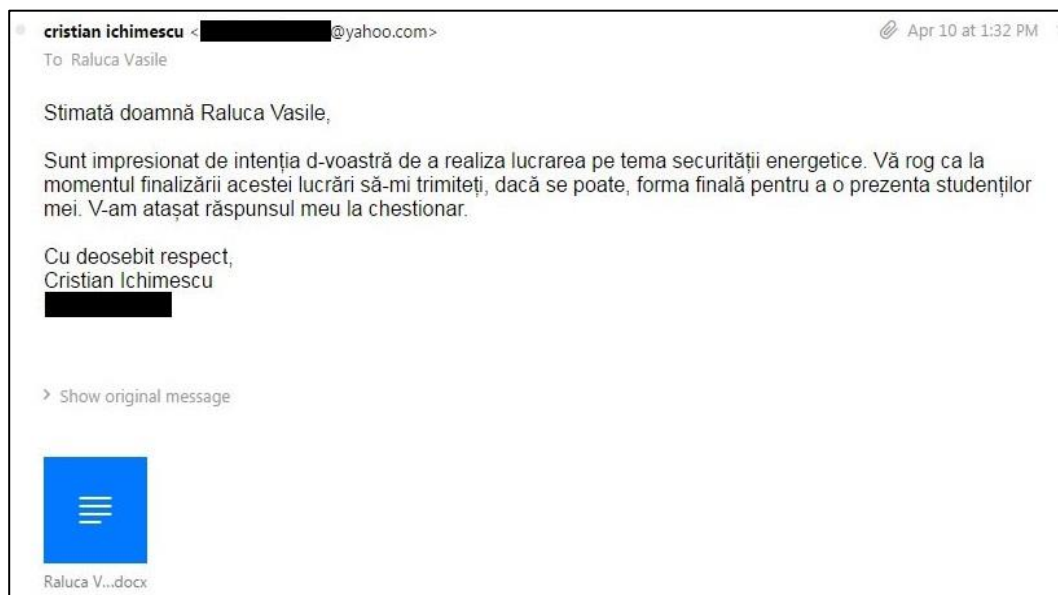


Figure 26: Screenshot of the e-mail sent by Cristian Ichimescu.¹³²

132 Author's note: Figure created by the author.

1. Having in attention the latest conflicts and crisis the EU has faced, have they influenced EU's energy security policies?

1	2	3	4	5	6
		X			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

2. Do you think that EU's activities, policies and structures keep up with the new threats regarding gas supplies in the EU?

1	2	3	4	5	6
			X		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

3. In your opinion, do EU member states support EU's efforts in achieving energy security?

1	2	3	4	5	6
			X		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

4. Ukrainian Crisis was one of the major conflicts at EU's borders recently. Has this crisis influenced energy relations between EU and Russia, especially gas supplies from Russia to Europe?

1	2	3	4	5	6
			X		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

5. Which are – from your point of view – the measures implemented by the EU as a response to the Ukrainian Crisis concerning the security of gas supply? Could you please insert some key-words listed according to your priorities?

- Protect own resources of EU countries
- Reoriented to other resources of gas

6. Hypothetical, even though it is hard to imagine a total gas cut-off from Russia, in your opinion, is EU ready to rethink its energy strategies and to have an immediate answer to such a new crisis?

1	2	3	4	5	6
		X			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

7. Has the Ukrainian Crisis influenced in a good way the energy relations between EU member states?

1	2	3	4	5	6
		X			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

8. Is Austria, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
		X			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

9. Is Romania, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	X				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

10. As part of EU's energy independence, the "BRUA" gas pipeline is an on-going project. How will this pipeline help to improve EU's energy security? Could you please insert some key-words listed according to your priorities?

- Working together
- Sharing
- Profit

5.4.4 Expert Interview No. 4

Expert:	Dr. Alexandru Lucinescu
Institution:	Romanian National Defence University
Function:	Univ. Lect.
Interviewer:	OCdt Raluca-Theodora VASILE
Date:	11 th April 2017

In order to prove evidence, the author includes the screenshot of the e-mail received from the expert.



Figure 27: Screenshot of the e-mail sent by Alexandru Lucinescu.¹³³

1. Having in attention the latest conflicts and crisis the EU has faced, have they influenced EU's energy security policies?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>It is relevant in this respect the European commission proposal for a decision of the european parliament and of the council on establishing an information exchange mechanism with regard to intergovernmental agreements and non-binding instruments between member states and third countries in the field of energy and repealing decision no 994/2012/eu from 16.02.2016 and also the council decision establishing an information exchange mechanism for intergovernmental agreements and non-binding instruments between member states and third countries in the field of energy adopted on 21.03.2017.</p>					

133 Author’s note: Figure created by the author.

2. Do you think that EU's activities, policies and structures keep up with the new threats regarding gas supplies in the EU?

1	2	3	4	5	6
	X				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>Arguments could be found in</p> <ul style="list-style-type: none"> the proposal for a regulation of the european parliament and of the council concerning measures to safeguard the security of gas supply and repealing regulation (eu) no 994/2010, put forward by the european commission on 16.2.2016 the european commission decision of 11 august 2011 establishing the composition and the operational provisions of the gas coordination group and repealing commission decision 2006/791/ec. 					

3. In your opinion, do EU member states support EU's efforts in achieving energy security?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
<p>See for example the council conclusions on EU energy diplomacy (including the EU energy diplomacy action plan) adopted by the council on 20 July 2015.</p>					

4. Ukrainian Crisis was one of the major conflicts at EU’s borders recently. Has this crisis influenced energy relations between EU and Russia, especially gas supplies from Russia to Europe?

1	2	3	4	5	6
		x			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
Analyse the evolution of the EU gas imports from the Russian federation since 2014 and compare them with the scope of the sanctions imposed to the Russian federation by the EU.					

5. Which are – from your point of view – the measures implemented by the EU as a response to the Ukrainian Crisis concerning the security of gas supply? Could you please insert some key-words listed according to your priorities?

- | |
|---|
| <ul style="list-style-type: none"> • resilience • gas stocks • diversification of external supplies • security of critical infrastructure |
|---|

6. Hypothetical, even though it is hard to imagine a total gas cut-off from Russia, in your opinion, is EU ready to rethink its energy strategies and to have an immediate answer to such a new crisis?

1	2	3	4	5	6
			x		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		

7. Has the Ukrainian Crisis influenced in a good way the energy relations between EU member states?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
The documents above mentioned have been adopted, with only one exception, after the Ukrainian crisis.					

8. Is Austria, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
See, for example, the report available at: https://iccr-foundation.org/wp-content/uploads/2016/06/2015-07-26-report-austria.pdf . Austria depends in a significant degree on imported energy but it strongly opposes the use and development of nuclear energy within the eu area. Austria is also a supporter of renewable energy and its policy in this field is in line with the eu energy policy.					

9. Is Romania, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
See for example the azerbaijan–georgia–romania interconnector (agri). Romania is also active in the field of renewable energy. A recent event that took place at bucharest was the conference eu's energy security. Romania's participation in the energy union					

<p>(http://www.ier.ro/webfm_send/431045). Also we could read the following report on this issue: http://www.crpe.ro/wp-content/uploads/2014/09/crpe-policy-brief-34-propunerile-pentru-strategia-energetica-a-romaniei.pdf.</p>	
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10. As part of EU’s energy independence, the “BRUA” gas pipeline is an on-going project. How will this pipeline help to improve EU’s energy security? Could you please insert some key-words listed according to your priorities?

- | |
|--|
| <ul style="list-style-type: none"> • Diversifying external supplies • Improvement of national security policies • Integration of the EU energy market |
|--|

5.4.5 Expert Interview No. 5

Expert:	Assoc. Prof., Dr. Sorin Topor
Institution:	Romanian National Defence University
Function:	Head of Military Information Systems and Defence Information Department
Interviewer:	OCdt Raluca-Theodora VASILE
Date:	6 th April 2017

In order to prove evidence, the author includes the screenshot of the e-mail received from the expert.



Figure 28: Screenshot of the e-mail sent by Sorin Topor.¹³⁴

1. Having in attention the latest conflicts and crisis the EU has faced, have they influenced EU's energy security policies?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
In my attention is Ukrainian crisis.					

2. Do you think that EU's activities, policies and structures keep up with the new threats regarding gas supplies in the EU?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
In my opinion, the answer is yes. However, my information are from newspapers and on the Internet.					

¹³⁴ Author's note: Figure created by the author.

3. In your opinion, do EU member states support EU's efforts in achieving energy security?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
According CE114, each state organizes its own security critical infrastructure without affecting another EU Member State. The biggest issue is how much money from their national budget are allocated for energy security.					

4. Ukrainian Crisis was one of the major conflicts at EU's borders recently. Has this crisis influenced energy relations between EU and Russia, especially gas supplies from Russia to Europe?

1	2	3	4	5	6
x					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
As we know many European countries are large consumers of energy. Russia demonstrated that it using gas supplies as a "democratic weapon". The specialists concern is the possibility that Russia even stop providing power supply.					

5. Which are – from your point of view – the measures implemented by the EU as a response to the Ukrainian Crisis concerning the security of gas supply? Could you please insert some key-words listed according to your priorities?

- Only the dialogue at the green table.

6. Hypothetical, even though it is hard to imagine a total gas cut-off from Russia, in your opinion, is EU ready to rethink its energy strategies and to have an immediate answer to such a new crisis?

1	2	3	4	5	6
			x		
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
			Yes, EU is ready to rethink its energy strategy, but the national security strategies will have many other objectives and priorities, which will make it impossible to adopt a common solution. This means will be only good recommendations.		

7. Has the Ukrainian Crisis influenced in a good way the energy relations between EU member states?

1	2	3	4	5	6
		x			
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
I believe so but I do not have enough information.					

8. Is Austria, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
	x				
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
I believe so but I do not have enough information.					

9. Is Romania, as an EU member state, responding positively to the EU's strategies for a secure energy?

1	2	3	4	5	6
x					
Comments if you agree (if you would like to specify)			Comments if you disagree (if you would like to specify)		
I think Romania is looking for its way for a good governance and therefore has a cautious approach. Good for it.					

10. As part of EU's energy independence, the "BRUA" gas pipeline is an on-going project. How will this pipeline help to improve EU's energy security? Could you please insert some key-words listed according to your priorities?

- We can transport gas to Hungary and Bulgaria
- It will be a bidirectional, meaning more sources and more competition
- BRUA perfectly integrates both EU policy of diversifying energy sources
- BRUA confirm Romania's policy to strengthen its regional energy market hub.

6. Affidavit

I herewith declare that I have written the present thesis 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 thesis 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 thesis, exclusion from the awarding of a degree, and legal consequences for lying under oath. These consequences also apply retrospectively, i.e. if plagiarism is discovered after the thesis has been accepted and graded. I am fully aware of the scope of these consequences.

.....

(OCdt Raluca-Theodora Vasile)

Wiener Neustadt, Austria in June 2017