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**A comprehensive analysis of integration of EU energy
markets and aspects affecting the process of integration
between 2000 and 2019**

Master's thesis

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Declaration

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Abstract

This Master's thesis analysed integration process of national energy markets through non-legislative and legislative EU documents. The aim was to study integration of national energy markets and aspects that had influence on the integration process through interpretative content analysis. Additionally, the definition of internal energy market was augmented. The internal energy market requires not only competitiveness, market-based approach, customer orientation and flexibility, but it is also necessary to ensure security of supplies, diversification of suppliers, sustainability, and transparency. Four aspects were analysed. It was partially proven, that several initiatives and proposals made by the European Commission were implemented by the member states in binding EU legislation (energy packages) in the period from 2000 to 2019. The initiatives presented by the European Commission were far more ambitious. However, as it was pointed out several times in Commission's publications that progress was rather slow in transposition of EU legislation into national laws by the member states which significantly prolonged integration process. Main problems were deregulation of gas prices for end users, ownership unbundling and independence of national regulatory authorities. Next, geopolitics within the EU is a significant problem in formation of unified EU energy policy which was identified during the conflict between Russia and Ukraine in 2014. Even though the EC promoted building infrastructural projects for diversification and to enhance security of supply in CEE countries after gas shortages due to the conflict in Ukraine, political conflict in the EU neighbourhood was not found as an accelerator for further integration of national energy policies.

Abstrakt

Tato diplomová práce analyzovala integrační proces národních trhů s energetikou skrze evropské legislativní a nelegislativní dokumenty. Cílem této práce bylo skrze interpretační obsahovou analýzu zkoumat integraci národních trhů s energetikou a aspekty, které mají vliv na integrační proces. Taktéž byla obohacena samotná definice vnitřního energetického trhu. Vnitřní trh s energiemi vyžaduje nejen konkurenceschopnost, tržní přístup, orientaci na zákazníka a flexibilitu, ale je také nutné zajistit bezpečnost dodávek, diverzifikaci dodavatelů, udržitelnost a transparentnost. Čtyři aspekty byly analyzovány. Jako první byl částečně potvrzen fakt, že většina iniciativ a návrhů Evropské komise byla implementována do Evropské legislativy (energetické balíčky) v období mezi roky 2000 až 2019. Avšak, Evropská komise několikrát identifikovala ve svých publikacích, že progres členských států v implementaci evropské legislativy do zákonů byl pomalý, co ovlivnilo i samotný proces integrace. Mezi hlavní problémy se řadí deregulace cen plynu pro konečné uživatele, proces rozdělování vlastnictví a nezávislost národních regulátorů. Geopolitika uvnitř EU se ukázala jako další aspekt, který způsobuje značné problémy při formulaci jednotné evropské energetické politiky, což se projevilo i během konfliktu mezi Ruskem a Ukrajinou v roce 2014. Konflikt na Ukrajině sice akceleroval výstavbu nové infrastruktury v členských zemích střední a východní Evropy, politický konflikt v evropském sousedství ale nepoukázal na urychlení sjednocení energetických politik jednotlivých členských států.

Keywords

Internal energy market, integration, natural gas, the European Commission, European strategies, green paper, Energy union, interpretative content analysis, energy packages

Klíčová slova

Vnitřní energetický trh, integrace, zemní plyn, Evropská komise, evropské strategie, Green Paper, Energetická unie, interpretační obsahová analýza, energetické balíky

Title

A comprehensive analysis of integration of energy markets and aspects affecting the process of integration between 2000 and 2019

Název práce

Souhrnní analýza integrace evropských energetických trhů a aspektů, které ovlivňují integrační proces mezi lety 2000 až 2019

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Introduction

The ongoing EU integration process over the years created a borderless Europe for people, labour, goods, and services moving freely within the EU. Recently, the EU started to advocate for a new element to flow freely on the EU market – energy. It is essential to state at the very beginning that this research is focused on natural gas.

Thanks to the single market, the enlargement of the EU created a massive network of businesses, households, industry, and governments within the EU that led to increased energy demand and to call for maintenance of stable energy supplies. Nevertheless, many EU countries had regulated energy markets and nationalized energy providers, which led to a monopoly over the market, lack of competition, transparency, and unnecessarily high prices for end users. Having only one energy supplier could by someone be seen as unproblematic, but most of the times those nationalized providers were decreasing their effectiveness, reducing transparency, and were prone to any form of corruption. On top of that, focusing more on security issues, if there was any problem with energy distribution to the industry or households by national energy provider (maybe because of infrastructure problems or problems in supply chain) a state economy would suffer tremendously since whole state functioning requires steady energy supplies.

Furthermore, many post-soviet EU members had poor or obsolete infrastructure and were and some still are dependent solely on one state as supplier of natural resources. For example, Estonia or Bulgaria were and still are predominantly importing natural resources (oil, gas) from Russia. Dependency on one state as a supplier of natural resources gives a massive advantage for the supplier and offer a form of leverage in future negotiations or discrepancies while increasing a threat for security of supplies.

Over the years, the European Commission (EC) intended to improve the situation by proposing initiatives to ensure competition, transparency, deregulation, and security of supply. It is also noteworthy to say that EU energy policy and integration of national energy markets is incredibly dynamic aspect to study, and it is still developing. The first discussions on the EU level regarding integration of energy markets commenced in the beginning of 1990s. Those talks resulted in First Energy Package that would modify and restructuralize energy markets of member states and prepare those markets for upcoming integration process. After 2000, integration process accelerated following three energy packages which resulted in proposition for establishment of Energy Union in 2015.

Hence, the aim of this master's thesis is to analyse specifically integration process of gas energy markets and aspects that had an effect on the process from 2000 to 2019 concerning Prodi, Barroso I, Barroso II and Junker Commissions. During this period of time, the European Commission proposals and initiatives were presented in green papers which will be the base of this research. Strategies, reviews, directives, and regulations will also offer insight on how the integration process was developing and whether the proposals of the EC were adopted by member states.

To achieve this goal, it is necessary to introduce in theoretical framework the definition and characteristics of internal energy market. However, before addressing this concept, it is necessary to briefly outline all preconditions to this notion. Hence, theories of European integration and the concept of European single market will be presented. This will be followed by methodological part where I elaborate on interpretative content analysis and its features and weaknesses, I presume to face during writing this thesis. In the next section, two research questions and four hypotheses will be drawn as well as description of empirical sources used in this work.

Analytical part is divided into 5 chapters. Four chapters represent each European Commissions which are subsequently divided into segments that represent legislative or non-legislative acts ordered according to years they were published. Chapter 4.5 introduces case study of the conflict in Ukraine in 2014 and its effects on the integration process. Analytical part is followed by Discussion where hypotheses are evaluated. Finally, the comprehensive summarization of the entire research is provided in the conclusion.

1. Theoretical Framework

Before elaborating on the notion of internal energy market, there should be, even though briefly, introduced other concepts and theories that the idea of internal energy market originates from. Single market is related to a process of the European integration. In the sole beginning of this paragraph, it could be proclaimed that the idea of internal energy market is a narrowed down concept that is an outcome of the integration processes in the EU with a focus on particular economic area - energy. However, internal energy market could be understood as a "living organism" that is still being developed. There is no strict theory that would clearly explain the concept. As a result, this is one of the aspects that might cause lack of interconnection between the research and theoretical framework. Instead of attesting theory, conducted research will appear more descriptive. However, throughout the research,

the concept and its aspects will be presented. Hence, the magnitude of this diploma thesis is also elaboration and better formulation of the concept as well as presentation of its principles to a reader.

1.1 European integration

Explaining the concept of the European integration will later facilitate the comprehension of internal market and what was the drive force behind it. The EU integration was accelerated mainly by two different conceptual frameworks before the debate about internal energy market was even launched. Someone might argue that EURATOM was the first platform ever bringing the debate around internal energy market. It is indeed true, but it was solely for nuclear energy. On top of that, despite the fact that one of the EURATOM's policies was a formation of common nuclear market, the core of the creation of EURATOM was a security threat in a form of Germany accessing nuclear knowhow and becoming nuclear power. And although EURATOM enabled knowledge of nuclear energy to Germany, Western allies had a guarantee that any German move has been scrutinized on the international level.

The first theory describing the process of integration is neofunctionalism, introduced by Ernst B. Haas in 1958. It explains integration process as a spill over effect, where the completion of integration of initial sector requires integration of other related sectors (Schmitter, 2005). A spill over effect creates a natural opportunity for an integration. Certain EU policies could not prosper and be developed because of particular restrictions in operations or other policies. It could be described as rather organic way of integration where such opportunities for integration come naturally.

On the other hand, there is liberal intergovernmentalism which protagonist was A. Moravcsik in mid 1990s. It emerged during the timeframe when the representatives of EU member states declared the creation of internal market as finished. Although it is not totally true, the immense effort (and progress) has been taken to integrate members' economies. Liberal intergovernmentalism, broadly speaking, describes European integration as a form of bargain among the states where they voluntarily transfer certain power to supranational institutions to prevent and sanction non-compliance with admitted policy (Moravcsik, 1995). Integration is actually fuelled by the member states which desire economic prosperity. Thus, to prosper economically, members frame a policy that needs to be integrated and transfer

their national power to the EU, which has capacity and a platform for implementation and compliance.

There are several other theories that deal with integration such as multilevel governance (MLG) which has more to say about the process of the integration of internal energy market. MLG explains the parallel between supranational institutions, national representation as well as domestic actors like unions, associations, interest groups or businesses (Jossep, 2004). Regarding the internal energy market, it would be a broad debate among member states, the EC, national regulators, energy providers, transmission system operators and business interest groups.

Overall, internal market was a result of European integration that was either conditioned by spill over effects or intergovernmental dialogue while the design of internal energy market was part of multinational debate.

1.2 European single market

The debate about single EU market commenced in 1982 (European Commission, 1985) and was formally admitted by Single European Act (SEA) signed by the member states in 1986. The idea of single EU market was supposed to be finished by the end of 1992 (Single European Act, 1986). However, the project is still considered ongoing. Single market work on few important principles that are necessary to comprehend before starting to explain the concept of internal energy market. According to SEA (1986) “the internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured.” The EU or European community back then was defined as one territory without any internal borders or regulations that would halt free movement of goods, people, services, and labour. It is believed that “a functioning single market stimulates competition and trade, improves efficiency, raises quality, and helps cut prices” (The European single market). To actually perform as a single market, it requires a collaboration on common customs tariff from all states (European Commission, 1985), which means there has to be one central figure integrating all customs tariffs into one. Additionally, borderless countries with free flow of people required to establish an alternative way for all the countries to “deal with other relevant problems such as public security, immigration and drug controls, the reasons for the existence of the physical barriers will have been eliminated” (European Commission, 1985). Even though integration of national markets resulted in strengthening competition among businesses, European Commission (EC) was

appointed as a surveillance body over competition rules in member states (European Commission, 1985), creating more opportunities for EC to establish its role as a front liner in integration.

One particular risk was debated in the EC white paper *Completing the Internal Market* from 1985. It was social security. Single market created more possibilities for “human, material and financial services to move without obstacle to the areas of greatest economic advantage” (European Commission, 1985) and, therefore, leaving behind empty countryside. EC was well aware about certain underdeveloped regions that possibly could end up cut-off. Such isolated regions could destabilize single market and social system of member states. Furthermore, single market had to be resilient and flexible for integration future markets, esp. for Eastern enlargement. Differences between those regions are to be balanced by structural funds (European Commission, 1985). Structural funding gradually became the main drive for regional development as well as investment into infrastructures.

1.3 Internal energy market

Recalling the theory of EU integration and the concept of European single market set a solid baseline to understand the concept of internal energy market. There is, however, no definition regarding internal energy market. The European Commission states on its official website that internal energy market is “a more competitive, customer-centred, flexible and non-discriminatory EU electricity market with market-based supply prices” (Ciucci, 2020). Electricity is rather misleading word. Even though it is a dominant and common energy product, there are also other natural resources that provide energy such as natural gas, the area of focus of this research.

Energy is a word that will be commonly used in this research paper. Thus, in order to grasp the topic, it is essential to offer a definition of the word. The Oxford Dictionary defines energy as “a source of power, such as fuel, used for driving machines, providing heat, etc.”¹ The first thing coming up in a mind regarding energy is electricity. But there are other sources like oil, gas, renewables, or even nuclear energy. It is therefore anything that provides power to our households, businesses, transportation, and industry. It is like the Internet. A common asset in our lives easily purchased by the customer. However, a stable supply of energy is still something that should not be taken for granted. In the second half of the 20th century, Europe faced several energy crises, the most known ones are oil shortages

¹ Oxford Dicitonary. Retrieved from: <https://www.oxfordlearnersdictionaries.com/definition/english/energy>

in 1973 and 1979 and reduce oil supplies during Gulf war in 1990. Only recently, the EU experienced natural gas disruptions in 2009 and 2014. Thus, the debate around energy is highly politicized on national and even supranational levels and flow of energy supplies has been securitized ever since the supply disruptions started.

Implementation of internal energy market has been a process which has not ended up until now (the end of 2020) despite the fact that during Junker Commission it was proclaimed it was concluded. The problem is that the definition of energy market has been developing over the time as it is outlined below in analytical chapter. But, at the time when internal energy market was marked as completed, Junker Commission regarded milestones for the integration to be achieved. The problem is that in order to ensure free flow of energy in the EU, it is necessary to have perfectly integrated energy market. The matter Junker Commission address was only qualitatively harmonized national markets through legislation. Yet, there are still areas such as infrastructure, diversification, or security of supply where progress needs to be done. Hence, it is rather misleading to claim that internal energy market is finalized.

Internal energy market is a one of priority policy areas of EC. Its legal basis is in Article 194 and Article 114 of the Treaty on the Functioning of the European Union (TFEU) or, commonly known as Lisbon treaty signed in 2007. The Lisbon treaty set an agenda for internal energy market and its creation. To declare internal energy market as being fully completed, it requires “the removal of numerous obstacles and trade barriers; the approximation of tax and pricing policies and measures in respect of norms and standards; and environmental and safety regulations” (Ciucci, 2020). Internal energy market should create a “battleground” for energy providers from all over the Europe to compete freely and provide the best energy prices possible for the costumers. Targeting national energy suppliers created a fair market with “a high level of consumer protection” (Ciucci, 2020). The EU is a strong advocate for a consumer protection and empowerment “to take an active role and fully exercise their rights and choices” (European Commission, 2012).

Next, the completion of single energy market should lead to closer cooperation among member states and resilience when a supply disruption occurs. There should not be a problem for a customer from Estonia to have access to gas even though Russia would cut off Estonia from gas supplies. This is mainly thanks to development of infrastructure that should interconnect states. Therefore, there has been major investments in pipelines and storage houses. A brilliant example for transformation of infrastructure is Slovakia. Slovakia was

extremely dependent on Russian gas and oil supplies thanks to Druzhba oil pipeline and Brotherhood gas pipeline. But, ever since Slovakia entered the EU, infrastructural investments and redesign of pipelines helped Slovakia to become to some extent independent on Russia. Pipelines can now reverse the flow of gas. Thus, Slovakia can access gas from Austria or Czech Republic where Brotherhood pipeline continues. Additionally, Slovakia aims to be interconnected with Poland and Hungary creating a new route for gas flow, so called North-South project.

However, not every country has such geographical advantage as Slovakia does. Countries that are islands or are on the EU external border has more difficult position. Cyprus or Malta are islands not connected via pipelines with continental Europe. They are dependent on stable supply of fossil fuels via tankers. Others, Bulgaria, Romania, or Baltic states are also isolated because of their geographical location. Those countries share mostly one or two borders with other EU members, have outdated infrastructure dating from Soviet era and are located on the external border of the EU. Those regions are more prone to supply disruptions and interconnection of those states is rather difficult and expensive since their infrastructure is underdeveloped. For that reason, one of the goals of internal energy market is to end energy isolated countries and fully connect them to the EU market. To foster the integration and to structure investment priorities, the EU identified 4 important infrastructure corridors that are a priority in order to eliminate energy isolated countries. These four projects are North-South gas interconnections in Western Europe, North-South gas interconnections in Central Eastern and South Eastern Europe Southern Gas Corridor, Baltic energy market interconnection plan (Gas Regional Groups).

Last but certainly not least, the internal energy market targets at energy poor regions. The EU estimates around 34 million European households are unable to keep warm in 2018. If one pictured a household consisting of two parents and a child, it would be over 102 million people affected by energy poverty. The EU adopted Clean energy for all Europeans in 2019, a document where fighting energy poverty to increase living standards and to protect the most vulnerable groups was made EU policy priority (Energy Poverty, 2019). The EU motivates developers to redesign buildings that are energy inefficient and incapable of bring satisfying living standards such as being prone to cold weather or heatwaves, deficient air quality weather or use of dangerous materials.

At this point, it is useful to shed light on the notion of “energy poverty”. According to UNDP energy poverty is “inability to cook with modern cooking fuels and the lack of a

bare minimum of electric lighting to read or for other household and productive activities at sunset” (Sovacool, 2012). While the UNDP accentuates global definition of energy poverty, especially in developing regions, according to the EU, energy poverty “results from a combination of low income, high expenditure of disposable income on energy and poor energy efficiency, especially as regards the performance of buildings” (Energy Poverty, 2019). Both definitions by UNDP and EU are well integrated in the definition by The Asian Development Bank saying, “it is the absence of sufficient choice in accessing adequate, affordable, reliable, high-quality, safe and environmentally benign energy services to support economic and human development” (Sovacool, 2012). Energy poor households are lacking not only stable electricity connection or access to gas for cooking or heating power, but it also affects other aspects of life that are fundamental for social development such as education, health or even politics (González-Eguino, 2015). Hence, it is obvious that energy poverty is slowing down and undermining any kind of development, welfare and “contributing to lower productivity, health problems and higher mortality and morbidity” (Energy Poverty, 2019).

Health is especially an important security issue. González-Eguino (2015) in his research states that “although energy poverty affects many different economic sectors and hampers environmental protection efforts, its most relevant (and perhaps least known) repercussion is its impact on health: according to the WHO it currently causes more deaths than malaria or tuberculosis.” One might argue that stated deceases are not common in Europe, which is definitely true, but the core of the statement lies in casualties it causes just because of not having access to energy. Furthermore, inability to access any kind of energy or paying bills might result in frustration and other psychological problems. An important thing to say it that energy poverty cannot be tackled down by any medical treatment but solely by structural reforms and investments, mostly backed by the EU. And, since, the EU is facing aging population, there is an aspiration to improve living standards by eradication energy poverty to minimum.

Limited access to a variety of energy sources is typical for energy poor regions. While more developed countries, especially western EU members have possibilities to choose from numerous energy sources, many regions, mainly the ones isolated because of geographical reasons), are lacking access to diversified sources of power (González-Eguino, 2015). It means that while a household in south of France can choose between energy

providers (according to its financial possibilities), it can also decide whether it will use renewables, wood, or gas as a source for its heating system.

The role of the EC in integration energy markets is undoubtful. The Commission has acted as accelerator and coordinator for that matter. However, proposals made by the EC are required to be adopted by the Council and the European Parliament. The role of member states is to approve and implement initiatives into directives published as energy packages. The goal of energy packages was to support and strengthen a competition between undertakings (providers, suppliers, transmitters), guarantee market-based prices and transparency, develop tools to protect energy poor and vulnerable areas, monitor the sector, etc. The electricity market is, in a way, the most developed one as we can talk about several regional markets within the EU already integrated.

Furthermore, it is also expected from member states to transpose EU law into national legislation which is rather long process as it will be outlined later. While the EC acts as a coordinator for member states, it is also essential for member states to cooperate with its neighbouring countries regarding infrastructural projects. The whole mechanism for integration of energy markets is comprehensive as it requires cooperation with several actors on many levels.

Overall, internal energy market is a complex concept covering a wide range of important factors with impact on wellbeing of the EU citizens - from socioeconomical issues through geographical problems to security threats. The EU aspires to eradicate energy poverty and connect energy isolated areas with the market and establish a free movement of energy within European borders. The European Commission (EC), in line with its competences set in the Treaty of Functioning of the EU (TFEU), took a position as a facilitating, motivating, and controlling body expecting full cooperation of the EU member states. Since the EC does not have energy policy under its sole power, only thanks to cooperation, internal energy market can be formed into fully-fledged functioning market. But it is important to remember, that the process of integration is long and exhaustive as the creation of single market has been.

2. Methodology

Even though the early stage of academic content analysis emerged in 1910s, its historic roots stem from the moment when human consciousness and writing skills were developed (Krippendorff, 2003). An early protagonist of content analysis was Max Weber who advocated for formal analysis of articles in newspapers (Drisko & Maschi, 2015), as newspapers were widely used as a form of propaganda in early 1900s. Later on, content analysis gained formal methodologic form. In 1960s, the main ambition of content analysis was focused on frequency of words and concepts in texts (Carley, 1990). Therefore, it was necessary to read a large body of work, texts or even images and symbols from objective perspective (Krippendorff, 2003). Imagining the conditions in the past, it required a large amount of time to process such extensive data without any modern tools we have nowadays. Thus, content analysis was eventually met with dissatisfaction. Authors faced difficulties with data gathering, and data processing. They did not have necessary processing power and lacked strong theoretical foundation. Another problem was to relate gathered data with other sources (Carley, 1990). In the 1990s, the methodology regained its position back. The main reason was the fact that content analysis switched from counting words to more sophisticated qualitative research thanks to modern technologies and software (Carley, 1990).

Citing professor Klaus Krippendorff (2003), content analysis is defined as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.” Texts are perceived from larger picture. It means, that content analysis reviews not only text, that can be read, but also it can refer to “wide range of communication media that can be stored in many different formats” such as television, audios recordings, images, and currently even social media (Drisko & Maschi, 2015).

Krippendorff (2003) distinguishes six features of texts that are relevant to content analysis. The first one is a lack of objectivity. Krippendorff (2003) argues that “a text does not exist without a reader, a message does not exist without an interpreter, and data do not exist without an observer.” It means, that no reader can factually read the message. The second one is a meaning. According to Krippendorff (2013) “texts can be read from numerous perspectives, so signs can have several designations and data can be subjected to various analyses.” As there are many readers, there are also several interpretations of a text. Researchers have tendency to focus on one understanding while excluding other

interpretations as deviant or subjective (Krippendorff, 2013). As a third feature he defines lack of common ground or consensus. Researchers approach texts with different perspectives. Thus, it is hard to create a common notion. Having similar thinking and finding the common ground would ease the research unconditionally. But “if content analysts were not allowed to read texts in ways that are different from the ways other readers do, content analysis would be pointless” (Krippendorff, 2003). This aspect advocates for different points of views that are natural for academic research. The fourth feature is meaning. Krippendorff (2003) argues that there are different responses to a message and there is a link between reading a text and something else whether it is “purely mental constructions, past or future experiences, or hidden causes, the analyst must be able to conceive of them and verbalize them.” Simply, content analysis must look outside the “physicality of texts”. Fifth element is relative meaning to contexts or discourses. “Messages always occur in particular situations, texts are read with particular intents, and data are informative relative to particular problems” (Krippendorff, 2003). The understanding of the text differs based on the lances we read the text or listen the debate. Hence, the diversity of meanings. Such differences, however, do not implicitly mean that there is no chance to find an agreement. Last feature are the conclusions from texts to particular context. Krippendorff (2003) summarizes it saying: “Texts, messages, and symbols never speak for themselves. They inform someone. Information allows a reader to select among alternatives. It narrows the range of interpretations otherwise available. For the content analyst, the systematic reading of a body of texts narrows the range of possible inferences concerning unobserved facts, intentions, mental states, effects, prejudices, planned actions, and antecedent or consequent conditions.”

Carley (1990) in her article recognized three (four) basic strategies that address special difficulties and needs of texts. The first one is conceptual analysis. It determines what words or concepts are in the text. Conceptual analysis extracts explicit and implicit concepts. Explicit ones are the obvious words or phrases that occurs unequivocally in the text (Carley, 1990). Implicit concepts are rather hidden ones under the meaning of words or phrases within the context (Carley, 1990). The main difference between these two approaches is that while “explicit concept analysis locates what words or phrases are explicitly in the text or frequency with which they occur, ..., implicit concept analysis makes explicit implicit concepts and then locates the frequency of concept occurrence” (Carley, 1990). Researchers often must combine both approaches to comprehend a text. Although conceptual analysis is easily automated, concepts may be insufficient in decoding the meaning (Carley, 1990).

Next is procedural analysis. Unlike conceptual analysis, its focus is on processes are present in the text. Similarly to a discourse analysis, procedural analysis considers content of text as action (Carley, 1990). Thus, it “focuses researcher’s attention on the domain, action sequences, and decision sequences exhibited by the author or actor in the text” (Carley, 1990). It emphasizes the order of the sentences in the text. However, the main weakness is an inability or restrictive ability of automatization of this strategy unlike in conceptual analysis (Carley, 1990).

Last, but not least it is relational analysis. It somehow combines both above mentioned strategies. It “goes beyond conceptual analysis in that it focuses both on what concepts are present in the text and on the relations between those concepts” (Carley, 1990). In order to conduct relational analysis, three main techniques were developed. The first one is affect extraction that provides “evaluation of the text based on the relationship between concepts that are explicitly present in the text” (Carley, 1990). Another one is proximity analysis which is constructed on co-occurrence of explicit concepts in the text (Carley, 1990). Lastly, there is cognitive mapping. It “involves extracting from the text and then representing the “mental models” or “cognitive structures” that individuals at one time had their memory” (Carley, 1990). This strategy is largely used within psychological domain or artificial intelligence. Even though it contains a large number of difficulties, it is also necessary to mention fourth. It is emotional analysis. It emphasizes the emotional state under which was text written. Attending the emotional feature of the text allows researcher to interpret text differently.

Content analysis in general encompasses techniques from both, qualitative and quantitative methods with inductive or deductive development. Elo & Kyngäs (2007) distinguish these two developments based of the purpose of the study. While inductive approach is recommended “if there is not enough former knowledge about the phenomenon or if this knowledge is fragmented,” deductive approach is utilized “when the structure of analysis is operationalized on the basis of previous knowledge and the purpose of the study is theory testing” (Elo & Kyngäs, 2007). Content analysis requires coding unstructured data, that are “analysed and reduced using descriptive statistics” (Drisko & Maschi, 2015). Generally speaking, inductive approach moves from specific to general, while deductive approach moves from general to specific.

In their book, Drisko & Maschi (2015) define three different approaches to content analyses: basic content analysis, interpretative content analysis and qualitative content

analysis. Each of these has its benefits. While basic content analysis is “using quantitative analytic techniques that only or predominantly address literal communication content”, qualitative approach is rather new and it “seeks to develop carefully specified categories that are revised and refined in an interactive, feedback-loop process to ensure credibility and usefulness” (Drisko & Maschi, 2015). However, out of all three types, this research is based on interpretative content analysis as it offers “an alternative to traditional content analysis for quantifying connotative interpretations” (Ahuvia, 2001).

While Osgood defines interpretative content analysis as a “procedure by which one makes inferences about sources and receivers [of communication] from evidence in messages they exchange,” Holsti approaches interpretative content analysis as “any technique for making inferences by objectively and systematically identifying specific characteristics of messages” (Drisko & Maschi, 2016). Krippendorff (2003) describes interpretative content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.” It means that interpretative content analysis looks at the concrete aspects of the texts to make a conclusion based on the data. Interpretative content analysis is more qualitative approach of content analysis as it does not involve any quantification or statistics. It goes beyond basic frequency-counting. Additionally, using interpretative content analysis can also lead to predictions or to test theories despite the fact that it is mostly descriptive, (Drisko & Maschi, 2015). More importantly, its focus is on “summarizing and describing meanings in an interpretive, narrative manner” (Drisko & Maschi, 2015). Therefore, researchers do not approach fundamental meaning of a word, but they gather information from the text to connect and form a comprehensive message. Texts “do not simply contain meaning but are instead rendered meaningful by the perspective and understanding of the reader for specific purposes” (Drisko & Maschi, 2015).

Interpretative content analysis analyses latent content in the messages. Latent content is “implicit or implied by a communication, often across several sentences or paragraphs” (Drisko & Maschi, 2015). Hence, using interpretative content analysis requires a deeper research of texts. It looks for common characteristics in the message and it also involves active interpretation. Additionally, very important factor in understanding the meaning is the context since interpretative content analysis is not restricted by any coding rules (Ahuvia, 2001).

Even though interpretative content analysis seeks to be systematic and transparent it does not necessarily assume objectivity (Drisko & Maschi, 2015). Drisko & Maschi (2015) referring to Krippendorff's six features of content analysis argue that "meaning is not simply contained in the text." On the contrary to asking "what" and "how" which are rather descriptive questions, interpretative content analysis seeks to answer questions to "why", for "whom" and "to what effect" (Drisko & Maschi, 2015). They (Drisko & Maschi, 2015) continue stating that "researchers can address both the antecedents and the consequences of communication, allowing exploration of both the causes and effects of communication along with its explicit content." This helps researchers answer questions "when direct access to original sources is limited or impossible, such as when the events are in the past or when participants are unavailable or deceased" (Drisko & Maschi, 2015). Cultural heritage for example is one of the aspects affecting interpretation of texts. Any claims or interpretations, however, must be justified by valid evidence.

For the purpose of interpretative content analysis, data are collected from existing texts or datasets. Relevancy, informativeness and a variety are the key principles in data collecting process (Drisko & Maschi, 2015). It is necessary to avoid any sort of biases. Additionally, as mentioned above, interpretative content analysis lacks quantification. However, coding is very important factor. It is predominantly descriptive, and it starts inductively with the data gathered in the very beginning (Drisko & Maschi, 2015). Drisko & Maschi (2015) stated that "emergent codes are generated on the basis of content of the data and seek to closely reflect its meaning in context. However, greater latitude is allowed in the coding process for interpretation and the impact of the contexts of communications."

Connotative categories are used in analysing results during the coding process. Connotative codes are "those based not on explicit words but on the overall or symbolic meaning of phrases or passages" (Drisko & Maschi, 2015). They might be literal (could be read out of text) or rather vague. If vague, it requires more coherent explaining. It is essential that connotative codes are clear and logical. However, they are clear and logical from the perspective of researcher. Therefore, it is necessary to a reader how and why connotative codes were chosen. Miles, Huberman & Saldaña (2014) claim that coding could be directed to many different characteristics of texts depending on the researcher's purposes.

Coding is commonly based on review of several selected documents by a researcher to create a list of subjects that according to a researcher are convenient (Drisko & Maschi, 2015). The main ambition of the coder should be identification of the most informative,

important, or common material from a set of documents (Drisko & Maschi, 2015). The main problem in coding for researcher is researcher themselves. Imagining coding a large number of documents for a single person is an exhausting task. Therefore, it is recommended to use multiple coders. Multiple coders could bring different perspectives that might enrich a research and enhance inclusiveness. Acquiring different points of views evokes more credibility to a research (Drisko & Maschi, 2015).

Presentation of the collected data are summarized mostly by descriptive narratives which “reduce the data and highlight chosen themes and ideas” (Drisko & Maschi, 2015). The main advantage of interpretative content analysis is “to summarize the data while not losing divergent views and nuance. Where context shapes meaning, context must also be fully explicated to the reader” (Drisko & Maschi, 2015). However, it is once again necessary to avoid any biases in narratives researchers chose to exclude or include. Researchers have tendency to unintentionally overemphasize some meanings while leaving out certain factors. Even though it is difficult to achieve objectivity, it is necessary to remain unbiased as much as possible. To achieve impartiality, researcher should be self-reflective and self-aware. Researcher should be able to identify personal biases that might appear during a research (Drisko & Maschi, 2015). Stating such biases helps reader to comprehend researcher’s work and might lead to further exploration of the topic.

3. Research question and hypotheses

The main target of this diploma thesis is to analyse the process of the integration of national energy markets and aspects that affected this process through interpretative content analysis. The time frame for the research is from 2000 to 2019 concerning four European Commissions – Prodi, Barroso I, Barroso II and Junker. Chapters in analytical part are ordered in time when they were published. It is to outline the development of initiatives proposed by the EC and their subsequent implementation into strategies, regulations, or directives. Evaluation of the hypotheses is outlined in Discussion chapter. In order to achieve the goal of this diploma thesis, two research questions and five hypotheses were outlined accordingly:

RQ1: Were initiatives and ambitions proposed by the European Commission taken on board by the Member States?

H1: All initiatives and propositions presented in Green Papers were implemented in respective legislative and non-legislative acts.

RQ2: Are there any positive or negative aspects that affect the integration of gas markets?

H2: Geopolitics of the member states causes the main complicating factor in the integration of national energy policies to European energy policy.

H3: Political conflicts in the EU neighbourhood are the accelerator for the integration of national gas markets.

H4: Lack of implementation of European legislation regarding the gas sector to national legislation is a significant challenge for the European Commission to finish the integration of the internal gas market.

I decided to choose Green papers concerning energy markets as the main source of initiatives and propositions presented by the EC. Legislative acts or Directives adopted by the Council and the European Parliament as well as non-legislative acts or Strategies published by the EC are the main sources for assessment of the success of the Commissions. Even though the integration process of national gas markets emerged in the 1990s, the progress was rather minimal. Real debates and willingness for the integration came after 2000. Hence, only green papers, directives and strategies published since 2000 until 2019 will be analysed. The year 2019 was chosen as it is the last year of Juncker's Commission which proclaimed the integration process of national gas markets as concluded.

To answer the second research question, hypothesis 2 and 3 will be analysed by a case study. To prove that geopolitics within the EU is a problematic aspect of the integration process, the approaches of member states towards Russia during Crimean annexation after 2014 will be used as a case study. Conflict in Ukraine in 2014 is also a case study of external conflict to demonstrate the acceleration of the integration process. Hypothesis 4 will be analysed via Commission's communications and green papers as well as second, third and fourth energy packages.

As I analyse the work of the EC, I work predominantly with publications from the Commission. Therefore, I presume there might be a biased perspective on the success of implementation of the EC proposals into binding legislative acts. Having an insight on the proposals the European Parliament and the Council would be beneficial. Furthermore, as I only intend to identify the factors that affected integration of energy markets, I encourage the rest of the academia to analyse why and how those factors affected the integration process

as well as how to tackle this problem. Additionally, using only one case study to prove whether conflicts in the EU neighbourhood and geopolitics causes a problem for the integration of energy markets, might seem insufficient. Nonetheless, I believe that the conflict in Ukraine was an unprecedented moment for the EU and its energy market as well as it is the most recent conflict that affected security of gas supplies to EU member states.

4. Analysis

European countries have always been dependent on gas supplies from external producers. In reality it means that member states are more vulnerable to any potential energy shortages or changes in prices. Therefore, the debate about integrating national energy markets and creating infrastructure that would connect isolated regions and create more resilient and independent market emerged. While the roots of the EU internal energy market are traced back in Single European Act from 1987, the debate about building integrated and competitive energy market on European level arose already in early 1990s (Karan & Kazdagli, 2011). The talks resulted in Green paper on energy policy from 1995 where the EC proposed creation of the single energy market (Karan & Kazdagli, 2011). The motivation for integration of national energy markets was not purely economic move but also due to political and security concerns. Integrated energy market was expected to be free, efficient, resilient, and also open to competition for private European companies across the member states. Before the integration process started, a typical feature of most countries was the fact that most of the infrastructural sector was dominated by typically state-owned national suppliers. This aspect targeted by the EC was expected to be toppled down by deregulating energy market.

Liberalization regarding gas sector was covered in three directives published subsequently in 1990 (directive about price transparency), 1991 (directive concerning transit of gas through grids) (European Commission, 2000) and 1998 when the internal gas market directive was introduced (Karan & Kazdagli, 2011), a year before Prodi Commission was selected, when vice-president Loyola de Palacio was responsible for energy sector. Directives presented as the First Energy Package served as an instruction for the European Commission (EC) to analyse a variety of needs for liberalization of national energy markets and harmonization of their national regulations in order to create one common energy market (Eikeland, 2008). In March 2000, during Portugal's presidency, Lisbon Strategy was introduced. It urged the Commission, the Council and member states "to speed up

liberalization in areas such as gas and electricity” (Lisbon European Council, 2000). As a reaction to Lisbon Strategy, European commission published Green paper in 2000 which Loyola de Palacio (2001) in her speech at London School of Economics in 2001 marked as “the catalyst for a public consultation over Europe's energy policy without precedent for its breadth, depth and frankness.”

4.1. Prodi Commission

4.1.1. Green Paper - Towards a European strategy for the security of energy supply (COM(2000) 769)

In the Green paper, the EC emphasised the dependency on external suppliers, vulnerability to any supply disruptions and higher prices as well as stressed the need for security of supply and “limited scope” to have any influence over energy supplies (European Commission, 2000).

Gas has been omnipresent in every sphere of life, from transportation and housing, through industry to services as a primary or secondary energy mix accounting for 22% of whole energy consumption in 1998. This number was predicted to increase as the EU pursued a strategy to replace solid fossil fuels with natural gas. It was believed that within 20 to 30 years, 70% of natural gas (up from 40) will be imported and the number would be even higher after the enlargement of CEE countries. Over the years, natural gas has become a significant energy generator since out of 22% of energy mix, 26% of natural gas was used in industrial sector, 30% was consumed in housing and 15% of natural gas generated electricity. Electricity production cost by natural gas appeared to be the cheapest alternative out of all primary energy mixes accounting for 3,18 cents/kWh. For the comparison, cost of production of nuclear power peaked at 4,51 cents/kWh and price for domestic coal production was 4,2 cents/kWh. Electricity production by wind turbines costed 4,46 cents/kWh even if subsidised. It seemed that natural gas is the most economically efficient electricity producer. Hence, the EC identified natural gas as a future source for generating electricity predicting over 40% of electricity will be produced by natural gas by 2020. Moreover, with high heat value and low pollution rate, natural gas was defined as the main energy product for transition of the EU economy. (Chai et al., 2016; European Commission, 2000).

The Commission also acknowledged its main gas suppliers – Russia, Algeria, Norway, and Libya – as well as identified possible future suppliers – Iran, Azerbaijan, Turkmenistan or Nigeria. The largest EU gas trading partner has been Russia, accounting for 42% of all gas imports. Loyola de Palacio (2004) at FORATOM workshop in 2004 estimated that the number will increase to 60% by 2030 especially due to conflicts in the Middle East (Speech/04/299, 2004). The EC expressed concerns over such high number as well as over the fact that countries lacked diversification of infrastructure, especially aspiring members east from the EU border that were (and some still are) dependent on Russian gas supplies delivered by single pipeline (European Commission, 2000). Back then, natural gas was transported through two main gas pipelines, Brotherhood passing through Ukraine, Slovakia and Czech Republic and Yamal that crosses Belarus and Poland. Both of these pipelines distributed gas not only to CEE countries, but also to the EU.

The long-term relationship between the EU and Russia regarding natural gas supplies created a stable economic partnership over the years that was beneficial to both actors. Russia had stable gas consumer market and revenues while the EU had affordable and stable gas supplies via pipelines. On top of that, transit countries received revenues from operating gas pipelines on their territory. It was advocated for long-term strategy with Russia over its gas supplies to ensure energy security.

If the internal gas market was to be functional, it would be also necessary to overhaul infrastructure. Old pipelines will struggle to fulfil the demand for increased use of natural gas supplies causing so called “bottlenecks”. Even though Western members were already interconnected via pipelines, further construction projects will be necessary in the future to prevent supply shortages or overload. Especially between France and Spain, Benelux countries and the EU and aspiring member states. (European Commission, 2000). Additionally, member states should refurbish aging infrastructure as it becomes more vulnerable to physical disruptions. Such examples are disturbances in France due to severe winter or roads blockade in the UK in November 2000 (De Palacio, 2000)

Another weakness identified was lack of influence over international prices. The EU project stabilized the continent and had decent relations with its gas suppliers. However, the EU could not ensure political stability in gas rich regions as well as protect sea routes or fix exchange rates. The main problem was the fact that “there was no explicit mandate for a European energy policy” within the EU hands (European Commission, 2000). At the time when Green paper was published, the EU had little or no bargaining power on the

international platform regarding energy sector, leaving this competence to member states. The EC called out member states to re-evaluate their stance over the integration to perform on behalf of members and was capable to ensure stable supplies and purchasing prices otherwise gas markets weaknesses will persist (European Commission, 2000).

The economic growth and increasing demand for natural gas (by 45% between 1998 and 2030) also requires transformation of infrastructure within and outside the EU. As it is difficult to transport natural gas by any means, it is necessary to find funding for new projects such as LNG ports and trans-European transmission networks (European Commission, 2000). Unfortunately, such construction projects were within member states mandate. Hence, the EU could only provide expertise or recommendations for starting those infrastructural projects.

The Commission also called out member states for harmonization of taxes from energy products as “lack of harmonization in energy taxation can lead to distortion of competition between member states” and “to excessive tax competition” (European Commission, 2000). A country with lower energy tax rates would be a favourable option for private investors, encouraging competition and lowering end prices for consumers while it would be more difficult to enter a market, where high energy taxation was implemented. Additionally, differences in taxes on energy products in the European Single Market could cause problems for private actors with expansion resulting in demotivation and resentment to investments. Furthermore, it should nonetheless be noted that increased energy taxation in one country could lead to spill-over effect. Thus, the EC claimed that no country should be able “to introduce a tax on energy product if this product is not taxed in comparable way in a neighbouring country” (European Commission, 2000).

The EC pointed out disparities among member states and their tax revenues from duty on energy. The purchasing price for a consumer comprises VAT, excise duties and dedicated taxes and duties. Even though VAT was covered by the EU accounting for 15% on all energy products, excise duties and dedicated taxes and duties are predominantly not within the EU competencies. For example, only Nordic states has had CO₂ taxes while Spain taxed coal imports to support its domestic production. Especially for natural gas, neither of above-mentioned taxes was harmonized. It is necessary to note that general VAT rate was 15% for all energy products but gas (and electricity) was granted an exemption thanks to the 6th Directive. Therefore, VAT rates on natural gas could vary from state to state. To prevent such challenges, member states should lose some of their “decision-making independence

on tax matters” as well as policy decision-making on the EU level should shift from unanimity to majority voting. (European Commission, 2000).

In the Green Paper, the Commission also rejected state aids that maintain national markets function smoothly. The main argument was the fact that some energy resources might be favoured by such aids over others. There was also a chance that aiding certain energy products would neglect the objectives of energy and environmental policy. Surprisingly to someone, the EC proposed the idea that some sectors should not benefit from state aid for gas in favour of development of renewables pushing for transition of energy economy already in 2000 (European Commission, 2000).

The means gas is delivered to the EU was also reflected in prices and secure gas supplies. The geographic location of the EU plays for its advantage. Gas pipelines were constructed thanks to the proximity to Norway, Russia, and Algeria. LNG terminals on the Atlantic coast offered an opportunity to trade with Middle East and Nigeria. However, outdated infrastructure notably from Russia needed overhaul reducing leakages of natural gas and become more effective. The EC assured that it will continue monitoring possible gas suppliers and routes to ensure energy security and stable energy supplies (European Commission, 2000).

Additionally, one of the weaknesses acknowledged by the Green Paper was climate change. Even though gas was not the main CO₂ contributor, it still accounted for 22% of all emissions. To put it into the mathematic perspective, households contributed 14% to greenhouse gas emissions while industry 16%. If 30% of households were dependent on gas supplies, household contributed 4,2% of all emissions. In the industry sector, the number is similar, 4,2%. Natural gas in electricity production added up 5,5% of CO₂. Out of 22% of total greenhouse gas emissions caused by gas, transportation accounts for 8,1% which places gas in transportation as the main polluter. Even though only 14% of world CO₂ production was produced in the EU, the EC stressed out role of the EU in climate action and set the EU as an example for other countries (European Commission, 2000).

Liberalization of national gas markets could be implemented under the Commission coordination. Harmonization of taxes as well as enforcement of competition are the key factors for functioning energy market. Liberalization of markets will motivate operators to diversify their energy options which will lower prices and protect the environment. In the mid-term review from 2002, the EC announced that gas market will be liberalized for non-household consumers by 2004 and the talks will continue to expand liberalization for all

households (Mid-term review of the Prodi Commission - closing the gap between rhetoric and reality, 2002). Moreover, hand in hand with new infrastructural projects, security of supply could be preserved, and integrated gas market would fulfil increased demand for natural gas. Gas would especially transform areas such as transportation and heating if the EU will maintain pushing for more gas-powered cars, public transportation, and thermal power plants. It will eventually become a dominant energy mix for whole European community. Integration of national gas markets improves gas dependency and preserves security of supplies. On top of that, further integration will open new possible routes of supplies, especially from potential trading partners like Azerbaijan, Iran, Turkmenistan or Nigeria (European Commission, 2000). De Palacio (2004) asserted building up partnerships also with transit countries to maintain good relations, peace as well as secure natural gas supplies.

The Green paper summarized situation by 2000 as well as identified future trends in the gas market. It elaborated broadly about infrastructural reforms and recognized possible new gas suppliers. Additionally, climate action was an important aspect brought out by the EC. Gas was set as a future energy mix that will help with transition from coal-dependent industry towards renewables since it is the cheapest and effective energy product. Furthermore, taxation is considered as a significant problem towards integration national energy markets, and it is necessary to harmonize and regulate tax values. The EC also acknowledged its role as an important part in the integration process of national gas markets.

4.1.2. Second Energy Package

The Second Energy Package adopted in 2003 consists of two directives concerning electricity and gas. The Directive 2003/55/EC focused specifically on internal gas market. Referring to Directive 98/30/EC which was presented in the First Energy Package, a progress in price reductions, efficiency, increased competition, and higher standards was made. However, issues like access to the network and to storage, tariffication, differences in opening national markets between member states as well as interoperability between systems remained as should be addressed in the upcoming years (Directive 2003/55/EC, 2003).

The EU acknowledged the fact that member states established and delegated certain powers and competences to national regulators. Nevertheless, it is necessary that national regulators adhered to basic share of competences across the EU. Those competences are fixation or approval of tariffs in order to maintain transparent, cost-effective and non-

discriminatory market. Any change of tariffs should be published prior they are enforced. Member states should establish one or more independent regulatory bodies. National regulators should ensure active competition, non-discrimination, and effective functioning of gas market. These authorities should monitor the market for potential disputes or disruptions and present their findings annually. The government is allowed to submit a proposition for tariffs, but the decision is on regulatory authorities to be made. Their approval or disapproval of the propositions and their justifications should be published ensuring the transparency. Furthermore, necessary safeguard measures are allowed if sudden energy crisis happened. These measures, however, should be held strictly necessary for coping with the problem and should not be prolonged. Likewise, member states should notify whole Community (Directive 2003/55/EC, 2003).

Under the principles of the Directive, the EC will publish for each member state an annual review with their progress and problematic areas where recommendation for further action to speed up the integration process will be stated. However, if member states are not able to achieve common objective (creation of internal gas market), the EU should step in “in accordance with the principle of subsidiarity and proportionality as set out in Article 5 of the Treaty” (Directive 2003/55/EC, 2003).

Member states must guarantee that natural gas undertakings, which basically refers to any producer, distributor, supplier, operator of gas storages but not a customer, will operate under the principles of internal gas market. Member states should grant an authorisation for new infrastructural projects built and operated on their territory. All EU small and medium enterprises since July 2004 and all EU citizens from July 2007 should have access to internal gas market. Every consumer should have a right to choose their gas supplier. It is within member states power and interest to protect customers (Directive 2003/55/EC, 2003).

Monitoring and maintaining security of supply is within national government’s competences. It is also required that natural gas undertakings are formally independent in decision-making (unbundling process). Distributors should provide its network and information for any EU supplier that aspires to enter the market. Any third party is entitled to have access to national transmission and distribution system, storage facilities and upstream pipeline networks. Natural gas undertakings may refuse access for the third party only due to lack of capacity approved by national government. Investments in new infrastructural projects as well as in existing infrastructure to increase their capacity should

be encouraged. The Directive also acknowledged so-called energy islands and states dependent on one main gas supplier if above 75% of all gas imports are from one provider (Directive 2003/55/EC, 2003).

4.2. Barroso Commission I

4.2.1. Green Paper on Energy Efficiency or Doing More with Less (COM(2005) 265)

The Commission expressed concerns over the future energy demand and prices as energy consumption in developing countries was rapidly increasing. While Asia-Pacific region consumed approximately 200bcm in 2001, by 2011 it could double to 500bcm (Aktemur, 2017). Therefore, the EU had to focus on energy efficiency as a key measure to tackle this challenge. Energy efficiency should be a priority policy and the EU should become a global leader in this area. The EC presented Annual Energy Efficiency Action Plans for member states to identify actions within a state and monitor their results. The EU then could provide expertise and offers “peer review” for all member states in order to exchange their experience and learn from mistakes and to inspire others from their successes (European Commission, 2005).

It was necessary to fight information deficiency in order to increase energy efficiency. The EC identified lack of information on costs and accessibility of new technology or standardization of energy-efficient tools as well as absence of specialized workforce for maintenance of new technologies as a primary challenge for more efficient use of energy products. One of the ways how to tackle this problem were more transparent energy markets, adjusted regulations, and framework to boost investments for energy efficient equipment. Investors tend to focus on obsolete technologies since the new ones impose fear of financial loss. A more harmonized framework for investments at the EU level would amplify private sector to capitalize in new energy efficient areas. Public information campaigns were another option how to spread information to a wide community and change people’s perception and behaviour. While ordinary people should be an important target, it is also necessary to educate industrial sector as well as financial segment. Systematic campaign will eventually change general perspective on energy efficient products leading to shift in consumer behaviour (European Commission, 2005).

Additionally, instead of focusing on cheaper energy products, low energy consumption products or renewables, member states tended to fund obsolete and inefficient electricity producers by state aid or with adjusted taxation to maintain employment. It was not only waste of public funding but also it reduces modernization and implementation of new technologies. The Commission estimated that in the EU-15 alone approximately 200 000 cars and vans and 15 000 buses were purchased every year by the governments. Hence, if only the public authorities purchased more energy efficient vehicles, it could stimulate building up a new market credibility while promoting development of new technologies. Another important trend to be targeted was a merger of companies in energy and transportation sector in order to prevent an abuse of monopoly power on the market as well as energy deficiency. Therefore, not only the EU but also governments should reassure investors to invest in new energy efficient technologies with incentives and objective expertise on new know-hows. The EU should also encourage member states to increase taxation on high energy consumption products while lowering them on more energy efficient technologies (European Commission, 2005).

Taxation is an important form of encouragement to pursue new policies. Taxation regimes were, however, sole competence of national states. Nevertheless, it is necessary to highlight that taxation in a form of duties has been the EU competence. The integration of national taxation regimes and creation of a common taxation strategy could support a development of energy efficient technology. Such an example could be a European CO₂ taxation regime. If there was an apathy from certain members to participate in indirect taxation, enhanced cooperation, introduced in Amsterdam Treaty, could be a last option for those states willing to intensify cooperation while leaving an option for the rest of the community to join in the future (European Commission, 2005).

The Commission recognized its limited influence over energy policy that was not formalized in any treaty yet. At the time the Green Paper was published, member states were finalizing a Constitution for Europe, which still did not acknowledge role of the EU in this policy area. The Constitution eventually was not ratified which led to adoption of Lisbon Treaty in 2009. However, despite the lack of political power over energy policy, the EC used its limited competencies to coordinate and provide a platform for formation of internal energy market. Additionally, it distinguished a number of players in the energy sector from governments, through national agencies and corporations to industry or local administrations. All these actors will be responsible for implementation of upcoming

frameworks and legislation. Hence it is necessary to incorporate their perspectives to the debate – something that could be also named a multilevel governance. To coordinate this many actors “a strong political message is essential” (European Commission, 2005).

Research is very important aspect in energy efficiency. Governmental and industrial investments in R&D will push for European leadership in effective use of energy products and keep its technological superiority. New vehicles powered by alternative fuels such as natural gas are developed thanks to R&D. As oil-dependent transportation was labelled as one of the largest polluters with CO₂ emissions, the EU will push for more use of alternative fuels in transportation, especially in the public transport. In 2005, the EC proposed 7th Framework Programme for Research and Development, where energy plays a vital role. The EC focused on renewables in energy production as well as fuel production, smart energy grids and energy efficient technologies (European Commission, 2005).

Efficiency is also a critical aspect for electricity generation. The Commission recognized Combined-cycle gas turbines (CCGT) as a future for electricity production since it is more efficient technology than solid-fuelled power plants. CCGT energy efficiency ranges from 50-60% and should replace inefficient obsolete coal-powered technology which efficacy ranges from 20-60%. Member states were recommended to invest in CCGT technology manufactured by the EU companies since it is the most efficient available on the market peaking at 60%. Despite the fact it was rather expensive to invest in the EU technology compared to the competition from the rest of the world, CCGT technology from third countries achieved only up to 40% fuel efficacy (European Commission, 2005).

Overall, as the title of the Green Paper presented, the focus of the Commission was an effective use of energy products. Increasing energy consumption in the developing world leaves the EU uncertain about its future energy supplies. Hence, the EU will continue financing R&D as the only way how to develop new energy efficient technologies. European CCGTs are the future for electricity generation and member states should purchase European technology over cheaper technology outside the Community. Moreover, the EC presented Annual Energy Efficiency Action Plans that would review good and bad practices to share with the rest of the member states to coordinate their policies and promote more energy efficiency.

4.2.2. Green Paper - A European Strategy for Sustainable, Competitive and Secure Energy (COM(2006) 105)

After the enlargement in 2004, the number of EU states amplified by 10 new member states and expected another enlargement in 2007 by two more to 27 member states. After such a large admission of countries, the Commission published new Green Paper about future steps towards integration of energy markets and security of supply, environmental protection, and competitiveness in March 2006.

Since 2007, every EU consumer will have a legal right to access gas from any gas supplier in the EU, which is a big step in comparison to the previous Green Paper. However, on the negative note, many markets, especially in new member states were still dominated by very few companies. This aspect was necessary to tackle down to create fully-fledged competitive market. Moreover, many member states conducted different approaches towards market opening such as regulations or grid rules (European Commission, 2006).

The EC advocated single European grid as the only way to ensure European gas market with common rules and standards, which was introduced as European grid code. The European grid code will consist of European energy regulator which will focus on cross-border issues and have decision-making powers for common rules and regulations. It will be an interlink among national regulators and become a platform for closer cooperation. Another actor is European Centre for Energy Networks which will gather network operators in one formal body. It is necessary to effectively coordinate the EU institutions and agencies with national energy regulators and competition authorities (European Commission, 2006).

The EC founded progress in interconnections unsatisfactory. In 2002, member states decided to increase interconnection level by 10% but the progress was rather minimal. To boost further development, the EC defended not only public investment but also cooperation with private sector. For the first time, the EC introduced term “energy islands”. Energy islands could be described as regions geographically isolated from the rest of the EU. As an example, islandic states Cyprus or Malta, but also Baltic states that joined the EU in 2004 enlargement can be identified as energy islands. Interconnections were acknowledged as a strategic project for integration process but also as an integral part of European solidarity (European Commission, 2006). It is something that was not previously analysed in Green Paper.

A special attention is paid to security of supply. The EC believed that only through competitive, transparent, predictable, and liberalized market security of supply can be

maintained and energy demand could be fulfilled. One suggestion to secure supply chain was to create a European Energy Supply Observatory, a new agency to observe supply and demand patterns on the EU market. The agency should also evaluate and predict potential energy shortages at the early stage and cooperate with International Energy Agency (European Commission, 2006).

The main thing regarding security of supply that comes to a mind is physical security. The EC suggested two strategies. The first one was “a mechanism that could be developed to prepare for and ensure rapid solidarity and possible assistance to a country facing difficulties following damage to its essential infrastructure” (European Commission, 2006). A damage could be also understood in a broader sense as a disruption of supplies such as the one in Slovakia in 2009. This mechanism should prevent any potential energy blackouts thanks to the solidarity of the Community. The second one was the implementation of EU standards and regulations to protect a network. The member states should also integrate their regulations and protective measures should be implemented on a communitarian level (European Commission, 2006).

Another aspect of security of supply was storage capacity of natural gas. There was no Directive to ensure basic storage capacity for member states. Hence, this feature was left on member states to decide on storage capacities leaving them vulnerable to potential disruptions. The Commission called yet again for solidarity among member states as well as for a new legislation for storage capacity of natural gas. Gas stocks were necessary prevention before any potential supply disruptions, and it was a means to survive for a certain number of days or months before a problem with supplies would be resolved (European Commission, 2006). Thus, it is necessary to boost new infrastructural project for gas stocks, something that was only briefly mentioned in Green Paper from 2000.

There might be a question, since natural gas is a cheap energy mix to generate electricity, why countries cannot transform its energy industry only to natural gas? Price for natural gas increased over the years. While in September 2000, an average price for purchasing one cubic meter of gas was \$8, in September 2005, it doubled and peaked to \$19. From 2000 to 2010, natural gas prices skyrocketed four times (Natural Gas Prices - Historical Chart). Being dependent solely on one energy product was an extreme risk. It would additionally have an impact on neighbouring markets threatening their security of supply while helping fixing energy shortages. Therefore, the EU introduced Strategic EU Energy Review, an assessment of energy mixes for each member state that would recommend

certain energy products and draft potential weaknesses. Such strategy could also lead to certain communitarian approach as it would articulate a common objective to push for minimal level of renewables in energy mix. It would be, however, up to each member state to decide on the form of renewables (European Commission, 2006).

The document once again acknowledged gas dependency from its three main suppliers: Norway, Russia, and Algeria. The EU-Russia partnership on energy supplies was considered as a priority and an important bilateral cooperation. The EU and Russia were equal partners who depend on each other. Even though the EU was highly dependent on Russian gas supplies (66% at the time), Russia had developed infrastructure only with the EU accounting for 98% of Russian exports to the EU market. As much as the EU needed Russian gas, Russia needed European demand as it has not diversified its gas recipients. On top of that, the EU was a reliable market of demand which is an important factor playing in favour of the Community (Kovačovská, 2007). This partnership is an opportunity for closer ties with Russia, it offered secure energy supplies and predictability from both sides. If so, it could boost new investments into the infrastructural projects between both actors as well as other long-term investments (European Commission, 2006).

The EC estimated that by 2030, astonishing 80% of natural gas will be imported (European Commission, 2005; 2006), what president of the Commission, Barroso (2007) marked as unsustainable. It left the Community extremely dependent on secure supplies from gas-rich countries. Therefore, the EU had to diversify its suppliers as well as overhaul old and construct new infrastructures. Piebalgs (2009), an energy commissioner in the First Barroso commission expressed its dissatisfaction with gas pipelines and argued that they were “constructed in the interests of energy companies, rather than with the guarantee of the EU's energy security in mind”.

Very important fact was that different regions were interconnected via pipelines with different suppliers. Here, geography plays an important role. While natural gas from North Africa had been mostly delivered to Southern member states, CEE countries and Germany had been more dependent on Russian supplies. Hence, new gas pipelines projects from Caspian Sea, North African region and Middle East as well as new interconnection projects among member states were re-introduced and affirmed in the European Strategic Review from 2007. Central European countries which were significantly dependent on Russian gas supplies emerged a joint plan for diversification of gas supplies. Poland, Slovakia, the Czech Republic, Hungary, Croatia, Romania, and Slovenia agreed on building LNG terminal in

Poland and Croatia, supported construction of interconnections between the countries as well as proposed a new Nabucco pipeline which eventually was not constructed. On the other hand, Caspian region introduced its own project to build Sarmatian Gas Pipeline that would start in Caspian Sea and pass-through Ukraine to Poland while bypassing Russia. The Strategic European review recognized a priority for Central European states to access natural gas from Caspian region. The Commission suggested implementing new infrastructural project connecting North Africa and the EU in the EU-Africa Strategy. Additionally, LNG terminals became a significant part for diversification of natural gas supplies from distant regions. The European Strategic Review stressed the importance of LNG terminals. However, the Commission did not mention or endorsed a bilateral project North Stream I constructed between Russia and Germany, fully operational since 2010. A commercial project North Stream I reduced Russian dependency on transit gas via Ukraine and CEE countries. (European Commission, 2006; European Commission, 2007; Kovačovská, 2007).

Common energy policy should be in line with European Neighbourhood Policy. It was for the first time when the Commission recognized integration of energy market as a form of foreign policy and approximation of neighbouring countries to the EU. The EU should not forget countries it is surrounded by and include them in the dialogue. Engaging with its neighbours would widen and harmonize energy markets, standardize regulations and implement environmental rules which in a long run would ease their admission to the EU structures. Countries interested in adhering common regulations would benefit from it since it could lead to more investments in their country. The EC proposed regional energy communities eventually integrating into one pan-European energy Community. It stressed out especially South East European Energy Community where not only Balkan countries could be integrated, but also Ukraine and Turkey, important transit countries. Turkey especially could become a significant transit player as it could interconnect the EU with the Caspian region. The EU also focused on Norway. While Norway and western member states are well-connected, the EU supports infrastructural projects to connect South East countries and Norway and open new markets for its gas supplies as well as a new way to diversify gas suppliers to respective countries (European Commission, 2006).

In the document, the Commission also reminded its limited political power to respond to external energy crises. It lacked formal mechanism how to cope with such events and proposed “a new more formal, targeted instrument to deal with emergency external supply events” (European Commission, 2006). Furthermore, common energy policy would

enable the EU to interact with larger players on issues like climate action, renewable, R&D, and efficient use of energy products. The EU should lead global talks to promote international agreement on energy efficiency. To achieve such goals, it was necessary for the EU to act as one to deliver clear message and have power over negotiations with business partners and third countries. However, as member states utilized different energy mixes and trade with different gas suppliers, it was more difficult to integrate their policies into one and create a unified strategy (European Commission, 2006; Kovačovská, 2007).

To sum it up, this Green Paper was focussed on essential questions regarding infrastructural projects (pipelines, gas stocks, investments) as well as harmonization of national regulations and competitiveness in the European energy market. The EC called for more diversification of energy mixes and proposed new potential gas suppliers from Caspian Region and Middle East. Furthermore, it was for the first time, the Commission presented the term Europe energy security and asked for comprehensive coordination of national energy policies to find common ground as well as integrated European energy policy with European Neighbourhood policy. It accentuated solidarity as an important aspect of European energy market.

4.2.3. Green Paper - Towards a secure, sustainable and competitive European energy network (COM(2008) 782)

The EC acknowledged positive trends of liberalization of the market. Nevertheless, it identified a problem with rising prices of natural gas (as it was explained in previous Green Paper) which had implications to electricity prices for consumers as a considerable amount of electricity was produced in gas-powered power stations. The Commission however could not have any impact on gas prices besides lowering duty levies or reducing taxation on the national level. Hence, end users had to cope with increased prices of energy resulting in equipoising previous reductions (European Commission, 2007a).

Competitive gas market ensured security of supply as it offers various ways how to purchase natural gas. It offered stronger bargaining power on the global market for the EU companies and promoted new infrastructural projects. For the first time the Commission stated that security of supply is not only national subject (European Commission, 2007a). Development of new gas pipeline network should be more coordinated at least on regional level avoiding any individual proposes. Only through coordinated strategy states can ensure security of supply. Competitiveness guaranteed not only efficiency but also flexibility and

sustainability of the market. It diminished monopoly over certain sector while encouraging entering new actors on the market (European Commission, 2007a).

The dissatisfaction with implementation of European legislation to national policies resulted in infringement procedures with 20 member states. Transposed legislation on national level to effectively open energy markets was the main denominator for European market to be accessed by all customers by mid 2007. The EC identified several breaches of European legislation such as regulation of prices that prevents entry of new actors into the market, inadequate unbundling of distributors that prevents their independence, limited competences for regulators and so on. Despite the fact some progress has been made, completion of internal gas market was still stagnating as consumers could not exercise their legal right to choose their energy supplier freely. The EC was not able to pledge to EU companies that they can sell their gas to any member states without any constraints (European Commission, 2007a).

The EU identified several inadequacies in existing regulatory framework. Larger companies had considerable advantage over smaller companies as they had access to information necessary to create their trade strategy. Next, transmission system operators (TSOs) were incapable of increasing cross border capacity either because of lack of investment or insufficient regulatory framework. Both, TSOs and regulators were oriented more on short-term national goals rather than integration of national markets into single energy market. Furthermore, national governments tended to pressure independent regulators to deflect from common objective to create single energy market. Next, distribution system operators in many instances were not ready for opening the competition to households since July 2007 and much more. As a result of these problematic areas, current gas companies remained as dominant actors on respective national markets. These challenging areas were also identified in the Green Paper from 2005 at the early stage. Since then, the EU undertook several initiatives such as country reviews or sector investigations. (European Commission, 2007a; 2007c).

The EC will focus on addressing five challenging aspects for building internal energy market. First of all, improvement of legal unbundling of TSOs was required to create more competitive market. Current unbundling rules discriminated third-party access to the market. Additionally, the Commission identified biased investments favouring needs of supply partners. Secondly, a role of national regulators should be perfected. It was important to protect development of single energy market from decision-making on national level. Any

amendment on national level should be coordinated with the Commission. The EC proposed formation of new independent agency that would make decisions over gas market concerning regulatory issues to establish functional cross border trade. Third problematic aspect was monopolisation of gas market. National governments had been reluctant to implementation of liberalization mechanisms. Monopolies tended to be less transparent which resulted in challenging entry to the market for smaller companies. Furthermore, TSOs still lacked coordination. Functioning single energy market required a free flow of gas supplies across all member states. Hence, further investment in network were essential as network in member states was designed to fulfil only needs for domestic demand and not for single energy market. Next, a well-defined framework is necessary for new investments in natural gas sector. The Commission projected modification of gas Directive to increase the Commission's competences to create framework for investments in new gas pipelines affecting more than 2 states. Last but not least, it was necessary to address problems in certain member states which were not prepared for liberalization of energy market for customers which starts in July 2007. European legislation should protect right of each customer to choose from different gas suppliers (European Commission, 2007a).

In summary, this Green Paper intended to address problematic areas identified by reviews of member states and set future steps towards completion of single energy market. One of the main problems recognized in the document was inadequate regulatory framework regarding TSOs resulting in monopolization of the market and lack of progress in the integration. The EU stressed slow unbundling process of TSOs as well as flawed role of national regulators and called for new coordination agency for national regulators as well as enrich the Commission's competence to promote investments in new gas pipelines.

4.2.4. The European Strategic Reviews (COM(2007) 1; COM(2006) 851)

The First European Strategic Review was presented in January 2007. It included complete energy sector inquiry. It identified three main challenges for energy sector: sustainability, competitiveness, and security of supply as well as it set a three-year timeline to build up European Gas Grid. To achieve fully competitive market, ownership unbundling was necessary. Up until then, majority of markets were still concentrated in hand of national companies impeding an access to the gas network despite having legal unbundling provisions. National monopolies over the sector prevented successful integration of national markets as well as implementation of European legislation into national legislation.

Furthermore, capacity for cross-border trade of natural gas was limited, reducing the access to new markets even more. Even though there was any expansion of capacity, it was still in favour of incumbent operator. Unbundling maintained options for customers as well as promoted more investments for the future (European Commission, 2007b; 2007c; Eikeland, 2008).

A considerable aspect for integration was transparency and pricing. Network users demanded more information regarding capacity, gas storage or network availability. Information should be provided equally to every network user. Prices did not reflect changes in supply and demand. In order to preserve security of supply market-based pricing was required to be implemented in long-term contracts. Adjusting tariffs and prices on the gas market had a negative effect not only on the integration process but also it led to further re-regulation (European Commission, 2007c).

The EC formalized a mechanism called European network of independent regulators which was given a task to “structure binding decisions for regulators and relevant market players,” proposed creation of new agency for decision-making regarding gas market and estimated around € 370 billion worth of investments to gas infrastructure and gas-fuelled power plants. (European Commission, 2007b). The Review only re-affirmed already presented trends to move from coal-fired power plants to more eco-friendly gas-fired power plants. A new proposition was Office of the Energy Observatory that would oversee future investments in gas infrastructure and ensure that member states accomplish EU’s energy goals (European Commission, 2007b; Eikeland, 2008).

A year and half later, in November, the Second Strategic Review was introduced to the European Parliament and the Council. The main outcome of the strategy was “20-20-20” objective. By 2020, 20% of greenhouse gas emissions should be eliminated as well as renewables should account for 20% of energy mix and energy efficiency should increase by 20%. As a result of this initiative, it was expected to reduce energy consumption by 15% and energy imports by 26% by 2020 (European Commission, 2008a).

The EU will remain dependent on natural gas supplies, but it had to transform its economy to become more resilient and efficient as there was increased gas consumption globally, mainly from Asian region. Especially those member states whose economies significantly rely on single gas supplier were the most vulnerable to increasing global gas demand and rising prices of fossil fuels. Even though the 20-20-20 initiative will to some extent ease these challenges, it was necessary to continue building interconnections between

member states to prevent any potential energy shortages and integrate isolated regions into one single energy market (European Commission, 2008a).

The Second Strategy presented an EU Energy Security and Solidarity Action Plan that covered five areas to be focused on to achieve 20-20-20 objectives. The first of the priority areas was diversification of energy mix and suppliers, hand in hand with promotion of new infrastructural projects. Out of 61% of natural gas import, Russia account for 42%, Norway 24% and Algeria 18% and LNG covered 16% of all gas imports (European Commission, 2008b). Even though the EU as a community had made a progress in diversifying its supply chain, there were still countries, that heavily relied on single supplier, especially Russian natural gas. Therefore, the EU had to take necessary measures to promote construction of interconnections, as mentioned above, to enhance solidarity among members and prevent any potential supply disruptions (European Commission, 2008a; Eikeland, 2008).

Several new infrastructural projects were set as priorities for upcoming years. Both, the EU, and national states were required to cooperate, and co-finance outlined projects. Nonetheless, the EU budget accounting for €22 million per year was very limited. Hence, the EU called for member states to overhaul current budget in the upcoming years. For Baltic region which was defined in the Green Paper from 2006 as an energy island, Baltic Interconnection plan for gas supplies and storage capacity was proposed. New interconnections between Baltic region and the rest of Europe were priority for secure gas supplies in the region. Another infrastructural project was Southern Gas Corridor. As proposed in 2006 Green Paper, it should deliver natural gas from Caspian region. Closer cooperation with Azerbaijan and Turkmenistan as well as Georgia and Turkey were required in order to maintain good relations not only with suppliers but also with transit countries. LNG terminals played a significant role in diversification of gas supplies. However, LNG was imported through cargo ships to LNG ports. As many landlocked countries did not have a direct access to LNG terminals, member states should cooperate in promoting building LNG ports and access to LNG via its neighbours under the solidarity mechanism. Another substantial project to be focused on was Mediterranean energy ring, a set of gas pipelines that would interconnect Southern members with the European energy market. Finally, New European Transmission System strategy was presented to link North with Central and Eastern European states via new gas pipelines. The initiative proposed 10-year Network

Development Plan that would identify missing projects and strategies to fully integrate national energy markets (European Commission, 2008a).

Second area of focus is EU external energy policy. The EU had to maintain good relations with producers as well as transit countries to ensure security of supply. A cooperation among actors was beneficial for all as economies are dependent on each other. Producers had stable demand; transit countries had revenues from operating pipelines through their territories and the EU secured its supply chain. The EU promoted further integration of Ukraine, Moldova and Turkey to Energy community that would inspire respective countries to reform their energy markets and renovate its infrastructure. Transit countries should maintain gas supplies through their territory even during political conflicts. Hence, dispute mechanisms should be implemented. Regarding partnership with Russia, it was necessary to replace Partnership and Cooperation Agreement from 1997 with a new agreement. New agreement should encourage Russia to liberalize and reform its energy market, provide principles under which Russia can invest in the EU and create binding transit rules which were missing. Formal talks and mutually agreed rules will establish trust channels and confidence and coordination of investments between both actors. The EU also called for closer cooperation with Middle East countries to ensure stable supplies. Moreover, the EU should maintain good relations also with gas trading partners from North Africa and proposes construction of the Trans-Saharan Gas Pipeline as an opportunity for diversification in the EU. In all those debates, the EU should act as one which required further talks between member states to establish coherent one EU energy policy (European Commission, 2008a).

Gas stocks and crisis management was a third area necessary to work on. The EC recognized a need to improve coordination on security of supply mechanisms as well as construction of new gas storages. However, construction of gas stocks was at least five times more expensive than building oil stock. This required substantial number of investments as well as cooperation on construction of new routes for gas supplies. Moreover, potential crisis scenarios should be analysed by Gas Coordination Group. The EC should be in touch with relevant agencies to amend Security of Gas Supply Directive in 2010 (European Commission, 2008a).

Next was energy efficiency which was greatly elaborated in 2005 Green Paper. The Commission called for revision of energy labelling as well as Energy Performance of Buildings Directive. Cohesion policy should also finance more energy efficient projects.

Last area of interest was focus on local energy reserves. The EU was not considered a gas-rich community. However, many member states considered exploitation of their indigenous gas reserves when prices skyrocketed. A new phenomenon, shale gas which was not mentioned in the Strategy brought an opportunity for independency from gas supplies to some extent. A study that elaborated on shale gas was published in 2012 and its findings were that domestic exploitation is an expensive and technologically challenging process (European Commission, 2008a).

While the First Strategy was mainly focused on ownership unbundling and integration of national regulatory agencies, the Second Strategy proposed a series of steps for further integration of energy islands, acknowledged construction of new gas pipelines and called for coherent external energy policy. The Second Strategy offered a plan for security of supply not only thanks to liberalization and harmonization of internal gas market, but also thanks to further cooperation with producers and transit countries. Energy efficiency was a big topic to be addressed as it was generally left out by the First Strategy. The First Strategy was predominantly concentrated on decision-making processes and cooperation among member states, while the Second Strategy goes beyond the borders and explores new initiatives to secure energy supplies while accentuating environmental action through 20-20-20 objective.

4.2.5. Green Paper - Towards a secure, sustainable and competitive European energy network (COM(2008) 782)

The EU expanded its territory after the enlargement in 2004 and 2007, but also inherited poor East-West and North-South infrastructure. This aspect presented a substantial problem for creation of single energy market and certain members were prone to energy supply disruptions. Moreover, rising demand for natural gas required new infrastructural projects to preserve security of supply (European Commission, 2008b).

The EC believed that gas networks should be self-reliant and finance itself. Hence, a legal framework was needed for stimulating private sector to invest in generation as well as transmission. Third Energy Package, which was being prepared at that time, will make considerable changes on unbundling rules, network planning and coordination of regulators. Additionally, the Commission required strengthening the EU policy on energy network development and suggests that the EU should intervene in situations concerning projects with EU impact, where private and public sector disagrees. However, the EU should focus

not only on development of internal gas network, but also on import network (European Commission, 2008b).

Revision of funding Trans-European Network for Energy (TEN-E) was also required as well as new infrastructural projects to promote European solidarity and security of supply. Initially, TENs were instruments of internal market. Nevertheless, the Community decided in 1996 to establish framework for funding TEN-E and development of infrastructural projects. The EC realized that 1996 guidelines are not sufficient after 2004 enlargement. Hence, it advocated to amend or replace TEN-E with EU Energy Security and Infrastructure Instrument which would set a framework for further integration, preserving security of supply and provide assistance with upcoming infrastructural projects presented in the Second Energy Strategy. (European Commission, 2008b).

One of the main areas of focus was completely interconnected internal gas market where the progress needs to be made as soon as possible. Several TSOs proposed new the New Energy Transmission System (NETS). NETS is an initiative for integration TSOs from Central and South Eastern members to create regional gas market big enough to encourage new investors. In a long run, the EU welcomed the idea about creating single European TSO, an agency that would integrate all European TSOs and operate and manage whole energy network (European Commission, 2008b).

4.2.6. Third Energy Package

In April 2009, a third set of directives and regulations was adopted to further proceed in the integration process improving the functioning of internal energy market as well as target certain structural problems.

First document to be analysed is Regulation (EC) No 713/2009 regarding creation of Agency for the Cooperation of Energy Regulators (ACER), an independent authority endorsed by the Council in 2007. As proposed in previous green papers, the EC called for a cooperation of national regulators to tackle obstacles in cross-border exchanges of natural gas and electricity. Creation of ACER ensures further cooperation of national regulatory authorities and ensures that ambitions of the Community will be achieved. Furthermore, ACER will monitor cooperation among gas transmission system operators, progress of national energy markets as well as implementation of network-development plans. It could be said that it is a supporting body for the EC, the Council, the European Parliament and national governments since it will provide expertise and propositions on the integration of

national energy markets. Another competence of ACER is a formation of integrated framework, a baseline for national regulatory authorities for facilitation of implementation of European legislation into national policies. As a coordinating body, ACER will also provide expertise for national regulators as well as recommend future steps and good practices for the integration. ACER gained limited decision-making power over technical issues upon a request from national regulators. It may also resolve certain procedural problems between national regulators within specific timeframe. It is believed that ACER is another step for ensuring security of supply and enhancement of energy security of the Community (Regulation (EC 713/2009, 2009a).

Initiatives presented by the Commission were also implemented in Directive 2009/73/EC. The Directive delegated member states to ensure that natural gas undertakings will be operated in accordance with principles of competitiveness, security of supply and sustainability. For the first time a directive addresses member states to enforce sufficient safeguards to protect vulnerable customers. The term vulnerable customer is understood as a customer prone to energy poverty during critical times. Accentuating social security benefits, the Directive advocates for security of supply to end users in energy poor regions. Member states or designated regulatory authorities should also monitor their balance of supply and demand on the gas market as well as quality of their network and propose future steps for improvement accordingly. The Directive emphasises solidarity and cooperation among member states in order to preserve security of supply during supply disruptions in neighbouring states (Directive 2009/73/EC, 2009).

Cooperation between member states is also highlighted in combating energy islands. Isolated markets of energy islands are not directly connected to internal energy market or at least 75% of their gas supplies are dependent solely on one producer. The Directive identified Cyprus, Finland, Estonia, and Latvia as energy islands. Certain legislation presented in the Directive is not necessary to be implemented by those countries until they will be integrated into energy market. Integrating isolated regions will ensure security of supply in potential interruptions. Each state should guarantee that national transmission system operators are independent, and the network is interconnected with one or more member states. Unbundling of transmission system operators should be completed by March 2012. Transmission system operators as well as distribution system operators should pledge that an access for a third party will be ensured. They are also bound to invest in expansion of capacities approved by regulatory authorities. Their ten-year network investment plans in

infrastructure should be submitted to national regulator which must consult ten-year plans with natural gas undertakings to ensure all necessary aspects are targeted to preserve security of supply. Eventually, national regulatory authority will monitor implementation of ten-years plans (Directive 2009/73/EC, 2009).

Additionally, unbundling of LNG facilities and gas storages is accentuated. Each storage or LNG facility should operate independently and adhere to regulations. No transmission network operator is permitted to discriminate or refuse connection to new storage facilities, LNG regasification facility or industrial customer. Next, the Directive explicitly asks member states to establish independent national regulatory authorities. The decisions made by the authority should be unbiased and transparent. To ensure its impartiality, national regulatory authority should have its own decision-making power over the energy market as well as its own budget. Such body should cooperate with ACER as well as other national regulators and the Commission. The main task for national regulators is to guarantee competitiveness, environmental sustainability, security, effectiveness and properly functioning regional energy markets as well as elimination restrictions on trade with natural gas and removal of any barriers that would discourage competition (Directive 2009/73/EC, 2009).

Last but not least, the goal of Regulation (EC) No 715/2009 is to set non-discriminatory rules to access natural gas transmission systems, LNG facilities and storage facilities and establishment of transparent market that would ensure security of supply for increasing demand as it was defined in previous Directives and Regulation. However, the Regulation established European Network of Transmission System Operators (ENTSO) for Gas. The role of ENTSO for Gas is coordination of national transmission system operators, creation of non-binding ten-year development plan for gas network and elaboration and implementation of network codes regarding network security and efficiency, connection and transparency rules, third-party access rules etc. ENTSO for Gas may also coordinate and offer expertise to third countries that are interested in joining the network. In order to proceed in the integration process, national transmission system operators should firstly cooperate and integrate on regional level (Regulation (EC) No 715/2009, 2009b).

4.3. Barroso Commission II

4.3.1. Energy 2020 (COM(2010) 639; COM(2010) 677)

After serious gas supply disruptions in 2009, there was still absent common approach towards producer and transit countries. In 2009, obsolete and poorly interconnected infrastructure and low storage capacities as well as single source dependency in Eastern member states proved how fragile were energy markets in this region. Article 194 in the TFEU (2009) helped to implement energy policy central goals: sustainability, security of supply and competitiveness. Increased consumption of natural gas by developing countries challenged European security of supply. By 2020, gas imports would reach approximately 79% of domestic consumption. Development on new supply routes as well as trading with new gas suppliers to maintain security of supply was necessary. However, fragmented internal gas market was more prone to any supply disruptions as well as limit competition on the market. As over 80% of all greenhouse gases were produced in the energy sector, a radical structural change was necessary to recreate energy sector to become more secure and sustainable. Hence, the Commission proposed a new strategy towards 2020 (European Commission, 2010a; 2010b).

It was estimated that over €1 trillion of investments were needed for diversification of energy transmission systems and products by 2020. The EC welcomed creation of ACER and ENTSO for Gas to further integrate national energy markets. The role of natural gas became more significant over the year as the demand for natural gas was rapidly growing. Thus, new investments should be allocated to new pipelines and LNG terminals to ensure security of supply as well as diversification of suppliers (European Commission, 2010a).

Internal energy market was still fragmented and even though member states ensured the access for foreign companies, their development was disadvantaged by national rules and regulations. Implementation of legislation from second energy package was rather weak resulting in over 40 infringement procedures. It was for each member states own good, especially for the countries from energy isolated regions like Baltic states to coordinate their work and to build up interconnections to prevent potential gas shortages (European Commission, 2010a).

Every member state should have access to at least two different gas suppliers. Hence, the EC set several priority corridors for gas. The first one was Baltic Energy market interconnection plan (BEMIP). BEMIP should improve interconnection between Baltic

region and Poland as well as with Finland and Sweden. Next was North-South interconnection plan that was previously brought up several times. North-South initiative should interconnect North Sea with Central Europe and further expand to South Eastern region to tackle problems with energy islands. Third project was regarding Southern Corridor to supply gas from Caspian Sea. Lastly, the EU should also focus on bottlenecks in Western member states in order to expand transmission capacity of natural gas. High Level Groups, a platform for cooperation, should be established in respective regions to foster infrastructural projects. Modification of current network was also necessary. The EC identified around 45 projects to improve reversed flow, something that was apparent in gas crisis in Slovakia in 2009. It is also for the first time that the EC also focused on reversed flows (European Commission, 2010b).

Overall, in the Communications regarding Energy 2020, the EC expanded on the projects and brought up new infrastructure that was necessary for security of supply. Building new interconnections between states was essential, but it was also necessary to pay attention on out-dated infrastructure. Obsolete infrastructure should expand its capacity as well as modify pipeline network for reverse flow. While previous communications were concerned mostly on deregulations, competitiveness and efficiency, this time the EC stressed out importance and elaborated more on new infrastructural projects (European Commission, 2010a; 2010b).

4.3.2. Energy Roadmap 2050 (COM(2011) 885)

Energy Roadmap 2050 is first long-term strategy for the European energy market. In this strategy for the period of time until 2050, the EC identified natural gas as a substantial energy product for transformation of the energy economy. Natural gas would not only substitute coal-powered power plants reducing CO₂ emissions, but also it would become a considerable energy product for heating in housing sector. Gas-fuelled power plants required less investments, were rather easy to be built and provided certainty for investments to be returned in the future. Hence, the EC expected investment boom in gas-fired plants. In order to maintain security of supplies for gas-fuelled power plants, integration of gas markets as well as infrastructural projects (pipelines, transmission network or storages) were necessary. Such infrastructural projects will occur predominantly on North-South axis as well as the EC advocated for building Southern Corridor to foster security of supply. Energy Roadmap also explored new gas energy source – shale gas. Fracking shale gas in the US and LNG

significantly changed gas market. Despite the fact that some member states produced natural gas or had shale gas sources on their territory, the EC identified that the EU energy market will remain dependent on gas supplies from the third countries in the future. However, the initiative pushed for transformation of the energy market to more renewables. It meant that eventually, gas-fuelled power plants will be used as a balancing tool to maintain increased electricity demand substituting renewables (European Commission, 2011).

4.3.3. Green Paper - A 2030 framework for climate and energy policies (COM(2013) 169)

As it is clearly stated in the title of this Green Paper, the main goal for upcoming years is to target climate change through transformation of energy market. The main ambitions of the EU should be reduction of CO₂ emissions via transformation of coal-fuelled power plants to more energy responsible energy product – natural gas. It recognised progress made by the Community in investments in infrastructural projects to ensure interconnected energy market that would maintain security of supply. However, a challenging aspect for the EU was the price for natural gas and sustainability of the market. The global energy demand shifted from the EU region to developing countries, especially India and China. Moreover, a price of natural gas in the US was four times lower than in the EU. It was caused by extended fracking of shale gas in the US. On the positive note, high prices motivated the Community to develop and explore other energy products in order to reduce utilization of natural gas (European Commission, 2013; 2014).

The Commission identified several challenges that halt further integration process of energy market. First, it was slow progress in implementation of European legislation into national legislation. The EU legislation ensured that prices will be kept low, and the energy market will be cost-efficient. Secondly, indigenous natural gas resources and shale gas should be reconsidered for exploitation, however, in environmentally friendly way. Thirdly, diversification of suppliers was a necessity for long-term savings and boosting competition on the market, something that was already previously accentuated in green papers (European Commission, 2013; 2014).

4.3.4. Priority Gas Corridors (Regulation (EU) No 347/2013)

The evaluation of the TEN-E framework found that the outline was lacking vision and flexibility to respond to any gas infrastructural gaps. And to achieve 20-20-20 initiative, an overhaul of energy infrastructure network was necessary. Hence, the Regulation No 347/2013 was adopted to frame recommendations for development and interoperability for infrastructural projects in priority areas. It established twelve regional Groups as proposed in Energy 2020 initiative to facilitate integration of regional energy markets. Each Group could propose infrastructural project of common interest that had to be approved by the member state to which the infrastructural project is concerned. Projects of common interest were defined as projects that were part of one energy infrastructure priority corridor. Furthermore, it was necessary that potential benefits will outweigh costs, involve at least two or more member states, and contribute to security of supply, sustainability and competition. Groups will also monitor the implementation of their plans. In cases where implementation of plan was stagnating, the Commission might appoint European coordinator for concrete project to facilitate talks between concerned parties as well as to counsel on the project (Regulation (EU) No 347/2013, 2013).

This regulation also set priority gas corridors. It was North-South interconnections in Western member states concerning Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, and the United Kingdom to promote security of supply and increase the capacity. Next, it was North-South interconnection in Central Eastern and South Eastern region. It would require cooperation of Austria, Bulgaria, Croatia,² Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia and Slovenia to interconnect member states as well as to ensure cooperation on LNG terminals to connect Adriatic, Baltic and Black seas. Third priority gas corridor was South Gas Corridor concerning Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia, and Slovenia. South Gas Corridor would serve as a new route for natural gas from Caspian and Eastern Mediterranean Basin and promote security of supply and diversification of suppliers. Lastly, it was BEMIP concerning Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, and Sweden to end isolation of Baltic region and Finland and to improve their diversification of gas supplies and to reduce their gas dependency on Russia (Regulation (EU) No 347/2013, 2013).

² Soon to become fully-fledged member state by 2013

4.3.5. European Energy Security Strategy (COM(2014) 330)

Shortages of natural gas supplies in 2009 showed how fragile was energy market in Eastern member states. It showed that even though security of supply was a concern for every member state, some countries were prone to be more vulnerable than others, especially those dependent on gas supplies from single external supplier. A study showed that there were certain states where over 20% of energy mix is natural gas but 100% of gas supplies are from Russia. It was Slovakia, Latvia, Lithuania. These states were the most vulnerable to any natural gas disruption from Russia. Furthermore, there were also states that over 80% of gas consumption is covered from Russia. It was Slovenia, the Czech Republic, Estonia, Bulgaria, and Finland. Infrastructure of all above mentioned states was predominantly directed towards Russia. Hence, the new interconnections with Western members were required. Especially in the wake of conflict between Ukraine and Russia in 2014. The EU set a number one priority to push Gas Coordination Groups of those vulnerable members to increase storage capacity of natural gas as well as develop reverse flows and to create a plan for LNG supplies as a form of diversification (European Commission, 2014).

Energy infrastructure was also considered as critical infrastructure. Hence, new preventing tools should be implemented. It meant not only physical protection before damaging the pipeline, but also IT security in era of digitalization (European Commission, 2014). This was the first energy security strategy concerned about possible IT attack that would prevent gas flow.

Additionally, this strategy addressed to the deadline for integration of gas markets. It acknowledged the progress that had been done. Markets became interconnected on regional level only in Western parts of the EU. Baltic states and South East Europe still lagged. The Commission recognised 27 gas projects in value €17 billion that were considered as critical for the EU energy security. Majority of projects were allocated in South East and Southern Europe. Half of those projects was predicted to be finished by 2017, the rest by 2020 (European Commission, 2014).

The Commission proposed orientation on domestic gas production considering shale gas or conventional production in North Sea, but also in new discoveries in Black and Eastern Mediterranean Sea. The EC stressed out diversification of gas supplies. In 2013, 39% of gas was imported from Russia, 33% from Norway and 22% from Algeria and Libya. LNG from Qatar and Nigeria accounted for 15%. Diversification of supplies of natural gas should maintain the volume needed for functioning internal gas market. LNG was especially

considered as a future form of diversification of gas supplies as new discoveries were made in East Africa and the US planned to export its LNG. The EC stressed the importance of Southern Gas Corridor connecting the EU through Turkey with Caspian region. Southern Gas Corridor also had potential to import gas from Iraq, Iran, and Turkmenistan (European Commission, 2014).

Finally, the EC believed that coordination of national energy policies was necessary to preserve security of supply. The argument was that as national energy markets were more intertwined than ever, inclusion of national policies was necessary as decisions of one state could affect its neighbours. If the EU achieved a new competency thanks to further integration of national energy markets, it could increase bargaining power over future gas supplies and enforce functioning, transparent, competitive, and effective internal gas market. Hence, in the long run, the Commission proposed “collective purchasing mechanism” like Euratom Supply Agency (European Commission, 2014).

4.3.6. Reviews of Energy Market

The EC was tasked with reviewing the progress in national energy markets and identify setbacks as well as recommend future steps to improve the situation. Out of four published reviews, only reviews from 2011 and 2014 described situation in member states in detail.

Review of EU energy markets in 2011 set out several challenging areas for better functioning of gas market and integration process. In general, a vast majority of member states regulated prices and blanket prices (France, Belgium) for end-users which limited proper competition on the market. Competition was a big problem in several states such as the Czech Republic, Bulgaria, Belgium, or Greece. Portugal, Bulgaria, Lithuania, and Romania lacked independent and economy-based regulatory authority. Denmark, France, and Ireland should focus more on protection of vulnerable customers. Opened market and competition was challenging for Slovakia, Bulgaria, Romania, Greece, and Cyprus. Estonia was lagged in ownership unbundling process while for Italy TSOs unbundling was required. Hungary on the other hand imposed new discriminatory network tariffs deteriorating competition on the market. Monopolization of gas market was problem in Greece, Bulgaria, Romania, and Cyprus. Cyprus especially was slow in implementation of EU gas-market law. Transparency and information availability was concerning in the UK (European Commission, 2012b).

Competition was identified as a dominant issue across majority of energy markets in Review from 2014. It was mainly due to weak infrastructure in CEE countries. Situation in Hungary deteriorated significantly over time. National regulatory authority had limited competences and its regulatory tariffs forced private sector to leave and sell their share to the state resulting in monopolization of the market. Monopolies were also problem in Romania and Latvia. Slow unbundling process was concerning in Latvia, Bulgaria, Romania, and Croatia. Croatia also needed to transpose EU law into national legislature. Exclusive right over regional gas supplies was significant problem in Greece. Estonia was lagged in preparation for connection with EU energy market. Belgium needed proper oversight over federal and regional markets. It was necessary for Slovenia to comply with Regulation (EC) No. 944. Regarding transparency, accountability and independence of national regulatory authority, there were some concerns in Slovakia and Bulgaria. Even though some progress was made in certain member states, regulated prices remained problem in Ireland, Croatia, Poland, and Romania. Austria should reduce number of system operators due to new gas market model. Problem with transparency and retail price formation remained in the UK. Entry barriers were recognized as an issue in Croatia and the UK (European Commission, 2014).

The EC pursued infringement procedures against those states which did not fully transposed Second and Third Energy Package into national law. Infringement procedure is a practice enforced by the Commission when the EC contacts the Court of Justice to decide whether member state breached the EU law. If so, states must comply with Court's ruling and fix its obligations.³ Out of 19 infringement cases regarding transposition of Third Energy Package (Directive 2009/73/EC) since September 2011, only few cases were closed by October 2012 (European Commission, 2012a; 2012b; 2014).

³ The European Commission official website – Infringement procedure. Retrieved from: https://ec.europa.eu/info/law/law-making-process/applying-eu-law/infringement-procedure_en

4.4. Junker Commission

4.4.1. Energy Union (COM(2015) 80)

In 2015, the EC introduced new concept of internal energy market – Energy Union. The aspects of Energy Union were the same as for the integrated energy market – sustainability, competitiveness, security, and affordability. Energy Union is a form of fully integrated market with developed infrastructure, interconnected markets, and functioning cross-border trade with energy. It should ensure solidarity and trust among states. Another feature of Energy Union is one European energy policy presented on the global stage. A presentation of Energy Union is a response to European Energy Security Strategy where vulnerability of certain member states was highlighted. Such Energy Union should guarantee security of supplies, reduce dependency on single energy supplier and develop more efficient energy market. It emphasises the same principles mentioned in European Energy Security Strategy, such as development of LNG, new infrastructural projects etc., with one twist. The role of the EU should be increased. The EU should take initiative in building and funding infrastructure as the progress for integration member states was rather slow. The EU proposed creation of regional operational agencies for ENTSO for Gas to ensure cross-border gas flows. ACER should also be empowered. So far ACER was able to act only through recommendation or opinions and with limited decision-making power. The role of ACER is significant in coordination and regulation of the market; therefore, ACER should be granted binding decision-making power to ensure functioning energy market (European Commission, 2015).

The relationship between the EU and Russia was also assessed. In the document, the EU should reframe current energy partnership with Russia to push for more market liberalization and environmental protection. Furthermore, a new partnership with Ukraine was mentioned. The EU should motivate Ukraine to overhaul its obsolete gas infrastructure since it is important transit country as well as implement energy market reforms to reduce its energy dependency on one supplier. European energy policy should be also implemented in European Neighbourhood Policy to ensure secure supplies and functioning energy market also outside EU borders (European Commission, 2015).

4.4.2. EU Strategy for LNG and gas storage (COM(2016) 49)

As potential of LNG was rising, the EC proposed a strategy how to exploit LNG. LNG creates a huge opportunity for diversification and resiliency of Energy Union as it is prospected that trade with LNG will increase approximately by 50% in the forthcoming years. The term Energy Union was not used previously in any communication whatsoever. Additionally, LNG could significantly reduce vulnerability in Baltic states as well as Eastern European members. LNG will also boost competition on the market resulting in lowering prices for gas (European Commission, 2016).

Creating of infrastructural project is required to use full potential of LNG. There are still regions lacking LNG terminals and regasification units, especially in Eastern region. It is also required to increase capacity in storages for imported LNG. Therefore, coordination among member states and identification of potential new locations for building new infrastructure and increase of storage capacity is essential. The EU should also proceed in integration of energy markets to attract new LNG producers. Not only in building interconnections between member states but also in implementing EU legislation. Lastly, the EU should remove any barriers for trading with LNG on international markets. The EU advocates for free and transparent trade on LNG markets. Therefore, the EU should also cooperate with major LNG importers through multilateral fora as well as potential trading partners (European Commission, 2016).

4.4.3. Fourth Energy Package

The Fourth Energy Package consists of one directive and three regulations. Regarding gas sector, Regulation (EU) 2019/942 modifying role of ACER is the most important one. As it was previously mentioned, ACER had very limited decision-making power. Hence, it was decided to amend its role to improve integration of energy markets while maintaining its competences defined in Regulation (EC) No 713/2009 presented in the Third Energy Package. ACER gained new competences in situation where there is a risk of fragmentation of internal gas market. ACER could issue a decision over technical and regulatory issues that are necessary for regional coordination. ACER should also be able to require information from national regulatory authorities, regional coordination centres as well as ENTSO for Gas (Regulation (EU) 2019/942, 2019).

4.5. Conflict in Ukraine in 2013 and its consequences for EU internal energy market

Russian annexation of Crimea in 2014 was a ground-breaking moment for the whole EU community. Relations between EU and Russia changed drastically. Back then, the EU consisted of 28 member states, each having different national identity, history, economic ties, and foreign relations with Russia. It is well known that after eastern enlargement in 2004 and 2007, the division between policies of member states was transformed into constant internal conflict regarding the relations towards Russia. The largest EU members (Germany, the UK, France, Italy) has had a significant voice in internal debates about Russia. But Germany, France and Italy also received special treatment from Russian side for example through trade opportunities. On the other hand, Russia depended on their Foreign Direct Investments. However, these states had different experience and history vis-à-vis Russia in comparison to Central, East European, or Northern member states. Additionally, economic ties have been also different. While CEE countries rely considerably on the EU market, Germany, which has had economic relations with Russia for decades, has been dependent on Russian energy supplies. Germano-Russian 'special' relationship was also confirmed by construction of North Stream I (respectively German defence for construction of North Stream II). A special treatment for the trio states hindered a strong EU policy vis-à-vis Russia. They supported softer approach to prevent any significant damage in trade. Member states preferred bilateral approach with Russia resulting in weak European stance that benefitted Russia (De Micco, 2014; Schmidt-Felzmann, 2014).

It is noteworthy to say that Russian relations with certain member states were far from perfect, especially after eastern enlargement. In November 2006, Alexander Litvinenko, a former KGB agent, was poisoned and in 2013 a businessman Boris Berezovski was found dead. In both cases Russia was convicted. Russia also increased export taxes on timber in 2007 harming Finnish and Swedish woodworking sector (Schmidt-Felzmann, 2014). Next, Russia cut Latvia from oil supplies in 2003 (Lelyveld, 2003). Russia also banned importation of meat from Poland in 2005 due to sanitary reasons which Warsaw labelled as a purely political move (Euractiv, 2007). In 2007, Estonia was a target of Russian cyberattacks for three weeks after Tallinn decided to remove a Soviet monument (Traynor, 2007). In 2009, Russia cut off Ukraine causing gas shortages in the EU, mostly eastern member states who were dependent on Russia supplies passing through Ukraine. This is the

evidence that there have been many discrepancies between the EU and Russia for quite some time, but it was not reflected in coherent EU policy towards Moscow. A perfect example is building of North Stream I between Russia and Germany in 2010, bypassing transit countries and ensuring secure gas supplies to Germany despite the protest from transit countries (De Micco, 2014; Schmidt-Felzmann, 2014).

A drastic shift to unified approach towards Russia came in 2014. After military conflict between Ukraine and Russia, Moscow decided to cut off Ukraine from its gas supplies eventually reducing any gas import for the EU. Slovakia, Hungary and others decided to reverse flow and supply Ukraine with gas through already built infrastructure which was met with strict antagonism from Russian side. Countries that intended to supply Ukraine eventually backed off under Russian threat to completely stop gas supplies through Yamal and North Stream I. This made a momentum for member states to cooperate in order to maintain gas supplies. All member states condemned actions against Ukraine and agreed on issuing targeted sanctions against Russia. However, those sanctions were not as effective as predicted and eastern member states called for stronger response which was met with mixed reactions. This changed after downing a civil plane MH17. All member states toughened their stance towards Russia. Despite risking special treatment from Russia, Germany and France were significant players for a unity of EU approach against Russia. Even though member states coordinated their policies, it was unknown how far the EU could go (Schmidt-Felzmann, 2014).

As a positive sign, European Energy Security strategy was published shortly after Crimean annexation. It stressed out importance of further integration of national energy markets and proposed 27 infrastructural projects mainly in CEE countries. The main goal was to improve diversification of supplies and strengthen resilience of the markets. On the contrary, it was rather difficult to unify national energy policies when certain states were 100 % dependent on Russian gas supplies while others did not import any at all. Take for example Portugal or Spain. In 2014, neither of those countries imported Russian gas and they are geographically distant from Russian border with different historic experience. On the other hand, there are Baltic states and Central European members which import a vast majority of their gas from Russia (European Commission, 2014).

Furthermore, the EC vetoed building South Stream to ensure gas supplies bypassing Ukraine through Black Sea. But South Stream initiative was supported by Bulgaria, Serbia, Hungary, Greece, Slovenia, Croatia, and Austria as a form how to secure Russian gas

supplies (De Micco, 2014). Problems occurred even between Bulgaria and Italy. Italy was big proponent of South Stream, but Bulgaria stopped the initiative as sanctions against Russia hit Russian companies working on construction of South Stream in Bulgaria (Euractiv, 2014).

By losing partnership with Germany and France, Russia turned to other member states to dissolve unified approach and shift to bilateral communication. Hungary, Cyprus, Greece and Italy were offered new investments in energy sector from Moscow in order to enhance their ties with Russia (Schmidt-Felzmann, 2014). Even though those member states enjoyed special treatment, unified approach in form of sanctions prevailed. Nevertheless, the first states lobbying for lifting sanctions were Greece, Cyprus and Italy, countries which dependence on Russian gas is insignificant. On the other hand, Baltic states for example were the biggest advocates for maintenance of sanctions despite the fact, that their energy economies largely depended on Russian gas. There were also countries (Ireland, Malta, Luxemburg) which did not object or support collective approach as they did not import and Russian gas or had any significant proximity to be concerned about their security. Even internal narrative in Slovakia, Slovenia, Bulgaria, and the Czech Republic was ambiguous. Internal political division over sanctions was between those who perceive Russia as an economic partner and those who driven by security concerns due to geographical proximity (Shagina, 2017). Moreover, Germany did not oppose building North Stream II that would weaken Russian position as the main EU gas supplier and France signed an agreement to invest in LNG hub in Murmansk and Kamchatka (Jessop, 2020). These matters were what crumbles unified stance against Russia. Indeed, the EU would have had a significant leverage on Russia if integration of energy markets and policies progressed faster. With more diversified gas suppliers, the EU could have tackled Russian invasion in Ukraine, as well as strengthened its position vis-à-vis Russia. Both actors were economically dependent on each other. But cutting Russian gas supplies to the EU when having other gas supplies routes would diminish Russian negotiation position considerably as back then Russia did not have diversified transit routes elsewhere.

5. Discussion

In general, the Commission in its green papers and communications presented its ambitious plans and initiatives for acceleration of the integration process. The EC advocated for deregulated internal energy market, cooperation among member states, enhanced transparency and competition in the gas market, new infrastructural projects to ensure diversification and security of supply. Very often the content of green papers was repetitive which is understandable as progress on initiatives and plans was rather slow. Constant reminder for member states only emphasized the importance of the proposals. It is safe to say that majority of initiatives presented in non-legislative acts (communications, green papers) were implemented into legislative acts (regulations, directives, and strategies).

As it was outlined above the concept of internal energy market consists of many factors. The definition of internal energy market in theoretical framework is not accurate. While internal energy market is required to be competitive, customer-based, and flexible, it is also necessary to ensure security of supplies, diversification of suppliers, interconnected market through infrastructure, sustainability, and transparency.

Although Green Paper from 2000 was rather descriptive, it called for harmonization of taxation and deregulation of national markets. Following green papers accentuated the need for deregulation, transparency, unbundling of national operators which was eventually transformed into Directive 2003/55/EC. Second Energy Package also adopted a right for consumers to choose freely their gas supplier from a wider range of providers, ensuring competition and deregulation of prices.

Understandingly, not all propositions of the Green Paper such as delegation of certain competences on the EC from national states was adopted. However, it sparked a debate about future of EU energy policy resulting in Lisbon Treaty in 2009 which outlined certain powers to the EC. Furthermore, as proposed in Green Paper - Towards a secure, sustainable, and competitive European energy network from 2007, the Community agreed on establishment of ACER, a European regulatory body, that would coordinate national regulators as well as ENTSO for Gas to coordinate infrastructural projects in the EU. ACER also gained some decision-making power as was proposed by the Communication of the EC regarding Energy Union from 2015. New infrastructural projects as proposed in green papers were reflected in long-term strategies and later on in Regulation (EU) No 347/2013 to facilitate realization

of projects which could be also regarded as a success for the EC. Formation of ACER profoundly changed the internal energy market.

On the contrary, a progress in integration of national energy policies into one policy was slow. There was no directive regarding European energy policy that would enhance role of the EC as a representative on the international platform. As a result, the EU had inconsistent energy policy and lacks significant bargaining power in negotiations of new supplies. To sum it up, most of the initiatives and propositions was implemented in strategies, regulations, and directives by the member states. Hence, it could be proclaimed that Hypothesis 1 was partially proven as some propositions stated in non-legislative acts were more ambitious than their implementation in legislative acts and certain features are still a matter of the debate among member states.

Hypothesis 4 was proven to be true. National governments lagged in implementation of European legislation as well as maintenance of free, competitive, and transparent gas market. Green papers as well as communications demonstrated significant problems in transposing EU law into national law. Hypothesis 4 was also proven in energy markets reviews from 2011 and 2014, where the EC identified several challenging areas such as excessive price regulation, lack of protection of vulnerable customers or independency of national regulatory authorities. The EC commenced infringement procedure with member states which lagged in transposition of EU legislature in national law. In the reviews, the EC also recommended further steps to improve the situation of national energy markets.

Cooperation among member states was present to some extent, especially in form of sanctions against Russia. Moreover, there is a link between conflict in Ukraine and sudden urge for new infrastructural projects from the EC to secure gas supplies to the most vulnerable members (CEE countries). On the other hand, it is noteworthy to say that internal division between member states prevailed. Southern members acquired softer stance vis-à-vis Russia while Baltic states advocated for more decisive stance. Baltic states felt threatened by Russian aggression as they are in the border proximity and had historic experience with Russia. Furthermore, internal division within member states was also observable, especially in Slovakia, Slovenia, and Bulgaria. Those states imported vast majority of gas from Russia as well as perceived Moscow as an economic partner. If progress in building new infrastructures as well as integration of national energy markets was faster, member states would have found a common ground to approach Russia and ensure security of gas supplies.

Hence, hypothesis 2 was proved to be right, but Hypothesis 3 was not proven even though the EC presented future infrastructures to boost security of supply in CEE countries.

Conclusion

The aim of this thesis was to analyse legislative and non-legislative acts concerning internal gas market and aspects that affected the integration process.

Firstly, I introduced the concept of internal energy market and briefly outlined theories regarding European integration and the concept of European single market in the theoretical chapter. Next, interpretative content analysis as a methodology used in this research was presented. It was followed by section where I set two research questions and four hypotheses to help me better grasp the topic. In the same section I identified what sources were used in the analytical part as well as presented the conflict in Ukraine from 2014 as a case study for evaluation of two hypotheses. Analytical part which was divided into several subsections aimed to describe what initiatives, proposals and strategies were introduced and consequently which of those initiatives were implemented into binding EU legislative acts. Furthermore, I intended to identify what factors influence the integration of the energy markets.

The findings of this research were interesting. Even though several proposals from the EC were implemented into EU legislation was true, the Community did not approve all the proposals. Certain EC initiatives were far more ambitious than those which were adopted in binding regulations and directives. Initiatives to establish EU regulatory body to coordinate national regulatory authorities was endorsed by member states in 2007 and implemented Regulation (EC) No 713/2009 in Third Energy Package from 2009. Competences of ACER were later agreed to be amended by Regulation (EU) 2019/942 in Fourth Energy Package from 2019. Creation of ACER fundamentally changed the internal energy market. Initiatives regarding liberalization of the market, transparency, deregulation of prices, ownership unbundling, independency of national regulators and free choice of consumers to choose their gas supplier were adopted in Second and Third Energy packages.

Next, geopolitics played significant role in integration of national energy policies. Conflict in Ukraine from 2014 showed that even though states agreed on cooperation in imposition economic sanctions on Russia, certain states lobbied to lift sanction as soon as possible while others threatened by Russia were advocating even harder sanctions. On the contrary, correlation between political conflicts in the EU neighbourhood and integration of

energy markets was not found. There was no evidence for coordination internal energy policies vis-à-vis Russia or unification national policies into European energy policy as well as acceleration of member states to coordinate their approaches besides sanctions. On the other hand, the EC promoted acceleration of building new infrastructural projects for security of supply in CEE states that were predominantly dependent on Russia gas supplies.

The implementation of EU legislation into national law was proven to have an impact on creation internal energy market and prolonged the integration process. The Commission stated several times in their publications that member states were slow in implementation energy packages into national legislation. Reviews from 2011 and 2014 also analysed progress in each member state and identified setbacks in majority of members regarding deregulation of prices, transparency, independence of national regulators or unbundling process. The EC launched infringement procedures with those states that did not comply with the EU legislature.

Finally, the definition of internal energy market was augmented. The internal energy market is required not to be only competitive, customer-based, and flexible, but also it is necessary to ensure security of supplies, diversification of suppliers, interconnected market through infrastructure, sustainability, and transparency.

Summary

This master's thesis was focused on the integration process of national energy markets into European energy markets. The purpose was to identify whether initiatives proposed by the European Commission were implemented by the member states into EU legislation as well as to detect factors that positively or negatively affected the integration process. The analysis of EU non-legislative and legislative acts was conducted by interpretative content analysis. It was proven that the European Commission to some extent was successful. Member states adopted several initiatives regarding transparency, competition, ownership unbundling, deregulation of prices or creation of ACER. However, initiatives proposed by the Commission were far more ambitious. Next, lack of implementation of EU legislatures into national law was found as a problem for integration of energy markets. As a result, the EC commenced several infringement procedures with member states for not complying with the EU law. Member states were slow in transposition of EU law into national legislature which prolonged integration process. Furthermore, geopolitics within the EU was recognized as a problem in integration of national policies regarding energy sector which was identified during conflict between Russia and Ukraine in 2014. Even though the EC proposed construction of infrastructural projects in CEE countries after gas supplies disruptions due to the conflict in Ukraine, political conflict in the EU neighbourhood was not found as an accelerator for integration of gas markets and policies of member states.

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