Zentrum für Europäische Integrationsforschung
Center for European Integration Studies
Rheinische Friedrich-Wilhelms Universität Bonn

Discussion Paper

Thomas Panayotopoulos

The Energy Union – a solution for the European energy security?

C230
2015

ISSN 1435-3288 ISBN 978-3-941928-61-9

Zentrum für Europäische Integrationsforschung
Center for European Integration Studies
Rheinische Friedrich-Wilhelms Universität Bonn

Walter-Flex-Straße 3
D-53113 Bonn
Germany

Tel.: +49-228-73-1810
Fax: +49-228-73-1818
http://www.zei.de

Thomas Panayotopoulos studied French and German law at the University of Cologne and the Université Paris 1 Panthéon-Sorbonne. In 2014 he completed the Master of European Studies at ZEI. He has been a research fellow at ZEI since January 2015.

Thomas Panayotopoulos

The Energy Union – a solution for the European energy security?

The conflicts of the twentieth century and especially the Second World War have shown that the possession of energy is of strategic importance. However, even in the years that followed the last major oil shock in 1986, the energy questions were carelessly ignored driven by the idea that the European Union was in a state of energy abundance.

This is also true for the topic of energy security, which was for a long time left aside in the European Union. Nevertheless, this topic seems to resurface under the current circumstances. The new crisis which erupted between the EU and Russia is used in order to correct the European Union energy paradox, stating that the European Union, which was created around Energy (ECSC and EURATOM), sixty years later does not have a common energy security policy. In this context dependency to gas imports coming from Russia is perceived as a real threat for the energy security of the European Union revealing that the lack of diversity of energy sources as well as the variety of national policies in the area of energy security are the main reasons for this vulnerability. Furthermore, this crisis also manifests that in the past the priority in the European Union's energy policies was set in the fight of climate change and that the question of energy security was left aside. However times are changing and the new European Commission announced a Frame-work Strategy for the Energy Union with the aim to overcome these exact weaknesses.

I. EU's weakness: energy dependency

Before talking about energy dependency it is important to further define these terms. In order to determine what energy dependency is, the question, of what shares of energy imports and internal energy production are used for the internal energy consumption needs to be answered. The answer to this question gives an idea of the dependency or independency of this consumption vis-à-vis the external energy supply. In the case of the European Union the answer is strongly leaning towards dependency. Indeed, it is important to realise that the European Union is not in a state of autarchy in what concerns the sources of energy. Whatever shifts and changes in energy sources the European Union chooses to seek in future, most of this energy will be increasingly imported, aggravating thereby the energy dependency of the European Union.

1. An increasing import based energy consumption

The energy situation of the European Union is defined by a growing dependency based on imports of fossil energy sources in order to satisfy the needs in primary energy.

According to EUROSTAT the EU-28 dependency on energy imports increased from 43% of gross energy consumption in 1990 to reach 53.4% by 2012. The highest energy dependency rates in 2012 were recorded for crude oil (88.2%) and for natural gas (65.8%). Since 2004, the EU-28's net imports of energy have surpassed its primary production, which means that more than half of the EU-28's gross inland energy consumption was supplied by net imports.[1] This dependency situation of the European Union can be explained because of structural reasons. Indeed, the European Union's energy consumption is very high. Its energy consumption, which represents 13,5% of the total energy consumption in the world, may have

Internet resources, last date of access: 7 June 2015.

1 Eurostat, Energy production and imports, Table 4. Online at: www.ec.europa.eu/eurostat/statisticsexplained/index.php/Energy_production_and_imports.

decreased in the recent years but the European Union still belongs to the four most energy consuming regions in the world[2].

Beside the increasing consumption it is also the reducing energy production which causes a problem in the European Union. This is due to the fact that the European Union's internal resources in fossil energy are highly limited. The European Union holds only 2% of the world's gas reserves, 2% of the world's uranium reserves and only 0,65% of the world's oil reserves.[3] On the other hand the renewable energy's contributions to the total consumption of the European Union only reach 15%[4]. If these sources of energy were to stay constant the European Union's energy dependency would arrive over 80% in 2035 because of the increase in energy consumption and the decrease in the internal energy production[5]. On the long term only a significant technological leap would provide the possibility to reduce the dependency in imported fossil energies[6]. This tendency towards a growing energy dependency is true for the four major fossil energy sources. The dependency for crude oil which lies at 88% will reach 95% in 2030. The same tendency is visible for natural gas hence the current level of dependency of 65% will grow to 84% in 2030. Last but not least the solid fuels import level will raise from 42,2% to 67% in 2030.[7]

2 Ratcliffe, Pierre, L'énergie en Europe, 2012: 2f. Online at: www.pratclif.com/economy/oil&gas/energy-europ.pdf; Eurostat, communiqué de presse, La consommation d'énergie en baisse de 8% entre 2006 et 2012 dans l'UE28, 17.2.2014: 1; European Commission, *EU Energy in Figures – Statistical Pocketbook*, Luxembourg, 2013: 13. Online at: www.ec.europa.eu/energy/sites/ener/files/documents/2013_pocketbook.pdf.

3 Indexmundi, Oil reserves. Online at: www.indexmundi.com/g/r.aspx?c=ee&v=97.

4 Eurostat, Gross inland Energy from renewable sources. Online at: www.ec.europa.eu/eurostat/statisticsexplained/index.php/Energy_from_renewable_sources.

5 Casey, Zoë, Rising energy dependency endangers Europe's economy, 23.3.2013. Online at: www.ewea.org/blog/2013/05/rising-energy-dependency-endangers-europes-economy/.

6 European Economic and Social Committee, Energy efficiency – changing behaviour and ways to achieve results. Online at: www.eesc.europa.eu/?i=portal.en.events-and-activities-energy-efficiency-changing-behaviour .

7 European Commission, *EU energy trends to 2030*, Luxembourg, 2010.

While the European Union is making good progress towards meeting its climate and energy targets for 2020, a policy framework for the period up to 2030 will be established to ensure a coordinated approach among the member states. The European Union policies concerning the fight against climate change incorporate both action in the areas of climate and energy. Next to the protection of the climate these policies have beneficial long term effects for the energy security of the European Union, even though these are only the indirect consequences of the environmental goals. In this context the European Union set some goals that needed to be reached by 2020.[8]

First, the reduction of the European Union's energy consumption by 20% till 2020 through the improvement of the energy efficiency will have the automatic consequence of mitigating the imported energy dependency. The European Union is also engaged in diminishing the greenhouse gas emissions by at least 20% by 2020. The implementation of quotas will incite to restrain from energy consumption produced by fossil fuels. Finally, the ambition to raise the share of the used renewable energy to 20% in the European Union, will most certainly have the effect of lowering the employment of fossil fuels in the energy mix.[9] In January 2014, the European Commission presented the 2030 framework that seeks to continue the progress set by the 2020 framework. When reached, the goals set by these two agendas will certainly be beneficial for the energy security. If the dependency itself won't be stopped, this policy implementing demand restraint and promoting renewable energy will at least contribute to lower the growth of this energy dependency[10]. This should however not be the

8 Information given by the European Commission on its website, The 2020 climate and energy package. Online at: www.ec.europa.eu/clima/policies/package/index_en.htm.

9 Ibid; see as well European Commission, *GREEN PAPER – A European Strategy for Sustainable, Competitive and Secure Energy*, Brussels, 2006: 10, 19.

10 European Commission, *European Energy and Transport – Scenarios on energy efficiency and renewable,* Luxembourg, 2006: 13; de Vos, Rolf/van Breevoort, Pieter/Höhne, Niklas/Winkel, Thomas/Sachweh, Catherine, *Assessing the EU 2030 Climate and Energy targets*, ECOFYS Briefing Paper, 2014: 16. Online at: www.ecofys.com/files/files/ecofys-2014-assessing-the-eu-2030-targets.pdf.

reason to believe that such policies are a substitute to the needed common policy for energy security.

Even though some see the solution to the increasing dependency in the atomic energy[11], this does not correspond to full reality. On one hand an increase of atomic energy being also linked to imports, since the uranium resources are almost entirely imported, would automatically raise this dependency. On the other hand such a measure would diversify the nature of this dependency and would therefore increase the energy security. However, coordinated increase is not feasible in the European Union. After the accidents in the nuclear facilities in Japan, many European Union members are reluctant to increase to use or even to have atomic energy[12]. Germany decided to speed up the shuttering of nine remaining reactors by about a decade, to 2022[13]. This division amongst the European member states clearly excludes the possibility of a coordinated revival as an internal antidote to the energy dependency[14]. Although the coal resources of the European Union are abundant, the shares of coal in the European energy mix will still decrease. Indeed, coal is the source of energy which emits the highest quantities of CO^2. The production of effective technologies filtering the CO^2 being only elementary, the use of coal as a source of energy seems nearly incompatible with the environmental goals the European Union set itself. A possible evolution of the sources of energy in the European Union does not appear to be able to change the trend towards an expanding dependency on imported primary energy.

11 European Nuclear Society, Nuclear in the energy mix, 18.5.2011. Online at: www.euronuclear.org/1-information/energy-mixes.htm.

12 Phillips, Leigh, "Europe divided over nuclear power after Fukushima disaster", *The Guardian*, 25.5.2011.

13 Knopf, Brigitte/Kondziella, Hendrik/Pahle, Michael/Götz, Mario/Bruckner, Thomas/Edenhofer, Ottmar, *Der Einstieg in den Ausstieg: Energiepolitische Szenarien für einen Atomausstieg in Deutschland*, WISO Diskurs, Friedrich-Ebert-Stiftung, Bonn, 10.06.2011. Online at: www.fes.de/aktuell/ documents 2011/110610_Studie_Atomausstieg.pdf; Deutscher Bundestag, Bundestag beschließt Atomausstieg und Energiewende. Online at: www.bundestag.de/ dokumente/textarchiv/2011/34938007_kw26_de_energiewende/205804.

14 Phillips, op. cit.

2. A constant dependency regardless of the energy nature

All currently used imported fossil energy sources contribute to the energy dependency in the European Union. Despite this fact, the different ways they are imported and used gives an idea that every single of these fossil energy sources has a different impact on the energy security of the European Union.

The crude oil represents around 37% of the primary energy mix in the European Union[15]. Although this energy source plays only a marginal role in the production of electricity and heat, in the field of transports it still satisfies almost the total of what is needed[16]. This situation might remain stable around 35%, if there is no major technological progress. Nevertheless at the moment the existence of a well-integrated world market seems to appease the dangers of a supply interruption of the European Union. Even though the European Union mainly imports crude oil from Norway and Russia[17], the European Union is not geographically bound to these supplies. The predominance of seaborne crude oil transports permits to the crude oil market to be perfectly interconnected worldwide.[18] This interconnection may also be the reason why the price per barrel of crude oil is fixed on the international market. The increasing integration of the crude oil market is therefore the main warrant against a supply disruption for many regions of the world as for the European Union.

In the European Union, natural gas speaks for around 25% of the energy mix[19]. It is used for the three main purposes of industrial needs, production of electricity and heating. Following the tendency of certain European

15 European Commission, *Market Observatory for Energy, key figures*, June 2011: 11. Online at: www.feb.kuleuven.be/public/n07048/EU%20Energy.pdf; European Commission, *Member States' Energy Dependence: An Indicator-Based Assessment*, Occasional Paper 196, Brussels, 2013: 13.

16 Ibid.

17 See information on EU crude oil imports given by the European Commission. Online at: www.ec.europa.eu/energy/en/statistics/eu-crude-oil-imports.

18 United Nations Conference on Trade and Development (UNCTAD), *Review on Maritime Transport 2013*, New York, 2013: 14f. Online at: www.unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=753.

19 European Commission, op. cit., p. 11.

Union member states withdrawing from nuclear energy, the share of gas will increase in the energy mix of the European Union. By 2030 natural gas will represent 31% of the European Union's energy mix.[20] This trend to natural gas fits better to the environmental goals set by the European Union, hence it is less polluting than crude oil or coal.

In parallel the internal gas production in the European Union itself will decrease by 40%, meaning that the imports in natural gas will automatically grow. Despite the fact that the European Union is less dependent in percentage to gas compared with crude oil, the structure of the gas market provokes a far greater impact. Indeed, contrary to the crude oil market the gas market is less diversified and more tied to a land transport network. In fact 82% of gas transport is done through pipelines. Nevertheless the supply of liquefied natural gas (LNG) (18%) provides with a possibility to avoid this structural particularity. The European Union LNG regasification capacity has more than doubled in the past five years. In 2012, 19 regasification terminals were operating. Liquefying natural gas permits its seaborne transport, which could in long term reduce physical dependency between consuming and producing regions.[21] Notwithstanding this form of transportation has the particularity to need regasification terminals and cannot as opposed to petrol use every industrial port.

In this context it becomes clear that the security of supply is not equal for gas and petrol. The gas market of the European Union is limited to certain producers who are tied to the European Union through the existing pipeline network, as the insufficient maritime connections for LNG are not a serious alternative. The risk of a physical supply disruption is therefore far higher to set for natural gas.

According to the 2013 monthly data the European Union imported 223 Mt of hard coal, compared with 204 Mt in 2012. Russia and Colombia remained the two leading sources, with shares of 29.7% and 22.6% respectively. Europe disposes 10% of the world's coal reserves which could

20 ENA, Direction des Etudes, *Securite energetique exterieure de l'Union Européenne: quelle strategie Française?* Paris, 2009. Online at: www.ena.fr/index.php?/fr/content/download/.

21 Eurogas, *Statistical Report 2013*, Brussels, 2013: 7.

be translated into 200 years of consumption.[22] However, the price of production is too high. The European coal is therefore three to four times more expensive than the imported one. This means that its dependency to imports results from an economical choice. Furthermore, because the costs of transport are not very high, the possibility to diversify the imports is made easy as coal is the most spread energy source in the world.

The supply with natural uranium is also largely unproblematic as it does not represent any hindrance for the European Union. It is easy to transport and its stockpile can be found around the world. More than 11 countries are in possession of over 93% of the world's reserves. Moreover, the imports within the European Union are diversified. The highest imports come from Canada and are therefore considered to be very stable in long term. The second highest amount comes from Russia. In order to keep a steady supply EURATOM has engaged in bilateral agreements for the peaceful use of atomic energy with some of the key suppliers.[23] Furthermore it is important to state that the price of uranium has a very limited effect on the price of atomic energy. Indeed, uranium represents only a small part of the atomic energy costs. Therefore the dependency on uranium cannot be considered of great importance.

Except for natural gas, it reasonable to say that all other fossil energy imports give rise to a strictly economical dependency which is based on the international prices. In the case of natural gas this is however different as this energy source does not enjoy the existence of a worldwide integrated market. For the natural gas the European Union is bound to a physical dependency on the imports.

22 Eurostat, Coal consumption statistics. Online at: www.ec.europa.eu/eurostat/statistics-explained/index.php/Coal_consumption_statistics,; see as well European Commission, *The Market for Solid Fuels in the Community in 2008 and Estimates for 2009*, Brussels, 2010. Online at: www.ec.europa.eu/energy/sites/ener/files/documents/2011_eu_market_solid_fuels_2010.pdf.

23 Agreement for cooperation in the peaceful uses of nuclear energy between the European Atomic Energy Community and the Government of the Republic of Kazakhstan.

II. EU's energy dependency: cause of multiple risks

The European Union energy dependency comes with three different threats for the energy security. First of all the European Union must cope with a sudden supply disruption provoked by natural, technical, or terrorist reasons. Secondly, if for a certain energy source the European Union disposes of only a limited amount of supply or transit countries, this is to be considered a threat for the energy security. Finally, the European Union's behaviour itself could be a danger if the European Union fails to invest in new forms of energy production.

1. The risk of an imminent supply disruption

Secure energy supplies play a crucial role in the world economy and are essential to fuel the development of contemporary society. The risks of supply disruption are diverse and have each of them a different impact on supply security.

Technical accidents and natural catastrophes belong to the situations possible to create a supply interruption. In the occurrence of technical problems and natural phenomena it is mainly the infrastructure that can be damaged. This could lead to supply reductions and would have thereby a repercussion on the European Union. Indeed, when the hurricane Katrina took place in the United States of America (USA) in August 2005, the oil production in the Gulf of Mexico was reduced by 79%[24]. The reduction in this region covering one third of the oil reserves in the world, caused the *International Energy Agency* (IEA) member countries to use strategic reserves[25]. In the short term the storage of imported energy as for example oil and gas storages, constitute an important shock-absorbing mechanism to overcome supply interruptions. These storages also enable to intervene on the market in order to calm down possible excessive speculations after a one-off shock. The IEA and the European Union set therefore the

24 Dancy Joseph, Energy markets set to ignite, Financial Sense University, 2.10.2005. Online at: www.financialsensearchive.com/fsu/editorials/dancy/2005/1002.html.

25 Office of Fossil Energy, Strategic Petroleum Reserve. Online at: www.energy.gov/fe/services/petroleum-reserves/strategic-petroleum.

obligation to its members to store energy at least for 90 consumption days[26].

Theses extreme situations can create damages for the transportation infrastructure. It is important to mention that a major part of the existing infrastructure is aging (pipelines), and would therefore need modernisation, even though such damages can be repaired quickly in most of the cases.[27]

Nevertheless weather-related hazards are likely to increase under the influence of climate change. This could be translated into a multiplication of incidents of supply disruption-The series of price increases following accidents and natural catastrophes would however not last long. As it was seen several times when such situations occurred, after a couple of weeks the prices decreased taking their pre-incident form[28]. The market soon realises that the technical accident or weather related hazard was only a punctual event.

Another risk for supply disruption are terrorist attacks which make the biggest headlines in the media. With this regularly used term different forms of intentional actions against energy infrastructures are meant that can interfere with the energy supply.

Terrorist or criminal acts are not a hypothetical situation only possible to happen. They represent a real threat to the European Union as for the rest

26 European Council Directive 2009/119/EC, 14.9.2009; International Energy Agency, IEA Methodology for Calculating Minimum Stockholding Obligation and Compliance. Online at: www.iea.org/topics/oil/oilstocks/methodology/#d.en.26791; Clingendael International Energy Programme, Fact Sheet, Russia – Europe: the liquid relationship often overlooked. Online at: www.clingendaelenergy.com/files.cfm?event: 3.

27 "Gas blast causes fire in Moscow", *BBC News*, 10.5.2009; "300 Meter hohe Flammen über Moskau: Pipeline-Explosion verursacht Großbrand", *News AT*, 10.05.2009. Online at: www.news.at/a/300-meter-flammen-moskau-pipeline-explosion-grossbrand-241599; see as well "Gas Pipeline Explosion at Ghislenghien", *Hazards Intelligence, Dossier*, Belgium, 14.2.2005. Online at: www.iab-atex.nl/publicaties/database/Ghislenghien%20Dossier.pdf.

28 Shabecoff, Philip, "Six groups urge boycott of Exxon", *The New York Times,* 3.5.1989.

of the world[29]. This is shown by the numbers themselves. Between 2010 and 2011 there was a sharp increase of attacks directed at energy infrastructure around the world, including fuel tankers, fuel pipelines and electrical networks, rising from 299 to 438 attacks[30]. The growing terrorists' interest for such targets is due to the fact that energy infrastructures are interdependent and belong to a long supply chain. Striking at one of the links of the supply chain, clearly affects the fossil fuel dependent western economies.

Mainly such actions are led by political or religious claims. In Nigeria, which is for example the eighth largest fossil fuel producer in the world, the rebels of the *Movement for the Emancipation of the Niger Delta (MEND)* achieved through sabotage and attacks against the infrastructure to reduce the oil production by 25%[31]. Because of this Nigeria loses 300.000 barrels of oil per day[32]. Although Nigeria may seem far away from the European Union, the oil production loss there has an effect on the whole world causing higher prices. However, it does not represent an isolated incident of that kind. The Arish-Ashkelon pipeline for example, linking Egypt and Israel, was attacked 13 times in the year following the fall of Mubarak, with dramatic consequences for Israel's energy security. And even recently in January 2013, Islamist terrorists attacked BP's oil production in the Algerian desert and kidnapped employees of that company.[33] The physical attempts to strike against energy facilities are above all first translated in the energy prices. Indeed, the price of crude oil

29 Jopling, Lord Michael, Energy Security: Co-operating to Enhance the Protection of Critical Energy Infrastructures, Introduction, 2012. Online at: www.nato-pa.int/default.asp?SHORTCUT=1478.

30 U.S. Department of State, National Counterterrorism Center: Annex of Statistical Information, 31.7.2012. Online at: www.state.gov/j/ct/rls/crt/2011/195555.htm.

31 Bala-Gbogbo, Elisha, Nigeria's MEND Rebels Threaten Future Attack on Oil Industry, Bloomberg, 27.1.2014; Courson, Elias, *Movement for the Emancipation of the Niger delta (MEND)*, Discussion Paper 47, Nordiska Afrikainstitutet, Uppsala, 2009: 18ff.

32 Shell Companies in Nigeria, Oil theft, sabotage and spills, 2014: 1f. Online at: www.s05.static-shell.com/content/dam/shell-new/local/country/nga/downloads/pdf/2014bnotes/spills.pdf.

33 Maher, Shiraz, *EUCERS Energy Talks*, Konrad Adenauer Foundation, London/Berlin, 2013: 7f.

for example incorporates a share for terrorism risks[34]. Besides increasing the prices of fossil fuels, the infrastructures' critical exposure to criminal and terrorist actions also escalates the risk of a supply disruption. In cases of an attack on critical infrastructures a total supply disruption is indeed also possible. The exposure of energy facilities forms a weak point of the energy supply chain to the European Union. Outside the European Union's territory several facilities are of utmost importance for the European Union's energy security. The Qatargas LNG terminal in Ras Laffan or the Druzhba (Brotherhood) pipeline constitutes strategic infrastructures delivering energy to the European Union. On the European Union's territory the main points of entry for oil and gas terminals are equally of key importance. An attempt to strike against these facilities would mean a serious supply interruption affecting immediately the European Union.

Next to the politically led actions, economical interest also plays a role. Indeed, in the last years the world witnessed the reappearance of piracy, a phenomenon that was long thought to belong to ancient times. These piracy actions are mostly driven by the goal to achieve a financial profit by criminal means. For the transportation of energy these piracy attacks represent a growing risk and such actions have the same disruption effect as terrorism. As the International Maritime Bureau states in its annual global piracy report, 264 attacks were recorded worldwide in 2013, compared with 297 in 2012 and 439 in 2011[35]. It was the lowest figure since 270 attacks were recorded in 2007. This is linked to the fact that Somali piracy diminished because of the greater deterrence by international naval vessels deployed in this region. Piracy of West Africa, however, has been increasing in recent years, which shows no sign of easing, account for 31 of that region's 51 reported attacks, many of them targeting vessels

34 Karolyi, G. Andrew, The Consequences of Terrorism for Financial Markets: What Do We Know? Cornell University, Ithaca, 7.5.2006. Online at: www.fisher.osu.edu/supplements/10/9860/ 200606.pdf.

35 ICC Commercial Crime Services, Somali pirate clampdown caused drop in global piracy, IMB reveals, 15.1.2014. Online at: www.iccwbo.org/News/Articles/2014/Somali-pirate-clampdown-caused-drop-in-global-piracy,-IMB-report-reveals/; Gladstone, Rick, "Global Piracy Hits Lowest Level Since 2007", Report Says, *The New York Times,* 15.1.2014.

serving Nigeria's oil industry. The consequences of the piracy on energy vessels in this region are crucial for the European Union as it imports nearly 10% of its oil and 4% of its natural gas from the Gulf of Guinea. Countries like Nigeria, Angola, Equatorial Guinea and Gabon are significant suppliers of crude oil, Nigeria of natural gas.[36] A single attack on an energy vessel alone is not deemed to have a long term effect on the European Union's supply security. Nevertheless, this would not be the case if the attacks were multiplied. In that case the attacks could provoke an extended outage of maritime traffic in the concerned regions.

Faced with these threats efforts have been made in the protection of the energy facilities. The Atalanta operation against piracy – established in the context of the European security and defence policy – showed that coordinated actions bring the best results. As the European Union's dependence on imported fossil fuels increases, it may become increasingly attractive to launch CSDP military missions in response to energy supply security problems, both to protect supply and to develop the military dimension of CSDP in a low-risk, low-cost context. Crude oil is an internationally-traded and strategic commodity crucial to the functioning of all European Union economies, and security threats to oil supply could prove a particularly galvanising force for unanimity between European Union member states in decisions around CSDP missions. The European Union's dependence on oil and gas imports from unstable regions like West Africa and the Middle East is growing. The European Union is considering investing in the proposed Trans-Sahara gas pipeline (TSGP) which would source gas from the troubled Niger Delta. The dire humanitarian and conflict situation in that region implies that the European Union will need to consider a security response to protect the pipeline if it is built. Unless the European Union takes steps to reduce oil and gas demand across the member states, the pressure to respond militarily to protect seaborne oil

36 Council of the European Union, EU Strategy on the Gulf of Guinea, 17.3.2014; 2. Online at: www.eeas.europa.eu/gulf_guinea/docs/strategy_en.pdf; Chapsos, Ioannis, "Stopping West African piracy is vital for Europe's energy security", *The Conversation*, 27.3.2014.

shipments and to invest in risky, morally-compromised fossil fuel projects will remain.[37]

The permanently existing risks of supply disruption for the European Union because of technical problems, weather related hazards, criminal or terrorist actions, pushes the European Union to improve its crisis management mechanisms and to secure critical energy facilities in and outside the European Union.

2. The dependency towards a limited amount of supply countries

The import dependency itself is not a problem, hence most of the regions in the world depend on energy imports. Indeed, the European Union is not aiming to be an energy autarkic region. The problematic side of the European Union's position is far more the geographic concentration of some energy resources to a limited amount of supply countries. This explains the frequently heard position that the European Union should increase its diversity of supply widening thereby the bottleneck it has to get through[38]. Contrary to coal and uranium, which are easy to supply with and well dispersed around the world, the gas and oil resources are more and more localised in a small number of countries.

The threat of an embargo or a radical increase of prices was for a long time perceived as one of the major dangers of oil concentration. The reason behind it is historical. Indeed, in the oil shock in the mid-1970s such influent instruments where often used in order to impose a political statement[39]. Today the globalised market does not allow to a producing country to deprive an importing country of its resources. Furthermore the

37 The Quaker Council for European Affairs, Military Responses to Energy Security Problems, November 2010: 3. Online at: www.qcea.org/wp-content/uploads /2011 /04/rprt-milresponses-en-nov-2010.pdf .

38 Duhme Kerstin, "What's the future for Europe's energy supply?" *E! Sharp*, May 2005. Online at: wwwesharp.eu/big-debates/energy-and-the-environment/39-what-future-for-europe-s-energy-supply/; Milner, Mark, "Eon boss says diversity of energy supplies crucial for future needs", *The Guardian*, 7.2.2008; Chilchester, Giles, Security of supply is best maintained by diversity, *New Europe*, 12.12.2011. Online at: www.neurope.eu/blog/security-supply-best-maintained-diversity/.

39 Office of the Historian, Milestones: 1969–1976, Oil Embargo, 1973–1974, 31.10.2013. Online at: www.history.state.gov/milestones/1969-1976/oil-embargo.

European Union is now far less dependent on the oil provided by the Organization of the Petroleum Exporting Countries (OPEC)[40]. This is mainly due to the supply diversification and energy efficiency effort the European Union put forward since the 1970's. The OPEC does not represent a threat for the European Union at the moment. Indeed, the OPEC faces internal disputes which are preventing it from steering the oil market. The OPEC is divided between two groups of countries.

On the one hand, the countries which are sparsely populated but rich in resources (Kuwait, Saudi Arabia, United Arab Emirates) wish to maintain the moderate prices for a long term preservation of the current situation. On the other hand, the countries with a diametrically opposed demography are trying to increase benefits in order to cope with running budget expenses (Iran, Nigeria, Venezuela). These inner disparities keep the risk for the European Union very small, as to see a common action of the OPEC threatening the European Union's oil supply.

The concentration of the natural gas production seems for many to be the epicentre of the European Union's political and economic vulnerability. Indeed, the discussions currently held in the European Union directly point on the imports of gas from Russia coming through Ukraine. Although several disputes between Russia and Ukraine existed earlier, the dependency of the European Union to imported gas from Russia was only seen as a serious weakness since the Russian-Ukrainian gas disputes of 2009. Because Ukraine failed to pay its debts, Russia decided to halt the gas supplying to the European Union through the Druzhba (Brotherhood) pipeline. This crisis actually signified the beginning of the European Union's involvement in this dispute. If in 2009 some voices were denouncing this dependency situation, today in the light of the current dramatic developments in Ukraine, these voices have doubled. It seems however very odd from a historical perspective that these imports of gas from Russia are today a synonym for an energy security threat. Indeed, the

40 Aleklett, Kjell, European Energy Horizons 2014, Aleklett's Energy Mix, 7.5.2014. Online at: www.aleklett.wordpress.com/2014/05/07/european-energy-horizons-2014/.

supply of gas from Russia was more than thirty years mainly unproblematic, even if at the time the cold war was in place.

Today Russia is the biggest gas supplier of the European Union providing 30% of the European Union's gas consumption demand, followed by Norway representing only 18% of gas supply.[41] It is therefore right to say that the dependence of the European Union to Russian gas in unusually high.[42] Unlike the oil imports, the gas situation clearly shows a lack of diversity. Nevertheless while it is true that the European Union is highly dependent on Russian gas imports, one should keep in mind that the European Union-Russia relationship is an interdependent one. Russia as well is increasingly dependent of the European Union[43]. Conversely the European Union is importing about 76% of Russia's natural gas, being thereby the highest export destination of Russian gas[44]. This mutual dependency cannot be qualified to be of short term, hence the supply contracts between Gazprom and the European counterparts are long term contracts.

The European Union's dependency to Russia is clear, especially considering the aspect that Russia holds the highest amount of gas in the world together with the fact that the European gas consumption is predicted to increase in the future. Through this lens, avoiding gas imports from Russia will be impossible also in the future for the European Union. On the other side the question is if this dependence will further exist for the Russian side in the future. The answer used to be simple, as there was no alternative for Russia to export high amounts of gas somewhere else. However, recent events turn the situation upside down, as after more than a decade of negotiations, China and Russia have agreed to a natural gas deal

41 Clingendael International Energy Programme, Russian gas imports to Europe, Fact Sheet, 2014: 1, 3. Online at: www.clingendaelenergy.com/files.cfm?event.

42 Tindale, Stephen, How to reduce dependence on Russian gas, Centre for European Reform, London, 10.4.2014. Online at: www.cer.org.uk/insights/how-reduce-dependence-russian-gas.

43 Lough, John, *The EU's Tough Gas Game With Russia,* London, Chatham House, 12.6.2014.

44 Russia's trade ties with Europe, BBC News, 4.3.2014. Online at: www.bbc.com/news/world-europe-26436291.

worth about $400 billion which represents a major step not only in global energy markets but also in geopolitics[45]. This deal goes with Russia's aim to increase exports to Asia, as stated in its Energy Strategy to 2030[46]. By 2030, the strategy envisions that the Asian exports of oil will constitute 22%-25% (as opposed to the current 6%), and gas 19-20% (as opposed to the current 0%)[47]. This gas will be mainly delivered through a new pipeline that Gazprom is constructing from the Siberian gas fields of near Irkutsk and Yakutsk to the Chinese border. Several other pipelines are also planned to be built.[48] This deal will give Russia the possibility to diversify its export destinations. Even though many European experts tend to play down this new turn in the gas market by stating that no pipeline linking Russia and China exists to this moment, the European Union should be careful not to underestimate the possibility of Russia slowly but firmly reorienting its economy to the East[49]. One should not forget that Russia is the third largest trading partner of the European Union, as the European Union exports machinery and transport equipment, chemicals, medicine and agricultural products to Russia[50].

All these elements plead for an imminent need to diversify the sources and ways of gas supply in the European Union. For this the European Union should concentrate its investment in new ways and regions of gas supply.

45 Mazneva, Elena/Kravchenko Stepan, "Russia, China Sign $400 Billion Gas Deal After Decade of Talks", *Bloomberg,* 21.5.2014. Online at: www.bloomberg.com/news/articles/2014-05-21/russia-signs-china-gas-deal-after-decade-of-talks.

46 Ministry of Energy of the Russian Federation, *Energy Strategy of Russia for the period up to 2030*, Moscow, 2010: 128.

47 Tharoor, Ishaan, "MAP: What the epic China-Russia natural gas deal looks like", *The Washington Post,* 21.5.2014; Anishchuk, Alexei, "As Putin looks east, China and Russia sign $400-billion gas deal", *Reuters*, 21.5.2014.

48 Bennett, Mia, "China-Russia gas deal creates Arctic winners and losers", *Cryopolitics,* 25.6.2014. Online at: www.cryopolitics.com/2014/06/25/china-russia-gas-deal-creates-arctic-winners-and-losers/.

49 Hecking, Claus, „30-Jahres-Vertrag mit China: Was Putins Gas-Deal für Europa bedeutet", *Der Spiegel,* 21.5.2014.

50 European Commission, website information on countries and regions – Russia. Online at: www.ec.europa.eu/trade/policy/countries-and-regions/countries/russia/.

3. EU's energy infrastructure: A lack of necessary investment

Transmission interconnections between the various national systems are crucial facilities to assure security of supply. They enable a member state with a shortage in energy to import energy from another member state which has a surplus of it. In recent decades however, cross-border interconnections have taken on a wider role because of the aims the European Union has set. The steps taken through the different Energy Packages, to promote investment in new cross-border interconnections are closely linked to the expansion in renewable energy sources which is planned under the 20/20/20 agreement. A number of these renewable projects require extensive increase in the interconnections between different national grids in order to develop their full potential. In the first place, interconnection capacity between member states remains generally insufficient and certain regions, such as the Baltic States, Spain the United Kingdom and Ireland remain isolated. However interconnecting pipelines have been built between Romania and Hungary, Hungary and Croatia, Slovenia and Austria, and Poland and the Czech Republic. In late March, the leaders of Hungary and Slovakia inaugurated their own connector.[51] This trend has to be continued. According to the 2030 Energy Package member states have to achieve interconnection capacity equivalent to at least 20% of peak demand by 2030[52].

Next to the interconnection of renewable energy production facilities the problem of insufficient interconnections also plays an important role in the cases of LNG. Even though liquefied natural gas imports recently decreased, their importance will only grow because of the need for diversification in the European Union gas market. In order to allow such an increase to happen interconnection between the member states should be constructed. For example in the case of Spain and France it is a pity, that the inexistence of a pipeline connecting the two networks does not allow

51 Chazan, Guy,"Europe seeks alternative gas supplies", *Financial Times*, 27.4.2014.

52 E3G, Options for 2030 infrastructure targets, December 2013: 1. Online at: www.e3g.org/docs/E3G_Infrastructure_and_the_EU_2030_climate_and_energy_framework.pdf (latest update 7.6.2015); "Leaked EU paper maps energy infrastructure black spots", *EurActiv*, 18.9.2012. Online at: www.euractiv.com/energy/countries-drag-feet-interconnect-news-514841.

Europe to take advantage of Spain's excess import capacity for LNG[53]. Other countries such as Poland and Estonia have also begun the process of building large LNG import terminals at their Baltic Sea ports that would enable LNG to be distributed throughout Northern and Eastern Europe contributing thereby to the diversity of supply. Huge investments are therefore required in networks and interconnectors, in storage capacity, in 'super grids' and 'smart grids'. In the European Union infrastructure Germany alone needs an approximate 20 billion euros to adapt its system to the new realities of large RES shares and the nuclear phase-out, as described in its national-grid plan In addition, the actual connection of RES generation capacity is added to these challenges, especially in terms of cost, sparking debates about cost-allocation and the cost-creation principle. This is especially relevant for offshore wind parks.[54]

Unconventional gas resources are thought to be, geographically, broadly distributed across all continents, including Europe. Their potential development may therefore offer a number of security-of-supply benefits for the Union: lower natural gas prices; more readily available gas on the European market; easing tightness in global energy markets; and adding diversity to the European Union's gas supplies. However, the growing focus on unconventional gas has not come without controversy. Notably, it has been argued that there may be several negative environmental and climatic aspects to its production. In addition, more and cheaper (unconventional) gas may challenge investment in coal, nuclear and renewables, as well as the established gas business model. And, of course, questions have been raised about the size of the recoverable resource base.[55]

53 Ratner, Michael/Belkin, Paul/Nichol, Jim/Woehrel, Steven, "Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification", *CRS Report for Congress*, Washington, 20.8.2013: 26. Online at: www.fas.org/sgp/crs/row/R42405.pdf.

54 De Jong, Jacques/Groot, Koen, A Regional EU Energy policy? CIEP Paper 2013/6, The Hague, 2013: 18. Online at: www.clingendaelenergy.com/inc/upload/files/CIEP_paper_2013_06_1.pdf.

55 European Commission, *Unconventional Gas: Potential Energy Market Impacts in the European Union*, Luxembourg, 2012: III.

Although it is not yet clear how many years will be needed for the first production, the recent discovery of natural gas resources in the eastern Mediterranean by Israel and Cyprus could open a new source of European natural gas. Such new energy sources are reflecting the increasing importance of gas in the European energy mix and the need, after the occupation of Crimea, to diversify imports apart from Russia. Since the European Union depends highly on pipelines from third countries, Cyprus, as a member state, could prove a valuable asset by serving as a conduit for gas flowing from Israel to the European Union. In this context, a bid to build an Eastern Mediterranean corridor would allow the European Union to achieve a greater degree of energy security. In 2012, the Commission gave its support to the Eastern Mediterranean corridor by including the Euro-Asia interconnector, the LNG storage facility and the offshore pipeline from Cyprus to Greece on the list of Projects of Common Interest (PCI) for the period 2014-2020[56]. Cyprus and Israel countries European experience in developing their resources, both on a federal and state level. However, the Eastern Mediterranean corridor faces the problem of lack of investment and technical issues, all of which combine to block the construction of the needed infrastructure.[57]

The fact that other countries in the region, including Lebanon and Turkey, may begin with exploration efforts should be understood by the European Union as a warning indicating that time is running faster in energy matters and that investments in crucial facilities must be realised fast and without bureaucracy. In this light it appears clearly that the European Union is in need of a coordinated action plan. On all the different levels of the existing threats the European Union's energy security can only be counterbalanced if all the member states cooperate. However, cooperation does not mean centralisation.

56 European Commission, Projects of Common Interest, 2013: 24. Online at: www.ec.europa.eu/energy/sites/ener/files/documents/2013_pci_projects_country.pdf.

57 De Micco, Pasquale, The prospect of Eastern Mediterranean gas production: An alternative energy supplier for the EU? European Parliament, In-Depth Analysis, Brussels 2014: 21. Online at: www.europarl.europa.eu/RegData/etudes/briefing_note/join/2014/522339/EXPO-AFET_SP(2014)522339_EN.pdf

III. The difficult attempt to reach a common energy security policy

The current crisis with Russia is used to establish a common energy security policy in the EU. Therefore efforts to build an Energy Union are made by the EU institutions. Nevertheless, the divergence between the different national energy interests as well as the fact that the subject of energy security was for a long time left aside and played only a secondary role, do not facilitate the implementation of such an Energy Union.

1. The different national energy strategies as a reason for vulnerability

The European Union member states do not all have the same level of energy dependency. The spectrum evolves from countries like Cyprus or Malta who are totally dependent on energy imports to Denmark who is the only European Union Member State to have a positive energy trade balance.[58] This disparity is also visible in the energy consumption where Italy, Germany, France and the United Kingdom consume the majority of energy in the European Union [59].

Taking into consideration the weakness of oil resources existing within the European Union, the member states are all highly dependent on oil imports. This common ground of dependency throughout the member states is however not true for the fields of coal, gas or uranium. These energy sources reveal a great disproportion of dependency between the member states. The status of the nuclear energy is also varying. In this matter France has for example a high amount of its energy coming from its atomic energy production. This has a direct effect on France's dependence to fossil fuels. The same goes for Poland and coal. Indeed, Poland has the highest

58 European Commission, Member State's Energy Dependence: An Indicator-based Assessment, Summary for non-specialists, June 2014: 1. Online at: www.ec.europa.eu/economy_finance/publications/occasional_paper/2014/pdf/ ocpocp196_ summary_en.pdf.

59 Eurostat, Consumption of energy, March 2014. Online at: ec.europa.eu/ eurostat/statistics-explained/index.php/Consumption_of_energy.

domestic production of coal (lignite) which explains the little amount of dependency Poland has towards coal imports[60].

Concerning the topic of gas, the level of dependence is the most divergence between the member states. Having a closer look on the special situation of dependency towards Russian gas, it appears that this divergence is even higher. While gas imports from Russia are equal to 0% for countries like Denmark or Spain, they represent around 90% for member states like Slovakia or Czech Republic. There are even member states importing 100% of their need in gas from Russia as for example Finland or the Baltic countries.[61] These flagrant divergences explain also the main reason why it is very difficult for the member states to speak with one voice in energy security matters.

2. The record of the European Union's energy security policies so far

This situation of having a multitude of different energy security strategies within the European Union evolved in this way because of the European Union's policy itself. As already mentioned, the aspect of security of energy supply was for a long time secondary. In the field of energy two other topics were traditionally of higher priority: The European Union concentrated its energy policy work on climate change and internal market integration. Policies about competition law in the energy market were held higher than the security of supply. Each of the two priorities (climate change and internal market integration) was deepened with policy packages. Security of supply was only mentioned, but no specific policy to this regard was created.

In the field of climate change the European Union leaders committed to transform Europe into a highly energy-efficient, low carbon economy. The European Union has set itself a series of targets for reducing its greenhouse gas emissions progressively up to 2050 and is working successfully towards meeting them. Under the Kyoto Protocol, the European Union

60 Węglokoks, The world of coal – Role of Polish hard coal in the European Union. Online at: www.weglokoks.com.pl/eng/index.php/our-business/the-world-of-coal/role-of-polish-hard-coal-in-the-european-union.

61 Clingendael International Energy Programme, op. cit., 2.

accepted to decrease its collective emissions to 8% below the 1990 level by the years 2008-2012. Most member states that have joined the European Union since 2004 also have Kyoto reduction targets of 6% or 8% (5% in Croatia's case) which they are also on course to achieve. For 2020, the European Union has committed to cutting its emissions to 20% below the 1990 level. This commitment is one of the headline targets of the Europe 2020 growth strategy and is being implemented through a package of binding legislation. The European Union has offered to increase its emissions reduction to 30% by 2020 if other major emitting countries in the developed and developing worlds commit to undertake their fair share of a global emissions reduction effort. In the climate and energy policy framework for 2030, the European Commission proposes that the European Union sets itself a target of reducing emissions to 40% below 1990 levels by 2030. For 2050, European Union leaders have endorsed the objective of reducing Europe's greenhouse gas emissions by 80-95% compared to the 1990 level as part of efforts of developed countries to reduce their emissions by a similar degree as a group. The European Commission has published a roadmap for building the low-carbon European economy that this will require.[62]

All these climate policies had nevertheless also an effect on energy security. Internally the European Union policy in matters against climate change include long term effect which are positive for the energy security of supply, as it leads to reduce the dependency on fossil fuels. Externally the fight against climate change and the establishment of energy security are also closely linked. In the fossil fuel production countries, which enjoy large resources of fossil fuels will leave these resources untouched if the European Union members states are reduction the consumption of fossil fuel. The promotion by the European Union of the energy efficiency and the development of renewable energy will thereby not only decreased the greenhouse gases but also reduce the production of fossil fuels themselves.

In the case of the internal market policies, the construction of the internal electricity and gas market was approached through the prism of the

62 European Commission, website information on European climate action. Online at www.ec.europa.eu/clima/policies/brief/eu/index_en.htm.

competition law. This approach finds its reason in the presence of a legal vacuum. If the European Commission had effective legal means to act in the name of the European Union in competition matters[63], in the field of energy the Commission was for long stripped of a legal basis. All this changed when the Treaty on European Union (TEU) and the Treaty on the functioning of the European Union (TFEU) modified by the Treaty of Lisbon (TL) came into force and introduced the provisions of primary law concerning energy issues. The separate chapter on energy in the TL[64] formed from this moment on the basis for establishing the secondary law and the European Union's policy in this area. But even before this important change, the internal market policies were beneficial for the energy security in the EU. By inciting for example the transmission system operators to develop their infrastructures, these policies helped to increase the energy solidarity between the member states.

Without losing sight of the aims to fight against climate change and to promote the competitiveness of the European economy, the European Commission placed the energy security at the forefront of it priorities by releasing in response to the political crisis in Ukraine an EU energy security strategy on 28 May 2014[65].

A bit earlier in April 2014 the then Polish Prime Minister, Donald Tusk had expressed his idea of wider European energy cooperation[66]. According to him such an Energy Union would provide energy security and energy independence towards Russia. In detail Tusk, who has since moved on to become President of the European Council, suggested that the EU should buy its gas centrally and that the European Commission should overlook the different energy deals.[67] This effort was picked up by the new European

63 Art. 101 f. of the Treaty on the functioning of the European Union.
64 Chapter XXI of the Treaty on the functioning of the European Union.
65 See European Commission, website information on the European Energy Security Strategy. Online at: www.ec.europa.eu/energy/security_of_supply_en.htm.
66 Tusk, Donald, "A united Europe can end Russia's energy stranglehold", *Financial Times*, 21.4.2014.
67 Devoy, Luke, European Energy Union: Living up to its name? IIEA, Dublin, 7.3.2015. Online at: www.iiea.com/blogosphere/european-energy-union-living-up-to-its-name.

Commission. Indeed, in his political guidelines the new European Commission President Jean-Claude Juncker set the energy security as a top priority, stating that energy that underpins the EU economy should be resilient, reliable and secure.[68] On the 25 February 2015 delivering what had been promised, the European Commission announced its strategy to achieve a resilient Energy Union with a forward-looking climate change policy[69]. The core elements of this strategy aim at reducing EU's energy dependency. The European Commission mainly adopted the proposals made by Donald Tusk as beside the solidarity clause reducing the dependence on single suppliers, this proposed Energy Union includes the development a resilience and diversification package for gas supply and the *ex ante* involvement of the European Commission when EU member countries make deals to buy energy or gas from countries outside the EU.[70] This last point is very controversial as it touches upon the question of competence of the member States and the EU Commission in the area of energy. This controversy is especially visible in the latest Conclusion on the Energy Union of the European Council.[71] In this response to the EU Commission, the member states mentioned multiple times "the right of member states to decide their own energy mix" and "the sovereignty and sovereign rights of member states to explore and develop their natural resource" as if they wanted to remind the European Commission under what kind of competence energy falls.[72]

68 European Commission, Press release, Energy Union: secure, sustainable, competitive, affordable energy for every European, Brussels, 25.2.2015. Online at: www.europa.eu/rapid/press-release_IP-15-4497_en.htm.

69 European Commission, Communication: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy, 25.2.2015. Online at: www.eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2015:80:FIN.

70 Giuli, Marco, *The Energy Union: what is in a name?* European policy Center, Commentary, 18.5.2015. Online at: www.epc.eu/documents/uploads/pub_5413_the_energy_union_what_is_in_a_name.pdf

71 European Council, Press release, European Council conclusions 19-20 March 2015, Brussels, 20.3.2015. Online at: www.consilium.europa.eu/en/press/press-releases/2015/03/20-conclusions-european-council/.

72 Ibid.

3. Energy – a shared competence between the member states and the EU

Energy belongs to the realm of the shared competences between the Union and the member states[73]. Although the measures necessary to achieve the objectives of European Union's energy policy – functioning of the energy market; security of energy supply; promotion of energy efficiency and the interconnection of energy networks – are set by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, this does not affect a member state's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply[74]. Hence, the European Union's energy policy remains an intergovernmental process. The European Commissions' role in developing and pursuing the energy security policy is a derivative of the European Union's competences in the integration of the common market, transeuropean networks [75] and environment[76]. This seems true in theory, however the latest events in the Ukrainian crisis are now taken as a reason to put these rules upside down. Indeed, different voices throughout the European Union call for a single European energy policy, creating thereby a centralized structure leaving the European Union organs the only ones to be in charge[77]. While the idea of a new European Union treaty to embark on a common energy policy has already been advocated since 2010 by former European Commission President Jacques Delors and the then-European Parliament President Jerzy Buzek,[78] in the light of today's crisis different actors are trying to push for

73 Art. 4 (2) of the Treaty on the functioning of the European Union.
74 Art. 194 (2) of the Treaty on the functioning of the European Union.
75 Art. 171 of the Treaty on the functioning of the European Union.
76 Art. 191 of the Treaty on the functioning of the European Union.
77 "Poland calls for EU energy union", *EurActiv,* 2.4.2014. Online at: www.euractiv.com/sections/energy/poland-calls-eu-energy-union-301303; Dods EU Monitoring, "Dods EU Briefing: Paving the way for a European Energy Security Strategy", *The Parliament,* 22.5.2014. Online at: www.theparliamentmagazine.eu/articles/eu-monitoring/dods-eu-briefing-paving-way-european-energy-security-strategy.
78 "Delors advocates new EU treaty", *EurActiv*, 6.5.2010. Online at: www.theparliamentmagazine.eu/articles/eu-monitoring/dods-eu-briefing-paving-way-european-energy-security-strategy.

this idea to be implemented. Despite the fact that these propositions go against the current legal basis, it is reasonable to say that such a policy is also highly unrealistic. As stated before, the member states are dependent in various forms and levels on energy imports. The energy needs of these members being heterogenic the possibility of a common energy policy does not seem feasible. As the general De Gaulle once stated, it is important to adapt one's policy to its geography ("Avoir la politique de sa géographie")[79]. Behind this canon lies exactly the way the policies on energy should be taken. If in future the energy matters were to fall in the centralised hands of the European Union, the solution it would provide could not be as tailored to the different needs of the member states. This may be also the reason why energy was regulated to be a shared and not an exclusive competence.

IV. Conclusion

The crisis with Russia has the virtue to remind us the decisive necessity to strengthen the European Union in energy security matters. Internally it is crucial for the European Union to reduce the risk of a supply disruption and increase the energy solidarity within the member states. Externally the European Union needs to find a way to diversify its supply and transit energy sources. This should be done not by claiming that all energy links with Russia are the personification of evil, but instead by using the various new possibilities of energy generation inside and outside of the European Union. It is important to understand that energy supply security hysteria will not lead anywhere if not followed by concrete investments in other sources. The European Union tries in to centralize decision making for energy matters forgetting that the energy landscape is different in every member state. Creating a common energy security policy through an Energy Union is thereby the wrong solution to take. The coordination of these policies – while leaving space for specificities at the same time – seems here a far more adequate unfolding.

79 Rassemblement pour l'Organisation de l'Unité Européenne, website information. Online at: www.roue-europe.org/avoir-la-politique-de-sa-geographie-citation-du-general-de-gaulle/.

Das **Zentrum für Europäische Integrationsforschung (ZEI)** ist ein interdisziplinäres Forschungs- und Weiterbildungsinstitut der Universität Bonn. *ZEI – DISCUSSION PAPER* richten sich mit ihren von Wissenschaftlern und politischen Akteuren verfassten Beiträgen an Wissenschaft, Politik und Publizistik. Sie geben die persönliche Meinung der Autoren wieder. Die Beiträge fassen häufig Ergebnisse aus laufenden Forschungsprojekten des ZEI zusammen.

The **Center for European Integration Studies (ZEI)** is an interdisciplinary research and further education institute at the University of Bonn. *ZEI – DISCUSSION PAPER* are intended to stimulate discussion among researchers, practitioners and policy makers on current and emerging issues of European integration and Europe´s global role. They express the personal opinion of the authors. The papers often reflect on-going research projects at ZEI.

Die neuesten ZEI Discussion Paper / Most recent ZEI Discussion Paper:

C 216 (2013) Marc Jan Eumann
Current Challenges in EU Politics. A Perspective from North Rhine-Westphalia

C 217 (2013) Desislava Kraleva
Free Movement of Workers in the EU. Legal Aspects of the Transitional Arrangements

C 218 (2013) Martin Seidel
Die deutsche Europapolitik unter den Vorgaben des Bundesverfassungsgerichts

C 219 (2013) Thorsten Kim Schreiweis
Die Demokratisierung der Europäischen Union

C 220 (2013) Michaele Schreyer
Europäische Integration aus historischer Erfahrung. Ein Zeitzeugengespräch mit Michael Gehler

C 221 (2014) Günter Verheugen
Europäische Integration aus historischer Erfahrung. Ein Zeitzeugengespräch mit Michael Gehler

C 222 (2014) Simon Perger
Regionale Integration in der arabischen Welt – eine neofunktionalistische Analyse

C 223 (2014) Ludger Kühnhardt
Gibt es eine politische Philosophie der Europäischen Union?

C 224 (2014) Christina Wunder
Communication and Campaigning in European Citizens‘ Initiatives

C 225 (2014) Ludger Kühnhardt
Die proto-konstitutionelle Etablierung der europäischen Innenpolitik.
Rückblick und Ausblick auf Bedingungen föderaler Ordnung in Europa

C 226 (2014) Lothar Rühl
European Foreign and Security Policy since the Lisbon Treaty – From Common to Single?

C 227 (2015) Monika Wulf-Mathies
Europäische Integration aus historischer Erfahrung. Ein Zeitzeugengespräch mit Michael Gehler

C 228 (2015) Ludger Kühnhardt
Neighbors and other realities: The Atlantic civilization and its enemies

C 229 (2015) Kun Hu
Innovations of the European Central Bank in the Context of Financial and Monetary Integration. A Chinese Assessment

C 230 (2015) Thomas Panayotopoulos
The Energy Union – a solution for the European energy security?

Die vollständige Liste seit 1998 und alle Discussion Paper zum Download finden Sie auf unserer Homepage: http://www.zei.de.

For a complete list since 1998 and all Discussion Paper for download, see the center‘s homepage: http://www.zei.de.