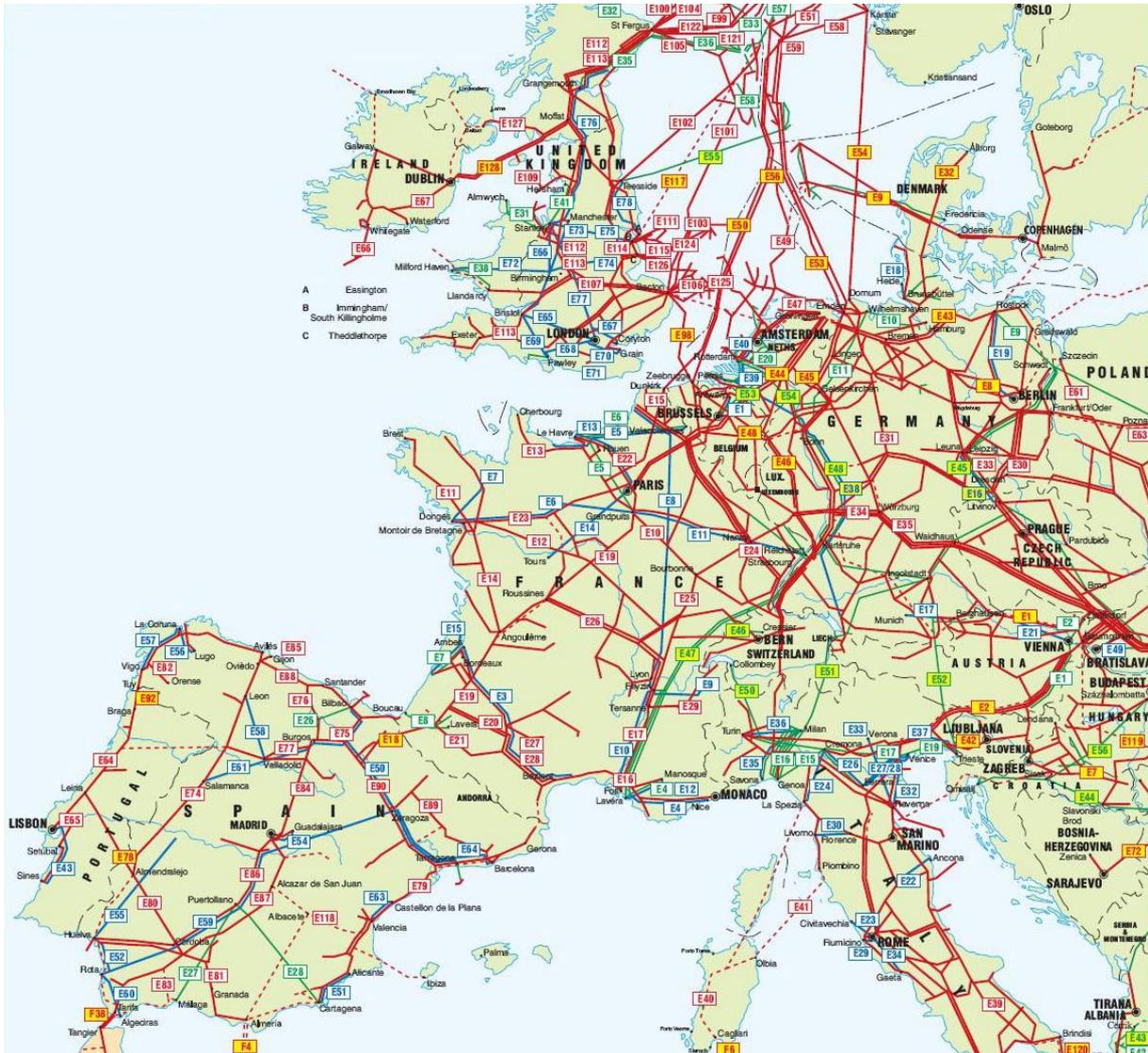


Oil Security Europe

Prospects for advocacy



Study commissioned by Securing America's Future Energy

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1. Introduction

Europe's energy use – and thus its economy – depends largely on imports of oil and other fossil fuels. Eighty-eight percent of its oil consumption is imported, and Europe's transport depends almost entirely on oil products. More challenging than the level of dependence is the near complete lack of any alternative energy source for the transport sector, making this crucial economic sector very vulnerable for disruptions in oil supplies from abroad.

This paper explores these risks as well as the need for and interest in increased advocacy in Europe to reduce oil's dominance of the transport sector. In particular, the process to which this paper belongs, searches for support among stakeholders with interests in security and business. While this paper deliberately examines reasons for oil reduction other than climate change, the EU climate policy does impact the shared goal of reducing oil use and oil dependence.

This paper first provides a short overview of arguments, policies and positions based on available studies, articles, statistics and two dozen interviews with stakeholders.¹ The goal is to share common insights and to structure the argumentation, in order to facilitate a fruitful exchange of knowledge and dialogue. Next, an international workshop on European Oil Dependency was held in Brussels on July 6, 2016.² Arguments to reduce Europe's oil dependency were sharpened and recommendations were made for what an advocacy initiative might look like.

¹ Listed in Annex A.

² List of participants in Annex B.

2. Europe's oil dependency

Europe³ imports 88% of the oil it uses and is the region of the world with the highest dependency on oil imports. Consequently, Europe is largely dependent on the world oil market and the international powers shaping it. Oil is the largest source of energy in Europe.⁴ Oil price shocks⁵ and volatile prices have hurt the European economy and will likely continue to do so in the future. A two-day closure of the Druzhba oil pipeline between Russia and Germany in 2007 made Europe nervous.⁶ Thirty-three percent of Europe's crude oil imports come from Russia. More than half of the imported crude comes from countries with a high geopolitical instability, such as Iraq, Libya, Nigeria, Algeria and Russia.⁷

European dependence on imports of oil increased from 74% in 1995 to 88% in 2014 and is expected to rise further. In the USA the share of imported oil (including oil products) has recently declined to only 24%,⁸ thanks to the shale oil boom. Interestingly, oil dependency is regarded a larger national security and economic risk in the USA than in Europe. An estimated 12 to 15% of the US defense budget can be related to safeguarding the undisrupted supply of oil.⁹ Europe does not spend anything near that level of resources on ensuring the free flow of oil.

There are only three of the 28 EU countries that import less than 50% of the oil they consumption: Denmark (net exporter), United Kingdom (40%) and Romania (47%). Many member states rely almost entirely on imports of oil and oil products including France (99%), Germany (96%), Italy (91%), Poland (91%) and Spain (98%).

³ Europe refers in this paper to the 28 member states of the European Union.

⁴ Europe depends also on imports of coal (44%) and natural gas (65%), so, shifting oil use towards these other fossil fuels cannot bring a substantial gain.

⁵ The IEA investigated 10 major oil supply disruptions since 1970 (IEA 2014).

⁶ E.g. the Guardian and BBC news January 2007.

⁷ Based on the Worldwide Governance Indicators from the World Bank. See *A Study on Oil Dependency in the EU* (Cambridge Econometrics 2016).

⁸ The dependency on imported heavy crude oil for US refineries is larger.

⁹ See *Imported Oil and U.S. National Security* (RAND 2009).

3. Policy responses

Introduction

The following section gives a summary overview of policies that have been developed to safeguard the uninterrupted supply of fossil fuels. A distinction will be made between short term disruptions and structural dependency on imports, because these require different policy responses. The primary concern of this paper and its recommendations is on long term dependency and on EU policies. In addition, an impression is presented of policies and public opinion in Germany and Poland, two large member states which are more than 90% dependent on imported oil and oil products.

Oil supply disruptions

In the 1970s, in the wake of the Arab oil embargo, international agreements have been made in the framework of the International Energy Agency, to mitigate the negative impacts of sudden oil supply shortages. The most important is the stockholding requirement. In accordance with the International Energy Program Agreement, each IEA country has an obligation to hold oil stocks that equate to no less than 90 days of net imports. The IEA emergency policy focuses on alleviating short-term oil supply disruptions only. It is not a tool for price intervention or long-term supply management, both of which are more effectively addressed through other policies that the IEA encourages, such as: oil import reduction, energy efficiency, energy diversification, or research, development and investment in alternative energy technologies.

Gas supply disruptions

The Ukraine crisis from 2014 and the related uncertainty about an uninterrupted supply of natural gas from Russia prompted the European Union to develop a European Energy Security Strategy.¹⁰ The focus of this policy is on regions with a less-integrated and less-connected energy infrastructure, such as the Baltic and Eastern Europe. The most pressing energy security of supply issue is the strong dependence from a single external supplier. This is particularly true for gas. An important response to this risk is to create a better functioning and a more integrated gas market. The European Energy Union will also reduce its external dependency on particular suppliers by diversifying its energy sources, suppliers and routes. Notably, a reinforced partnership with Norway, the acceleration of the Southern Gas Corridor and the promotion of a new gas hub in Southern Europe are all being pursued.

European energy policy

Although current EU energy policy tends to focus on competitiveness and climate change, the policy also contributes to increased energy security by reducing the use of fossil fuels. The 2020 climate and energy package is a set of binding legislation to ensure the EU meets its climate and energy targets for the year 2020.

The package sets three key targets:

- 20% cut in greenhouse gas emissions (from 1990 levels)
- 20% of EU energy from renewables
- 20% improvement in energy efficiency

The Emission Trading System (ETS), binding national targets for GHG emissions and for shares of renewable energy and European efficiency standards for several appliances and vehicles are the main policy instruments used by the EU. These measures do contribute to reducing Europe's oil dependency somewhat; however even a very efficient transport system that relies completely on petroleum is still highly vulnerable to the effects of supply disruptions and price volatility.

¹⁰ COM(2014) 330 final.

EU countries have agreed on a new 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030. This pathway leads towards the EU 2050 goal of an 80% reduction in greenhouse gases relative to the 1990 levels (60% reduction in the transport sector).¹¹

Important for Europe's oil dependency is also its climate policy on transport, which can be summarized as follows:

- aviation has been included in the EU Emissions Trading System (ETS);
- a strategy is in place to reduce emissions from cars and vans, including emissions targets for new vehicles (for cars a 40% reduction relative to the fleet average in 2007);
- a strategy for reducing heavy duty vehicle fuel consumption and CO₂ emissions;
- a target is in place to reduce the greenhouse gas intensity of fuels;
- rolling resistance limits and tyre labeling requirements have been introduced and tyre pressure monitors made mandatory on all new vehicles;
- legislation encouraging national authorities to deploy gas and electricity infrastructure; and,
- public authorities are required to take account of lifetime energy use and CO₂ emissions when procuring vehicles.

Germany

Germany has the largest economy in the EU and imports 96% of the oil and oil products it consumes, worth 55 billion euro in 2013; thirty-five percent is imported from Russia alone. The dependency on imports of other fossil fuels is also high: natural gas 87% and hard coal 86%. But the import bill for oil is the largest.

Despite this strong dependency, oil imports are not regarded as an economic or geopolitical vulnerability for the country.¹² Oil dependency is currently not a public or political issue in Germany. Although the German attitude towards Russia turned sour after the recent Crimea and Ukraine crises, this did not result in worries about oil imports from Russia. The argument goes that oil can be bought elsewhere if Russia cut off supplies and that Russia's economy would be severely hurt if their oil exports to Europe were halted.

One reason for the difference between the German and U.S. attitude might be the highly internationalized character of the German economy, with a degree of openness of 49%, compared to 15% for the USA.¹³ This economic interdependence is in line with the foundations of the EU, as stepwise established after the Second World War: create peace in Europe through economic cooperation. After the fall of the communistic dictatorships in 1989 and the following unification of Germany in 1990, German politicians formulated the so called 'Ostpolitik,' which can be summarized as 'no peace in Europe without Russia.'

Additionally, the German industry benefits more than other economies from exports to oil exporting countries and even has a positive trade balance with oil exporters (who themselves have a positive trade balance overall). Therefore, the German economy will be hurt more than others if oil exporting countries see their oil revenues decline.

¹¹ Excluding international aviation and shipping.

¹² *Abhängigkeit gleich Verletzlichkeit? Energieimporte in Deutschland und Europa* (2014), Institut der Deutschen Wirtschaft Köln.

¹³ Average of imports and exports as share of GDP.

The policy focus in Germany on its capital goods industries translates not only into substantial exports to oil exporting countries but is also consistent with its policies favoring renewable energy and the development of the related manufacturing industry.

Poland

Poland has the eighth largest economy in the European Union. Since 1989, the country is in a transition towards a market economy and a modernization of its industry. Institutional and legal changes to safeguard Poland's independence are still in progress. Energy is one among many other institutional issues to be tackled. Polish GDP per capita increased strongly from 19% of the EU average in 1995 to 39% in 2014 but is still lower than that of most Western European countries.

Poland is the largest producer of solid fuels – hard coal and lignite – in the EU, which covers 58% of its energy consumption, mainly for power generation and heating. Its coal production has been reduced by 46% (1995-2013) and further steps in this direction are socially and politically sensitive. Although Poland produces some domestic oil, its import dependency is 96%. And 96% of Poland's crude oil import comes from the Russian Federation through the Druzhba pipeline. Importantly, the capacity of the oil terminals in the harbor of Gdansk exceed the current import from Russia through the Druzhba pipeline, reducing Polish anxiety over dependence on Russian oil. Thirty-six percent of the country's refined products come also from Russia. Poland's export and import of refined products equal each other.¹⁴ The consumption of oil products increased the last decades with around 2% per year and is mainly used for transportation (64%). The energy intensity of the Polish economy is high, double that of the EU average. However, the energy consumption per capita is only two thirds of the EU average.

Oil dependency does not seem to be a major issue in Poland.¹⁵ The country's National Security Strategy, produced in 2014, pays some attention to oil dependency, mainly to develop the potential for shale oil (and gas) in Poland and to favor (but not to finance) the commercial construction of a new oil pipeline through the Caspian Sea.¹⁶ Security of gas and electricity supply receive more attention, however, mainly to avoid short term disruptions in supply.

In the EU, Poland and other Eastern European countries¹⁷ support the European Energy Union to create a well-functioning internal energy market and increase the bargaining power of member states towards energy suppliers. This will increase security of supply and prevents a 'price gap' for foreign energy purchases between different member states.¹⁸ Defending the EU's market is regarded an essential approach to reducing the energy, political and territorial security risks for European countries.

Due to its comparably low GDP/capita and high energy intensity, Poland tends to be interested in large-scale implementation of expensive technologies for renewables, energy efficiency and carbon capture and storage. One of Poland's focus areas in industrial policy seems to be the national oil industry – Grupa Lotos and PKN Orlen – with its refineries and strong regional market position.

¹⁴ Energy data from *Energy Supply Security* (IEA 2014).

¹⁵ See e.g. *Russo-Polish energy security relations: a case of threatening dependency, supply guarantee, or regional energy security dynamics?* (2012) and *Europe's energy security – caught between short-term needs and long-term goals* (2014).

¹⁶ *National Security Strategy of the Republic of Poland* (2014).

¹⁷ Mainly the Baltic States and the other Visegrad countries (Hungary, Czech Republic and Slovakia).

¹⁸ Poland payed in 2011 supposedly 20% more for gas imported from Russia than Germany.

Conclusion

EU policies are aimed at safeguarding the uninterrupted supply of oil and gas rather than addressing the long-term more structural dependency on oil imports. However, the EU energy and climate policies do contribute to reduced oil consumption and thus to reduced import dependency. Important in this context are the policies to increase fuel efficiency of vehicles and promoting electrification of urban transport.

In both Germany and Poland – two member states that import more than 90% of their oil and petroleum products – oil dependency does not appear to be a major issue in politics and public opinion. For Germany, there is the belief that the country has good trade relations with oil producing nations so exports act as a moderating force to any volatility in the price of oil. For Poland, concerns about oil dependency are muted by the knowledge that the country's import terminal could fully replace the supply currently coming from Russia.

Overall, Europe puts its faith in a well-functioning global market for its oil imports and takes measures to improve the internal energy market. Different national interests shape national energy policies and sometimes conflict in the EU. Energy policies try to strike a balance between economic competitiveness (cheap energy), exploiting natural resources (government revenues), security of supply, industry policy and environmental concerns.¹⁹ The structural dependency on oil imports plays a minor role in current EU policy design.

Although oil dependency is not high on the European agenda, this does not mean that the risk and cost of oil dependency are acceptable or that this topic does not require greater attention. The next section summarizes the risks and costs associated with oil dependency.

¹⁹ See e.g. *An Essay on the Colourful Scene of Europe's Energy Transition* (2016).

4. Risks and costs of oil dependency

Introduction

This section presents a summary overview of the risks and costs associated with Europe's oil dependency. It does not deal with short term disruptions. Two categories are distinguished: national security risks and economic costs.²⁰ The aim of this overview is to structure the sometimes confusing discussions about the risks and costs of oil dependency.

National security

From the literature review and opinions expressed in the interviews, five principal areas are identified where oil dependency may pose a national security risk to EU member states. Those four areas are:

- Military expenses for patrolling sea-lanes and ensuring that oil-producing nations are secure. The annual U.S. defense budget attributed to protecting the supply and transit of oil from the Persian Gulf is estimated at 75 to 91 billion USD in 2008.²¹ Suggestions have been made to share these costs between the allies.²² The substantial domestic shale oil production reduced the U.S. import dependency and might influence its relation with the Gulf States. No data have been found on military expenditures by European countries to protect oil deliveries from the Gulf area.
- Risk of disrupted energy supply during military operations. To mitigate this risk, defense agencies support R&D and deployment of renewables, energy efficiency and smart grids.²³
- Oil export revenues are partly used for military enforcement by rogue states and organized terrorist groups, such as ISIS. The recent decline in world oil prices supposedly led to a reduction in purchases of weapons and military equipment. The coalition against ISIS is partly aiming at reducing their oil revenues, by preventing smuggling and disabling refineries.
- Dependence on a single or limited number of suppliers may lead to coercion or influence by energy exporters, with respect to domestic issues or geopolitics. A report from the NATO Parliamentary Assembly on European energy security explicitly notes that this is assumed to be a real risk for gas and not for oil.²⁴ In contrast to this security risk, economic interdependence is also regarded as a means of promoting international peace.
- Oil exporting countries depend financially – to some or a large extent – on petrodollars.²⁵ A strong and sudden decline in their oil revenues might lead to political instability and in worst case even to a failing state. This in turn poses a national security risk, especially when these countries are close to Europe. Disintegration of the Russian Federation or Saudi Arabia might result in even more terrorists' attacks and refugees to Europe, as has been consequences of the instability in

²⁰ RAND presents a comprehensive overview in its 1990 study *Imported Oil and U.S. National Security*. Their categories 'political' and 'military' are in this paper combined to 'national security'. More recent studies and papers are integrated in the overview presented here.

²¹ *Imported Oil and U.S. National Security* (RAND 2009).

²² *Imported Oil and U.S. National Security* (RAND 2009) and *Thinking Out of the Box on NATO Out of Area* (NATO Energy Security Forum 2014).

²³ See e.g. *Energy Security: Operational Highlights* (2013), NATO Energy Security.

²⁴ *European Energy Security: the Southern Gas Corridor* (2014), NATO Parliamentary Assembly, Science and Technology Committee. Similar views have been expressed in several interviews.

²⁵ Oil exports contribute an estimated 35 to 40% to the budget of the Russian Federation (IEA 2014) and official data for Saudi Arabia reveal that 72% of state revenues is coming from oil in 2015, corresponding to 18% of its GDP.

Syria and Iraq. To counterbalance these risks, it is advocated to intensify the transparency and coordination between major oil suppliers and consumers, to properly manage the transition towards reduced oil consumption and lower global prices.²⁶

Economic

The economic risks and costs of oil dependency can be grouped into five categories, summarizing the interviews, articles and documents consulted for this paper:

- Dependence from a single or few suppliers, may lead to a lack of bargaining power and thus a higher price for imports compared to world market prices. This is similar to the security risk mentioned above and has been the case with gas supplies.²⁷ A remedy is to diversify suppliers and supply routes, which might involve extra costs for investments in new pipelines, terminals for LNG and the like. The interviews revealed no evidence that there has been a similar price gap caused by bargaining power for crude oil. Many interviewees stated that the global oil market functions well and does not allow for regional price differences. This is supported by the modest difference in import prices of crude oil between the member states.²⁸

The opposite can in theory also occur: a supplier is dependent on one or a few customers, resulting in a negative price gap. Several interviewees stated that Russia is more dependent on its oil exports to the EU than the other way around.²⁹ Ideally, no supplier or customer on the market has the power to influence prices and conditions. This is an argument for the efforts of the EU and others to create well-functioning internal and global energy markets.

- Volatile oil – and fossil fuel – prices have a negative impact on the economic performance of most countries, be it exporters or importers.³⁰ Volatile prices make the return on investments uncertain and will lead to capital losses. The magnitude of the GDP loss depends both on the exposure and on the sensitivity of the economy to volatile fossil fuel prices. Reduced consumption of fossil fuels – through energy efficiency and electrification – will in general reduce the negative economic impact of volatile oil prices. Because European countries apply much higher fuel taxes than the U.S., the price fluctuations for gasoline and diesel are dampened in Europe.³¹
- The large import bill for oil is an economic disadvantage³². Of course, not having to pay this sum is attractive, for instance by using national resources or reducing oil consumption. It is estimated

²⁶ See e.g. *What the world needs to ensure energy security* (2015), Abdullah M. Al-Shehri and Julian Popov, World Economic Forum.

²⁷ During the Ukraine crisis Lithuania did pay roughly double the price for Russian gas compared with the Czech Republic. *Quarterly Report on European Gas Markets 2015 Q3*, European Commission.

²⁸ In 2015 the CIF import prices for crude oil varied between minus 5% and plus 7% compared to the average world oil price. Price differences can be caused by differences in quality and transport costs. The price of Russian oil varied roughly plus minus 10% for deliveries to different member states. *Registration of Crude Oil Imports and Deliveries in the European Union* (2015), European Commission.

²⁹ See footnote 26.

³⁰ *Oil Price Volatility, Economic Growth and the Hedging Role of Renewable Energy* (World Bank 2013).

³¹ Fuel taxes in the U.S. are in the range of 20 to 25% of the pump price. In Germany the tax component (fuel tax and VAT) is around 65 to 75%. As a consequence, doubling crude oil prices will increase the price of gasoline at the pump in the U.S. by 90 to 95%. and in Germany only by 35 to 40%.

³² In 2015 the EU paid 187bn. euro, corresponding with 1.3% of its GDP, for its oil import, despite the low oil prices in that year. The import bill for gas amounted to 40 bn. euro, only a fifth of the oil bill. This large financial difference is a major reason to focus on long term oil dependency and not so much on gas.

that the EU could save around 30 billion euro a year on fuel costs from 2030 onwards by stronger than current policies to promote fuel efficient and electric vehicles.³³

- Low oil prices on the world market are beneficial for net importers and disadvantageous for oil exporting economies. Europe, being a large importer of oil, will gain from low oil prices. A recent study finds that policies aimed at low-carbon transport worldwide can reduce global oil prices by 8.5% in 2030, 24% in 2040 and 33% in 2050. Reduction in the volume of EU oil imports would lower the EU's oil bill by 29 billion euro in 2030, and the consequent reduction in oil prices would shave a further 12 billion from the bill.³⁴

However, the bill for imports equals the oil revenues of exporting countries, which will in turn be partly used for importing goods and services from Europe. So, less oil imports will to some extent be counter balanced by fewer exports. The net result of a global effort for low-carbon transport is that EU GDP would be 0.2% higher by 2030 and 0.5% higher by 2050.

- Following economic theory and mentioned by several interviewees, countries need to strive in the long run for an equilibrium in their balance of payments. A negative balance of payments can be an extra economic argument in favor of reducing oil imports. However, neither the EU nor the individual member states have currently a substantial shortage on their balances.

Conclusion

Europe's oil dependency does bring national security risks and economic costs with it. However, the question is whether these are higher or lower than the costs associated with reduced oil imports. Lower oil imports can be achieved by increased energy efficiency, increased renewable energy production and increased use of domestic fossil fuel resources. As long as these alternatives for oil imports are cheaper and do not cause negative impacts such as environmental degradation, it is a win-win policy: both the economic competitiveness and the independence from oil imports gain. And there is indeed a huge potential for economically viable energy efficiency improvement.³⁵ Assessments suggest that, under existing policies, two-thirds of the economically viable energy efficiency potential through 2035, across transport and other sectors, will remain unrealized. Realizing this potential would reduce Europe's oil dependency substantially.

Other research shows that a large shift towards fuel efficient and electric vehicles can reduce fuel use of cars by 80% in 2050 and will create 800,000 extra jobs in Europe, as compared to current policies.³⁶ Instead of paying for oil imports, jobs will be created in the largely European industries that develop and manufacture fuel efficient and electric vehicles.

In addition to the large potential of improved energy efficiency, solar and wind also provide a growing potential of cost-effective electricity, due to the anticipated further fall in their costs. In combination with electric mobility this also reduces oil dependency.

As stated before, economic viable energy savings at the same time reduce Europe's oil dependency and increase its international competitiveness. Are there good reasons to reduce oil consumption further than what is cost-effective? The overview and analyses presented above in this paper point towards a positive answer. Reducing oil revenues for exporters will likely result in reduced purchases of weapons and military equipment, thus contributing to a safer world. Second, reduced oil imports will make Europe's economy less vulnerable for the volatility in world oil prices. And third, lower

³³ *The Impact of Improved Vehicle Efficiency on Energy Dependency in Europe* (Cambridge Econometrics 2015).

³⁴ *Oil Market Futures* (Cambridge Econometrics 2016).

³⁵ *Capturing the Multiple Benefits of Energy Efficiency* (IEA 2014).

³⁶ *Fueling Europe's Future – How auto innovation leads to EU jobs* (2014).

average global oil prices, achieved by reduced demand, are beneficial for the European economy. Or the other way around: higher import prices for oil which might be caused by future market power of some suppliers, will hurt the European economy more than others, because of its strong import dependency. Weighing the extra costs and risks against these benefits of increased oil independence falls outside the scope of this paper and should be the subject of a subsequent study.

5. Conclusions

The survey undertaken for this paper does not reveal much worry in Europe about the region's strong reliance on imported oil. No high priority for this issue has thus far been identified among business and military leaders in Europe. Nevertheless, suppliers to the car industry, renovators of buildings and several NGOs do advocate for a greater effort to save energy and to shift towards electricity and thus reduce the import dependency from fossil fuels. Many studies show the economic benefits of such measures. An indirect signal of the modest worry about oil imports is the tepid support in different European countries towards exploration of their own unconventional domestic oil.

Europe's energy security policy is entirely focused on short term disruptions of supply and not on its structural import dependency. No policy documents were found that refer to the risks and costs of structural dependency on oil imports. The EU energy security policy focuses on gas and not on oil, while oil is more important for long term energy dependence, because it involves five times larger financial flows.³⁷

A key argument behind Europe's relaxed attitude towards oil dependency is that the global oil market is assumed to function well because, with so many global suppliers, the risk of physical shortages is low. If Russia or Arab countries would restrict oil supplies, the required imports can be bought elsewhere. Furthermore, it is not regarded as likely that suppliers will stop delivering, because they need the oil revenues. The assumption that the global oil market functions well is supported with recent data on price differences. However, all these considerations relate to the current global oil market and do not address the question of how this will be in the near future. Nor do these views address the underlying reliance on a commodity whose price is affected by the collusion of a small group of producer nations. This key question seems to be overlooked in Europe and should be explored further.

There are several reasons to question the functioning of global oil markets in the future. Almost half of the global proven oil reserves are in the Middle East, whose history of collusion on production quotas and ongoing geopolitical instability remains a threat to European oil security. In addition, supplies from the Russian Federation might decline, because of a growing backlog of investments in the upstream oil market there.³⁸ More than half of the imported crude oil comes from countries with a high geopolitical instability.³⁹

Another development with a potentially high impact on Europe's oil security, is that both the U.S. and China have large shale oil reserves, while Europe does not.⁴⁰ Thus far, Europe was in the company of these two large economies with respect to its oil dependence. So, there was a common interest to safeguard supplies and routes. As China and the U.S. become less dependent on oil imports thanks to domestic shale oil, Europe stands alone in its overreliance.

The dependence of Russia and the Gulf states on oil revenues, also poses a potential risk to Europe's national security. If these revenues decline through the combination of less exports and lower prices, this might lead to instability and turmoil in these countries, possibly resulting in more terrorist attacks and refugees. Transparency and cooperation are needed for a smooth transition towards a

³⁷ See e.g. *Europe's Energy Union - Foreign Policy Implications for Energy Security, Climate and Competitiveness* (Chatham House 2016)

³⁸ As the IEA states: "Russia's oil industry will require unprecedented levels of investments and technology upgrades, alongside foreign expertise and investments" (IEA 2014).

³⁹ *A Study on Oil Dependency in the EU* (Cambridge Econometrics 2016).

⁴⁰ Second and third largest reserves in the world (IEA 2015).

low carbon world, as pursued through the proposal to establish an International Energy Security Forum.⁴¹

Many studies show that a large reduction in oil consumption is beneficial for the economy and that policies need to be strengthened to realize these benefits.⁴² Reducing Europe's oil dependence until now has not played a role in policy development. The macro economic advantages for Europe of a reduced oil import bill and less harm caused by volatile oil prices add extra weight to reducing oil consumption. Just as the benefits for national security do, which follow from the reduced oil revenues for rogue states and some terrorist groups. So, the benefits of reducing Europe's oil dependence pose additional arguments for a shift towards fuel efficient and electric mobility.

⁴¹ *Memorandum on the Creation of an International Energy Security Forum* (2015), 1st Berlin Global Forum.

⁴² The International Energy Agency concludes that there exists a huge potential for economic viable energy savings also in transport. Under existing policies an estimated two-thirds of this potential will remain unrealized (IEA 2014).

6. Prospects for advocacy

This paper focused thus far on rational argumentation, analyses and statistics. However, effective advocacy appeals in addition to people's emotions. The international workshop combined both sides of this coin.

Because oil dependency is hardly an issue in European public opinion, politics and the press, raising awareness on its risks and costs requires a long breath. Involving e.g. business and military leaders, consumer advocates and former energy ministers can create new and credible voices on this issue. Participants pointed out that there has not been much outreach to these groups in the past.

Several promising routes were identified during the workshop. These need to be further investigated and specified later on:

- The Industry and Energy Committee of the European Parliament is potentially very influential with respect to oil dependency. Economic interests and energy security come together in this Committee, which generally takes conservative stances. If you can convince a conservative committee to worry about energy security, it can have greater credibility than a more liberal, environmentally focused one. Creating awareness among its members can be effective.
- Negative sentiments in East European countries and the Baltic states towards dependency on Russian energy can be a basis for awareness and policies to reduce their oil dependency. Setting up an Eastern European Energy Security think tank might be an effective step to pursue this.
- Existing economic think tanks in Europe hardly deal with the economic costs and risks of oil dependency. Promoting oil dependency on their research agenda seems an effective approach to raise political and public awareness. More insight into the functioning of the world oil market in the long run is urgently needed.
- Similarly, national security think tanks pay only modest attention to the geopolitical risks related to the global oil markets. Both the risk that suppliers will use the global oil market to pursue their interests – once suppliers regained market power – and the other way around, that reduced oil revenues will destabilize states in Europe's neighborhood, deserve more attention. Involving military networks through these think tanks is an additional opportunity.
- Suppliers to the car industry have a business interest in stricter policies stimulating fuel efficient and electric vehicles. Therefore, they might be interested in promoting awareness of Europe's oil dependency in industrial circles.
- Several influential countries without a clear position on oil dependency can be approached and might become interested. Suggested in the workshop were Italy, Spain and Turkey.

A first step to realize these options is to employ a qualified staff person at an existing European NGO with this task. In cooperation with other stakeholders, this person will further explore and investigate the sketched options and start organizing them. Entrepreneurial skills are necessary and a background in national security is preferred for this staff person.

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Annex A: Interviews

Mr. Greg Archer, T&E, Director Clean Vehicles
Mr. Henrik Bliddal, NATO Parliamentary Assembly, Director, Science and Technology Committee
Mr. Pieter Boot, Netherlands Environmental Assessment Agency, head department Climate, Air and Energy
Mr. Jarosław Ćwiek-Karpowicz, Polish Institute of International Affairs (PISM)
Mr. Jos Dings, T&E, Executive Director
Mrs. Manon Dufour, E3G, Head of Brussels Office
Mr. Christian Egenhofer, Senior Fellow Centre for European Policy Studies and Director Energy Climate House
Mr. Abrial Gilbert-d'Halluin, ECF, Associate for Transport
Mr. Adrian Joyce, Secretary General EuroACE and Campaign Director Renovate Europe
Mr. Pete Harrison, ECF, Program Director for Transport
Mr. Krzysztof Książkowski, National Centre for Strategic Studies (NCSS)
Mrs. Coby van der Linde, Director Clingendael International Energy Program
Mr. David Livingston, Carnegie Europe, Associate Energy and Climate Program
Mrs. Agata Loskot-Strachota, Ośrodek Studiów Wschodnich (OSW)
Mr. Jean-Luc di Paola-Galloni, Valeo Group Corporate Vice-President Sustainability and External Affairs
Mr. Julian Popov, ECF Fellow, former Bulgarian Minister of Environment
Mr. Alan Riley, City University London
Mr. Martin Rochell, ECF, Director of the Germany Program
Mr. Andras Rozmer, European External Action Service, Energy Diplomacy
Mrs. Louise van Schaik, Clingendael, Netherlands Institute for International Relations
Mr. Stefan Scheuer, Secretary General the Coalition for Energy Savings
Mr. and Jean-Claude Schwart, European Commission, Directorate-General for Energy, Security of Supply
Mr. Zsolt Tasnádi, European Commission, Directorate-General for Energy, Economic Analysis and Financial Instruments
Mr. Alexandros Yannis, European External Action Service, Energy Diplomacy Coordinator

Annex B: International workshop

Brussels, July 6, 2016

Mr. Robbie Diamond, Securing America's Future Energy, President and CEO
Mr. Henrik Bliddal, NATO Parliamentary Assembly, Director, Science and Technology Committee
Mr. Jos Dings, T&E, Executive Director
Mr. Abrial Gilbert-d'Halluin, ECF, Associate for Transport
Mr. Adrian Joyce, Secretary General EuroACE and Campaign Director Renovate Europe
Mr. Pete Harrison, ECF, Program Director for Transport
Mr. Krzysztof Książkowski, National Centre for Strategic Studies (NCSS)
Mr. Julian Popov, ECF Fellow, former Bulgarian Minister of Environment
Mr. Alan Riley, City University London
Mr. Joe Ryan, Securing America's Future Energy, Executive Vice President
Mrs. Jelena Simjanovic, T&E, Energy Director