OSW
OŚRODEK STUDIÓW WSCHODNICH
IM. MARKA KARPIA
CENTRE FOR EASTERN STUDIES

BETWEEN ENERGY SECURITY AND ENERGY MARKET INTEGRATION

Guidelines for the future development of the EU's external energy policy in Europe's neighbourhood

Zuzanna Brunarska, Aleksandra Jarosiewicz,

Agata Łoskot-Strachota, Iwona Wiśniewska

Content supervision:

Agata Łoskot-Strachota, Olaf Osica

Warsaw, June 2011

© Copyright by Ośrodek Studiów Wschodnich
im. Marka Karpia / Centre for Eastern Studies

Editor

Anna Łabuszewska

Katarzyna Kazimierska

Translation

Anna Kucińska

Co-operation

Nicholas Furnival

Graphic design

Dorota Nowacka

Charts and maps

Wojciech Mańkowski

Publisher

Ośrodek Studiów Wschodnich im. Marka Karpia

Centre for Eastern Studies

Koszykowa 6a

Warsaw, Poland

phone + 48 /22/ 525 80 00

fax: +48 /22/ 525 80 40

osw.waw.pl

ISBN 978-83-62936-02-1

List of contents

BETWEEN ENERGY SECURITY AND ENERGY MARKET INTEGRATION

Guidelines for the future development of the EU's external energy policy in Europe's neighbourhood

Recommendations / **5**

Introduction / **9**

I. The EU's present and future demand for energy in the global context / **11**

II. The state of the EU external energy policy / **14**

III. The EU's external energy policy: lessons learned / **37**

Main conclusions / **61**

Appendix / **63**

Maps / **72**

Recommendations

The EU's external energy policy – an external dimension of the EU common energy market

Energy policy is currently one of the EU's sectoral policies. Its external dimension is aimed at fostering the achievement of sustainability, competitiveness and the security of supply. In the context of relations with third countries the EU external energy policy is at present focused on:
– ensuring stable energy supplies at competitive prices and (often in relation to this)
– seeking to reform the energy markets in neighbouring countries in order to harmonise them with the EU market.

This reconciliation of the effectiveness of external actions with the attainment of the objectives of increased self-sufficiency and energy efficiency remains the key challenge for the EU's external energy policy.

The use of the integrated energy market as an instrument of the EU's external energy policy

Due to difficulties in developing instruments regulating co-operation with several partners (e.g. Russia), the key role in the EU's external energy policy is currently played by the internal market and EU *acquis*. The liberalisation and integration of the internal market is one of the fundamental elements of increasing the EU's energy security and self-sufficiency. It also constitutes a factor affirming the EU's credibility in relations with third countries. The EU's internal regulations enforce the modification of the modes of functioning in the EU for third country companies (mainly producers). In parallel, the export of the EU model of the energy market and standards is becoming a basic tool in collaboration with the EU's neighbours. However, the effectiveness of the internal market as an instru-

ment is restricted by several factors including the divergent interests of EU countries and a part of activities undertaken by European companies.

The definition of priorities and interests with regard to specific partners or energy projects

The priority area for the EU's external energy policy is the promotion of EU regulations and standards in the European neighbourhood. However, the lack of clearly defined specific objectives and interests for the EU tends to be problematic. This can be observed in EU-Ukrainian co-operation. It is not certain how the fading importance of Ukraine as a transit country bears impact on the EU's objectives and the possibilities of undertaking actions in Ukraine. Consequently it is not clear what the EU's specific aims are with regard to the Ukrainian gas sector and the future of the Ukrainian gas network.

The identification of general priorities, the concrete interests and problems of EU partners would therefore be of key importance for the success of the EU's own energy policy. In this context it would be particularly important to answer the question about the possible benefits stemming from energy co-operation with the EU for its partner countries (which could e.g. be the development of solutions for increasing energy efficiency, adapted to the needs of post-Soviet states, or know-how on developing alternative energy sources crucial to energy exporters).

The development of bilateral energy relations as part of the EU's overall political and economic offer

EU bilateral energy relations need to be pursued within broader package agreements. An example of an approach is the inclusion of energy questions in the overall framework for economic co-operation with the EU (as seen in the cases of North African countries and Ukraine). In the long term perspective, however, the effectiveness of cooperation is contingent

upon the attractiveness of the EU's economic and political offer. Without a tailored, country specific approach and flexible instruments backed by consistent foreign policy, the EU will not achieve its energy policy objectives.

The strengthening and promotion of the Energy Community

The European Commission (EC) is now seeking to extend the multilateral co-operation framework to the greatest number of countries possible from the EU's neighbourhood. Such a single framework would form a cohesive basis for the achievement of the EU's objectives. The Energy Community seems to be the best instrument EU has to reform and integrate its neighbours' markets.

However, both the Energy Community and the whole concept of exporting the EU's energy market model have their limits. Given the ideas to extend the Energy Community to more Eastern and Southern EU neighbours, it is necessary to increase the effectiveness of this instrument *inter alia* by defining a limited number of targets with regard to each member, adjusting action plans to the specifics of each country and developing ways to enforce commitments.

The involvement of the EC and the Member States

The EU's energy policy often falls victim to EU member states favouring bilateral agreements with external partners to the detriment of the interests of the EU as a whole. No sudden change in this may be expected. Therefore the EU should set up common rules and a legal and institutional framework which would encourage the cohesion of a global EU policy oriented towards key partners or strategic projects and which would clearly specify the EC's role within it. Currently, the attempt to elaborate such rules is visible in the EC's engagement in developing the implementation rules for the gas liberalisation directives with regard to third

country companies and the EC's participation in bilateral gas negotiations between new Member States and Russia. It would be important to institutionalise the formula for consultations and the exchange of information between states, companies (holding negotiations with suppliers) and the EC. The provision from the conclusion of the European Council of February 2011 that urges EU Member States to inform the EC about both new and existing energy agreements with third countries may prove to mark the beginning of such an institutionalisation[1].

[1] See: European Council Conclusions on Energy, February 2011.

Introduction

For many years the European Union has been improving the efficient use of energy resources and yet the demand for energy in the EU continues to increase. When Europe belonged to one of the world's key energy markets with relatively easy access to energy resources, growing energy needs were not seen as a source of concern. Today, however, as the competition for energy resources is intensifying and the global position of the EU energy market is being challenged by growing economies in the developing countries, above all China and India, the EU needs to adopt bold policies to guarantee the sustainable supply of energy. The goal of establishing a common and effective EU external energy policy based on the principles of the internal energy market, i.e. competitiveness and transparency, is therefore becoming a necessity.

In the coming decades the EU's external energy policy will be developed against the background of the ongoing changes on the global energy market. The larger availability of LNG or the soaring production of non-conventional gas in the US may fundamentally change the landscape of the European gas market in the coming decade. The unstable situation in North Africa and part of the countries in the Middle East (and, earlier, the Russian-Ukrainian gas crisis) raise in turn essential questions about the EU's future relations with suppliers; the integrity of EU policies and instruments in the neighbourhood as well as the cohesion and functionality of the internal EU market (including crisis prevention instruments). Furthermore, the collapse of the Fukushima nuclear power plant and the resultant fears over nuclear energy may lead to some deeper changes with regard to the EU strategy of a low-emission economy, e.g. turning away from nuclear power and opting for gas instead.

Thus far EU energy policy has been to a large extent shaped by lessons learned, which is especially visible in crisis situations (as is proven by the developments following the Russian-Ukrainian gas crises of 2006 and 2009 or the impact of the catastrophe at the Fukushima nuclear power

plant). A lot of the instruments which were being created or the applied modes of operation have to date been case-specific; sometimes they were created as precedents.
This report argues the EU needs to develop a fully-fledged external energy policy; i.e. a common, coherent, strategic approach that build bridges between the interests and needs of the EU integrated energy market on the one hand and supplier countries on the other. The geographical area of the present analysis focuses upon the EU neighbourhood: countries of the new Partnership for Democracy and Shared Prosperity and of the Eastern Partnership, the Western Balkans, and Russia.

This analysis consists of four sections:
The first portrays the position and role of the EU energy market on a global scale. The second section focuses on internal factors shaping the process of the development of the EU's external energy policy. The third section illustrates the EU's relations with its external partners: Russia as a strategic partner; Ukraine, as the most important transit country and the key Eastern partner, the Southern Corridor as the priority infrastructure project outside the EU; and North Africa as an example of current serious challenges the EU is facing in its external energy policy. The final part of this report recapitulates the most important challenges.

I. The EU's present and future demand for energy in the global context

The EU is one of the leading energy consumers worldwide[2] and one of the more attractive energy markets (due to its relative internal stability and predictability and still favourable prices). The EU's primary energy production has been falling, which is caused among other factors by the combination of finite and depleting indigenous resources with a restrictive environmental policy hampering coal, alternative gas, and offshore oil exploitation. An increasing part of the EU's energy demand is therefore met by external supplies. The EU is the key importer of energy resources globally[3] and its import dependency has been growing in recent years (in the case of oil it reached over 90%, with natural gas – approximately 64%, and with coal – 40%[4]. Given the strong geographical concentration of energy resources, the EU remains dependent on several sources of supply. The key source of oil is the Middle East and OPEC countries but the largest single oil supplier to the EU is Russia[5]. Russia is also the largest supplier of natural gas to the EU, before Norway and Algeria[6] and coal (Columbia and the Republic of South Africa follow Russia[7]) and the second largest – after Australia and before Canada – source of uranium[8]. The EU's

[2] In 2009 the EU was the second – after the US – gas and oil consumer, the fourth consumer of coal and the greatest consumer of uranium worldwide; data quoted from the IEA statistics of 2010 and the World Nuclear Association.

[3] In 2009 it was the largest gas and coal importer and the second oil importer after the US; data quoted from IEA statistics of 2010 and the BP Statistical Review of World Energy 2010.

[4] Data from the publication of the EC, EU Energy Trends to 2030 – update 2009.

[5] According to the EU Market Observatory, in 2010 OPEC countries accounted for approximately 35% of EU imports, whereas approximately 30% of oil was imported from Russia.

[6] According to Eurostat, in 2009 33% of gas imported by the EU came from Russia, 29% from Norway, 15% from Algeria.

[7] In 2009 the three countries accounted for 64% of external supplies of coal according to the Directorate-General for Energy (European Commission).

[8] According to the IAEA, in 2009 these three countries accounted for over 60% of EU imports (Australia – 22%, Russia – 20% and Canada –19%).

neighbourhood is hence vital as a source of gas – approximately 75% of EU imports came from this area; and oil – approximately 55% of imports.

The rate of growth in the EU primary energy demand has been limited for several years by the policy of enhancing energy efficiency, the increased use of renewable energy sources (RES) and the policy of climate protection and restrictions on GHG emissions (the 20/20/20 targets). This has been contributing to a gradual fall in the EU's demand for oil and coal. Due to the changes occurring on the European and global markets (non-conventional sources of hydrocarbons and a greater availability of LNG) forecasts regarding the development of the EU's demand for energy and its import needs in the coming decades vary widely. The most cautious scenarios assume a continuation of the current trends and foresee a further decline in EU demand for coal and oil by 2030 (respectively by 9% and 8%)[9], a relatively steady demand for nuclear energy and RES and an increase by as much as over 11–19% in the demand for natural gas[10]. On the other hand, the boldest scenarios for the EU that envisage intensified efforts to limit emissions and increased energy efficiency predict a decisive decrease in the EU's demand for hydrocarbons within the next two decades – by up to 60% in the case of coal, by over 30% in the case of oil and by over 10% in the case of natural gas, accompanied by a sharp rise in the demand for nuclear energy (by approximately 44%) and above all for RES (by up to 180%)[11]. For more information see Appendix.

The decline in the EU demand (or, as in the case of gas – the decline in the speed of the growth of demand) will be accompanied by an even more rapid decrease in the primary energy production, which will contribute to both an increased import dependency of the EU[12] and in certain cases – the volume of imports. This will be particularly visible in the case of

[9] See the EC, Baseline Scenario with EU Energy Trends to 2030 – update 2009.

[10] See IEA Current Policy Scenario, WEO 2010.

[11] See IEA 450 Scenario, WEO 2010.

[12] According to the EC (2009), the dependence on imports will rise in the case of oil to up to 100%, gas – up to approximately 80% and coal – up to approximately 50%.

natural gas, the import of which may grow by 2030 by as much as 24% in comparison to current volumes[13]. The EU's increased dependence on external suppliers will trigger a larger dependence of its economy on changes on global markets, the behaviour of the major energy exporters and a lower resilience to possible disturbances.

With regard to their growing production and export potential, the Middle East and the Caspian region will become more important for the EU energy market. In the coming decades both regions are set to experience a considerable rise in oil production (with Saudi Arabia as the world's leader and in the Caspian region, Kazakhstan) and gas production (Iran, Iraq, Qatar and Turkmenistan)[14]. Also an increase in Russian gas production will be visible[15]. In the case of oil and coal, the importance of Russia on the global scale and most likely in Europe will be diminishing[16], although the country will remain one of the vital suppliers of these resources.

In parallel, in recent years a greater demand for energy in other parts of the world has been witnessed, above all in the fast-growing Asian economies. The overall demand for oil in China and India in 2030 may even be twice as large as oil consumption in the EU according to IEA predictions, their overall demand for gas may grow several times (from 2.5 to 3.5 times)[17]. This means that the EU's relative importance as an energy consumer will be falling globally, whereas the competition for access to energy resources will become increasingly intensified.

[13] See the EC, Baseline Scenario, 2009.

[14] See IEA WEO 2010, New Policy Scenario predicts a rise in production in the Middle East by 400 billion m^3 by 2030, of which one third will be exported. The production in the Caspian region will grow by approximately 155 billion m^3, of which over 50% will be produced by Turkmenistan.

[15] See IEA WEO 2010, New Policy Scenario predicts an increase in Russia's production by approximately 140 billion m^3 by 2030. If reforms on the internal market are conducted in parallel, the export potential will grow significantly.

[16] In particular a decline in oil production in Russia is forecast (mainly in the regions that provide a resource base for exports to Europe) and the development of alternative export directions (including China).

[17] See IEA WEO 2010.

II. The state of the EU external energy policy

1. The debate over the policy and its objectives

Although the EU market will remain one of the most important globally, a relative decline in its significance and an insufficient degree of consolidation will make access to energy resources more difficult for the EU. This presents a challenge particularly in the context of an increasing dependence on external supplies and is one of the main factors that shape EU energy policy. The policy, especially its external dimension, is to a large extent unspecified, except for its widely recognised fundamental objective of securing a sustainable and stable supply of energy to European recipients. Being *in statu nascendi* EU energy policy is now to a large degree a process without a single institutional and legal framework. It involves a number of sectoral policies: environmental, competition, infrastructural. Its specific objectives are a derivative of the EU's economic, political, social and territorial agenda. They are hence neither unequivocally defined nor mutually exclusive.

The process of developing EU energy policy was usually gaining momentum in the aftermath of energy crises. In the 1970s and 1980s these were oil crises[18], in 1999–2000 – a sharp increase of oil prices[19], in 2006 – the Russian-Ukrainian gas crisis[20]; in 2009 – a similar, more serious crisis occurred, compounded by changes in the gas market (decreased demand, oversupply, the greater availability of LNG, the prospects of non-conven-

[18] They sparked a debate over the common energy policy and resulted in the resolution of the Council (1986) that defined the objectives of the EU energy policy.

[19] See Green Paper, Towards a European strategy for the security of energy supply, November 2000, http://ec.europa.eu/energy/green-paper-energy-supply/doc/green_paper_energy_supply_en.pdf

[20] See Green Paper, A European Strategy for Sustainable, Competitive and Secure Energy, March 2006, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0105:FIN:EN:PDF and Conclusions of the Council of March 2007.

tional gas). It seems however that in the last decade[21] both the discussion and concrete measures taken to develop the EU's energy policy have been gaining more sustainability and have been less directly linked with external events, although crises still provide an impetus for more decisive actions[22].

For several years the vision of an energy policy geared towards three overall groups of objectives – competitiveness, security of the energy supply, and sustainable development (also environmentally-friendly)[23] – was prevalent in the EU. EU Member States have a relatively good understanding of the course of action that should be taken in order to attain the objectives set for the EU's internal energy policy. Despite fundamental differences in specific issues, it is widely accepted that there is a need for a single – liberalised and integrated – energy market meeting efficiency, sustainability and environmental standards. It is certain that more dilemmas are provoked by questions about the shape and direction of the EU's external energy policy and the ways in which it can ensure secure and stable energy supplies at competitive prices.

The vision of the priority objectives of the EU's external energy policy has been modified over recent years. In 2006–2008 the major challenges for the stability of the energy supply to the EU were mainly seen in the behaviour of third countries or companies originating in them[24]. Large prominence was therefore given to energy security and the security of supply and these were defined as the primary objective of the EU's external ener-

[21] The publication of the Green Paper of 2000 by the EC can be recognised as the beginning of the current debate over the EU's energy policy. The debate has been rather animated since 2006.

[22] This is proven, among other measures, by actions taken with regard to the meltdown in the nuclear power plant in Fukushima in Japan.

[23] They are explicitly formulated in the Green Paper of the EC of 2006 and affirmed, among other provisions, in Art. 194 of the Treaty of Lisbon.

[24] The key factors for the external dimension of the EU's energy policy were for example identified in J. Solana's paper S160/06 'An External Energy Policy to Serve Europe's Interests' as follows: a) growing dependence on external imports of energy resources; b) political insta-

gy policy[25] to be achieved *inter alia* by diversifying sources and routes of supply. However, for several years now the notion of energy security has been devalued and diluted. Although it remains important as the EU's import dependency is growing (particularly in the context of the gas crisis of 2009 and the unstable situation in North Africa and the Middle East), increased attention has been given to the process of intensifying competition on the energy market[26].

Both in the debate at the EU level and in a part of the Member States[27], emphasis is placed on the EU's declining importance as a global energy consumer, which may result in more difficult access to resources and the decreasing competitiveness of the EU's economy. Enhancing the attractiveness of the EU market as an energy consumer would consequently be one of the vital objectives of the EU's energy policy which would require complementary and cohesive actions both externally and on the internal market[28].

In addition, an important factor that influences the process of the development of the energy policy is the repercussions of the economic crisis

bility in a part of the essential areas of the production of resources; c) the risk that emerged after the gas crisis of January 2006 and consisted in using supplies as a political instrument; d) the risk linked to the fact that bodies from third countries actively involved in the internal market did not comply with EU competition rules.

[25] In the Green Paper (2006) an increased collective external energy security for the EU was the first of the objectives set for the external energy policy. Energy security has also been the key question raised in the EU Energy Security and Solidarity Action Plan. Second Strategic Energy Review, 2008 http://ec.europa.eu/energy/strategies/2008/2008_11_ser2_en.htm

[26] Featured in Energy 2020 – A strategy for competitive, sustainable and secure energy, November 2010, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0639:FIN:EN:PDF and the discussions that preceded it.

[27] This topic is an important element of the current debate over energy policy in Germany, compare: A. Kwiatkowska-Drożdż, The Deficit of Natural Resources Deficit: the implications for German politics, CES, Warsaw, 2011 and the publication quoted there: http://www.peak-oil.com/download/Peak%20Oil.%20Sicherheitspolitische%20Implikationen%20knapper%20Ressourcen%2011082010.pdf

[28] Including the cohesion of actions within the whole EU energy policy and the ability to effectively attain external objectives while pursuing the policy of increasing energy self-sufficiency (through greater energy efficiency and the share of renewable sources of energy in the energy mix.

on global energy markets, including the EU market. In the current debate proposals for improving and strengthening the EU's relations with its leading suppliers, including Russia, are being put forward. Other issues being discussed are possible ways of increasing the EU's attractiveness and the role on the regional and global markets and the promotion, through external activity within the framework of the EU energy policy, of the interests of the EU and its particular Member States (e.g. by selling green technologies or energy efficiency know-how)[29]. In parallel, an increased coordination of actions within the EU energy policy has been proposed[30], which can be facilitated by the completion of the internal energy market and consequently a harmonisation of the energy interests of Member States. Another position, extreme although not infrequent, views as necessary the limitation of the EU's external energy policy and generally the EU's geopolitical ambitions in this sphere. It advocates instead a larger focus on the internal market which could become even greater (if not the only) objective and instrument of EU activity in the energy field[31].
Divergences between particular Member States regarding the establishment of the common external energy policy and differing views and definitions of its priorities are also noticeable. The dividing line between 'new' and 'old' EU Member States is quite clear. For the 'new' ones the establishment of this policy is significant as – in their opinion – it would serve to a large extent the achievement of short-term and medium-term objectives of increasing energy security, above all by limiting unilateral dependence on the supply of energy resources from Russia. On the other hand, a substantial part of 'old' Member States has quite an ambivalent approach to extending the competences of the EU in this sphere. In their view, the focus of the EU's external activities in the energy field should

[29] "Energy 2020" and debates in a section of Member States.

[30] Both as part of "Energy 2020" and also in the concept promoted by J. Buzek and J. Delors – the establishment of a European community of energy, modelled on the community of coal and steel, which would strengthen the unity of the EU.

[31] Compare: G. Zachmann, Memo to the New Commissioner for Energy, Breugel Policy Contribution, 2009 or P. Noel, Europe's external policy: Unrealistic yet unneeded, EuropesWorld, 2008.

be on preventing the decline in competitiveness of EU economies and the promotion of their know-how and exports. In order to achieve this objective it is necessary to strengthen partnerships with producer countries, above all with Russia (also in the context of the events in North Africa and the Middle East from the beginning of 2011).

2. The EU post-Lisbon energy policy

Before the modifications to the Treaty on European Union (TEU) and the Treaty on the functioning of the European Union (TFEU) introduced by the Treaty of Lisbon (TL) came into force the provisions of primary law concerning energy issues were overly incomplete and vague (see Table 1). The separate chapter on energy appeared only in the TL[32] and formed the basis for establishing the secondary law and the EU's policy in this area. Energy belongs to the realm of the shared competences between the Union and the Members States[33]. Although the measures necessary to achieve the objectives of EU'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[34]. Hence, EU's energy policy remains an intergouvernemntal process. The EC's role in developing and pursuing the energy policy energy is a derivative of the Union competences in the integration of the common market, trans-european networks[35] and environment[36].

[32] Chapter XXI of the Treaty on the functioning of the European Union.
[33] Art. 4 (2) of the Treaty on the functioning of the European Union.
[34] Art. 194 (2) of the Treaty on the functioning of the European Union.
[35] Art. 171 of the Treaty on the functioning of the European Union.
[36] Art. 191 of the Treaty on the functioning of the European Union.

The objectives of the EU energy policy stated in the TFEU are compatible with the three objectives identified in the European debate and enumerated inter alia in the Green Paper of 2006 (see above) and are aimed at ensuring the sustainability of the energy market and security of supply to the EU, supporting increased use of RES and expanding the interconnections of energy networks. The provisions of the Treaty also narrow down the possibility of achieving these objectives to the framework of the "establishing or functioning of the internal market while taking into account the need for safeguarding and improving the environment" (for more, see Table 1). The adopted approach implies therefore, that the EU should use its internal market *acquis* as a basis for external action towards third parties in order to promote the EU rules and mechanisms (related to the market, energy and environment).

As the Treaty of Lisbon does not provide a single legislative, institutional and political framework to puruse EU's energy policy objectives, including the issue of securing supply from third countries, it leaves ample room for both the EC and the Members States to frame the policy and discuss ways of its implementation; e.g. the notion of "security of energy supply" is subject to various interpretations.

It is obvious that EU Member States have a desire for advanced autonomy in this regard and want to limit the EC's impact on the energy policy, particularly on energy co-operation with third countries.

In practice, with the EU internal energy market and the growing dependence of its processes on external factors, the EC is becoming increasingly active in external energy policy in using most of all the internal market-related (also financial) instruments it controls. It is not only the Directorate-General for Energy that is responsible for energy issues but also other directorates such as DG Trade, DG Competition, DG Enlargement that have an impact upon the shape of the energy policy.

Table 1

1. The timeline of the most important changes in primary law that bore impact on the EU's energy policy

■ The Treaty of Rome establishing the European Economic Community (EEC), which was signed in 1957 and entered into force in 1958, and the adjoined Protocol (14) concerning imports into the European Community of petroleum products refined in the Netherlands Antilles (1962) – introduced energy issues into the treaty-based law but it did not represent a significant step in the development of the energy policy.

■ The Single European Act (SEA) – entered into force 1987 – stipulated that one of the Community's objectives relating to the environment should be "to ensure a prudent and rational utilisation of natural resources". In the protocol attached to the SEA a reservation was made that actions undertaken by the Community cannot interfere with its member states' national policies focused on the exploitation of energy resources.

■ The Treaty on European Union (the Maastricht Treaty, 1993) extended the range of the Communities' competences by the measures aimed at "encouraging the establishment and development of trans-European networks" and "resources in the area of energy". Also a declaration was attached to the Treaty that expressed the necessity of considering the introduction of energy questions into the primary law, compare below.

■ The Treaty of Amsterdam (1999), did not include separate regulations regarding energy.

■ The Treaty of Lisbon (2010) introduced for the first time a separate chapter devoted to energy issues and the "solidarity clause".

2. The most important provisions introduced by the Treaty on European Union (TEU) regarding the energy policy

Article 21 (…)

2. The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to: (…)

(f) help develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development;

3. The provisions of the Treaty on the Functioning of the European Union regarding the energy policy

Article 4

1. The Union shall share competence with the Member States where the Treaties confer on it a competence which does not relate to the areas referred to in Articles 3 and 6.

2. Shared competence between the Union and the Member States applies in the following principal areas: (…)
(e) environment; (…)
(h) trans-European networks;
(i) energy;

Title XX ENVIRONMENT

Article 191

1. Union policy on the environment shall contribute to pursuit of the following objectives:
(…)

– prudent and rational utilisation of natural resources,
– promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.
(…)

Article 192

1. The European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Union in order to achieve the objectives referred to in Article 191.

2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 114, the Council acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt:
(…)
(c) measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.

The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, may make the ordinary legislative procedure applicable to the matters referred to in the first subparagraph.

3. General action programmes setting out priority objectives to be attained shall be adopted by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions. The measures necessary for the implementation of these pro-

grammes shall be adopted under the terms of paragraph 1 or 2, as the case may be.

4. Without prejudice to certain measures adopted by the Union, the Member States shall finance and implement the environment policy.

5. Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, such measure shall lay down appropriate provisions in the form of:
– temporary derogations, and/or
– financial support from the Cohesion Fund set up pursuant to Article 177.

Title XVI TRANS-EUROPEAN NETWORKS

Article 170

1. (…) the Union shall contribute to the establishment and development of trans-European networks in the areas of transport, telecommunications and energy infrastructures.

2. Within the framework of a system of open and competitive markets, action by the Union shall aim at promoting the interconnection and interoperability of national networks as well as access to such networks. It shall take account in particular of the need to link island, landlocked and peripheral regions with the central regions of the Union.

Article 171

1. In order to achieve the objectives referred to in Article 170, the Union:
– shall establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks; these guidelines shall identify projects of common interest,

– shall implement any measures that may prove necessary to ensure the interoperability of the networks, in particular in the field of technical standardisation,
– may support projects of common interest supported by Member States, which are identified in the framework of the guidelines referred to in the first indent, particularly through feasibility studies, loan guarantees or interest-rate subsidies; the Union may also contribute, through the Cohesion Fund set up pursuant to Article 177, to the financing of specific projects in Member States in the area of transport infrastructure.
The Union's activities shall take into account the potential economic viability of the projects.

2. Member States shall, in liaison with the Commission, coordinate among themselves the policies pursued at national level which may have a significant impact on the achievement of the objectives referred to in Article 170. The Commission may, in close cooperation with the Member State, take any useful initiative to promote such coordination.

3. The Union may decide to cooperate with third countries to promote projects of mutual interest and to ensure the interoperability of networks.

Article 172

The guidelines and other measures referred to in Article 171(1) shall be adopted by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions. Guidelines and projects of common interest which relate to the territory of a Member State shall require the approval of the Member State concerned.

Title XXI ENERGY

Article 194

1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:
(a) ensure the functioning of the energy market;
(b) ensure security of energy supply in the Union;
(c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and
(d) promote the interconnection of energy networks.

2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.
Such measures shall 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, without prejudice to Article 192(2)(c).

3. By way of derogation from paragraph 2, the Council, acting in accordance with a special legislative procedure, shall unanimously and after consulting the European Parliament, establish the measures referred to therein when they are primarily of a fiscal nature.

Declaration on Article 194 of the Treaty on the Functioning of the European Union

The Conference believes that Article 194 does not affect the right of the Member States to take the necessary measures to ensure their energy supply under the conditions provided for in Article 347.

Article 347

Member States shall consult each other with a view to taking together the steps needed to prevent the functioning of the internal market being affected by measures which a Member State may be called upon to take in the event of serious internal disturbances affecting the maintenance of law and order, in the event of war, serious international tension constituting a threat of war, or in order to carry out obligations it has accepted for the purpose of maintaining peace and international security.

4. The most important EU directives regarding the energy policy (energy security)

- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC
- Directive 2005/89/CE of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard the security of the supply of electricity and infrastructure investment
- Regulation 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard the security of gas supplies and repealing Council Directive 2004/67/EC
- Directive 2003/55/CE of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC
- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC

■ Directive 2003/54/EC of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 96/92/EC

■ Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products (harmonising EU law with the provisions of the International Energy Agency).

3. The instruments and their recipients

The instrumentation employed by the EU in its external energy policy is complex, which is in part caused by a blurred division of competences and a multitude of bodies involved in energy-related relations with third countries. Only a section of these instruments exclusively concerns energy issues, e.g. the Energy Charter or energy dialogues with third countries. More of them provide a broader framework for economic co-operation, including energy co-operation, e.g. the Partnership for Democracy and Shared Prosperity, the Eastern Partnership. Certain initiatives overlap, e.g. the initiatives regarding energy in the countries covered by the Eastern Partnership overlap with earlier ones undertaken under the Baku Initiative or Black Sea Synergy. Part of the existing instruments of energy co-operation constitute a single framework for a number of countries (e.g. the Energy Community), others are partner-specific. Recently the EU has been increasingly leaning towards multilateral tools of co-operation with third countries as instruments establishing consistent frameworks for the EU's external activity. Nevertheless, bilateral instruments remain quite an essential element of co-operation, particularly in relations with the EU's key partners. It remains to be seen which of these instruments will prove to be more productive.

The "Energy 2020"[37] strategy and other related documents distinguish three groups of recipients of the EU's external energy policy: key partners, neighbouring countries and the remaining countries – all the international environment subject to EU global energy initiatives. The key partners are essential suppliers of resources and transit countries like Russia, Ukraine and Turkey. This group could also be enlarged to encompass key global consumers (e.g. the US, China). The neighbouring countries in this classification are Eastern and Southern states in the European Neighbourhood Policy but to a certain extent also the Western Balkan states which are aspiring for EU membership. In this perspective Ukraine is both a neighbouring country and an EU key partner, which generates a certain ambiguity with regard to the priority objectives and instruments. In parallel, this type of classification can be interpreted as granting privileges to a group of EU partners without clarifying the exact criteria.

In its relations with key partners the EU is seeking to improve and strengthen co-operation above all in order to ensure stable energy supplies at competitive prices. The key instrument for this group seems to be strong bilateral ties that allow package discussions about the most important energy issues – e.g. within the framework of subsequently established energy dialogues with Russia, China and Norway[38]. The effectiveness of instruments of this type hinges largely on the partners' mutual openness to co-operation, the convergence of objectives and the capacity to develop measures that take the interests of both parties into consideration. An example of dialogue with relatively low effectiveness is the one between the EU and Russia that has been ongoing for over a decade (see below). This dialogue has helped resolve several current problems (e.g. ensuring safety standards for maritime oil transportation in the Baltic Sea) but the attempts

[37] Apart from "Energy 2020" also in the background document for Public Consultation on the External Dimension of the EU Energy Policy http://ec.europa.eu/energy/international/consultations/doc/20110221_consultation_document.pdf)

[38] Or similar, formal frameworks of bilateral co-operation, see Table 2 and for more: http://ec.europa.eu/energy/international/bilateral_cooperation/bilateral_cooperation_en.htm

to develop legally binding rules of energy trading were unsuccessful. In contrast, the EU dialogue with Norway is very productive, due in part to large similarities of the energy market regulations, not to mention the same normative and political foundation between the two.

Additionally, a vital factor influencing EU policy in this area is the strong bilateral relations of particular EU Member States with individual producer countries. In cases of convergence between the objectives of the EU and particular Member States, bilateral talks may constitute one of the most important tools that facilitate real co-operation. In other cases they present a serious challenge to the EU's common policy in this sphere.

The main objective of the EU's policy towards broadly defined neighbouring countries is the integration of their energy markets and infrastructure and harmonisation of their regulations with those of the EU. The significance of this policy can be exemplified by the electricity market where the EU, unlike in the case of the oil and gas markets, is not only an importer but also an exporter of energy. In this regard both the compatibility of systems and the establishment of a level playing field for EU companies and firms from neighbouring countries are essential[39]. The basic mode of operation of the EU in its neighbourhood is the export of the EU *acquis communautaire* concerning the energy sphere and also environmental and nuclear security standards. The Energy Community framework is one of the most important instruments being used for this purpose; it has been the EU's intention to extend it to as many countries from its neighbourhood as possible (the Western Balkan states, Moldova and Ukraine are already members of the Energy Community). One of the fundamental challenges for this initiative is the lack of legal and political tools for enforcing commitments on the one hand, and the reluctance of the Energy Community's member states to effectively implement particular provisions[40] on the other. The countries of the widely defined neigh-

[39] See: A Euroelectric response paper, Public Consultation on the External Dimension of the EU Energy Policy, March 2011 and the ENTSO-E response to the Public Consultation on the External Dimension of the EU Energy Policy Brussels, March 2011.

[40] See, among other publications, A. Boodts, La Communaute de l'Energie: un bilan cinq ans apres, Note de l'ifri, 2010, p.15-17.

bourhood also seem to closely tie energy co-operation with the overall terms and objectives of their co-operation with the EU. The communication on the new European Neighbourhood Policy presented on May 25, 2011, reads that energy co-operation „will be stepped up through increased energy policy dialogue aiming at further market integration, improved energy security based on converging regulatory frameworks, including on safety and environmental standards, the development of new partnerships on renewable energy sources and energy efficiency, and nuclear safety." Furthermore, it stresses that in the medium term this could lead to extending the Energy Community Treaty to neighbours not yet party to it or, building on its experience, establishing a complementary "EU-Southern Mediterranean Energy Community"[41]. However whereas in the EU external energy policy the sectoral approach is the most visible, the EU's neighbours have a wider perspective on the attractiveness of the entire EU political offer. The instruments aimed at exporting EU market rules and energy standards are observed to be most effective with the countries that regard the fulfilment of EU expectations in the area of energy as a way of achieving integration perspective.

The EU also initiates a series of global initiatives aimed at increasing energy efficiency, climate protection[42] and the reduction in emissions, nuclear security etc. For many years another important objective for the EU has been the establishment of international rules for the functioning of energy markets (trade in energy resources, transit, investments). The Energy Charter Treaty and its Transit Protocol created for this purpose have proven rather ineffective as many countries that are key to the global and

[41] Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A new response to a changing Neighbourhood, Brussels, 25/05/2011 COM(2011) 303.

[42] One of Brussels' greater successes was negotiating and implementing the Kyoto Protocol. The elaboration of a post-Kyoto document that would allow further reductions in GHG emissions worldwide is much more difficult, particularly in the context of the growing assertiveness of the emerging economies and the related declining effectiveness of multilateral forums.

Table 2. The most important instruments of the EU's external energy policy

Instruments	Partners
a. bilateral	
Energy Dialogue	Brazil (since 2007), China (since 2005), India (since 2004), Iraq (since 2010), Norway (since 2005), Russia (since 2000), Republic of South Africa (since 2008), Ukraine (since 2005), US (since 2006)
Bilateral agreements of various types, regarding overall economic co-operation, including on energy, among them: Partnership and Co-operation Agreements (PCA), Free Trade Agreements, Stabilisation and Association Agreements (SAA)	– EU's economic partners worldwide – PCA were signed with the majority of the member states of the Commonwealth of Independent States (CIS) and they were one of the instruments in the EU neighbourhood policy – Deep and Comprehensive Free Trade Area Agreements – an instrument of the EPS (Eastern partners)
Memoranda of understanding relating to co-operation in the area of energy (MoU)	EU's energy partners, including Ukraine, the states from the Caspian region, MoU was also the first stage of deepened energy relations
b. multilateral	
Energy Community	The closest neighbours: currently its members are the Balkan states, Ukraine, Moldova; the observers include: Turkey, Norway and Georgia
European Neighbourhood and Partnership Instrument	17 states of the neighbourhood
Energy Dialogue	Oil producers grouped together in OPEC
Co-operation with the Gulf Cooperation Council	
Baku Initiative (INOGATE, Traceca)	EU's assistance programme aimed at Turkey and the member states of the CIS (Russia as an observer)

Black Sea Regional Energy Centre (BSREC)	11 states of the Black Sea basin
Caspian Development Corporation (CDC)	Companies from the Caspian region
Union for the Mediterranean, the Barcelona Process	16 states located on the Mediterranean Sea in North Africa, the Middle East and the Balkans
c. global	
Energy Charter	Signed by 51 countries, in reality many countries that are important for the global energy market remain outside the structures of this organisation: Norway, Australia (it has not ratified this document); Russia withdrew from the Energy Charter in 2009. The observers include: Algeria, Canada, China, Egypt, Iran, Kuwait, Nigeria, Oman, Qatar, Saudi Arabia, the United Arab Emirates, the US, Venezuela
Kyoto Protocol	Signed and ratified by 191 states worldwide, except for the US
International Energy Forum (IEF)	It gathers the states which account for approximately 90% of the global demand and supply for gas and oil, including the states with membership in IEA, OPEC; also Brazil, China and Russia
G8 and G20	8 and 20 of the world's richest states

European energy market (including Russia and Norway) have not ratified these documents. The ideas arising for a reform of this instrument or for the replacement of it with a new one[43] are currently rather vague and do not enjoy wide support from Member States. It therefore seems that they will not be easily implemented at least in the near future.

Currently, the key role in relations with external partners and the EU external energy policy is played by the EU's internal market and its regulations. The achievement of the objectives linked to a liberalisation of the energy market, its integration, energy efficiency and the share of RES in the energy mix, etc. by Member States themselves seems in many cases to be the essential instrument in external contacts (mainly on a regional level). An efficiently operating, single EU market may increase energy security (e.g. the effectiveness of emergency response mechanisms), the flexibility of the market, its self-sufficiency, and external credibility. Potentially it can also contribute to a greater attractiveness of the EU for energy suppliers and a greater effectiveness in negotiating the terms of supplies (including prices). At the same time, EU competition law[44] and the liberalisation of the EU gas and electricity markets[45] make it necessary to modify the ways of operation in the EU for third country companies. Finally, the EU's ambition to export its own regulations and standards outside is quite apparent. In relations with neighbouring countries, this objective is explicitly defined (and there are instruments created particularly for this purpose – see above). In contacts with other producers the principle of conditionality is sometimes used and part of the trade exchange made conditional on the compliance with certain standards (as in the example of Russian petroleum products), whereas in the case of other energy consumers, the EU is trying to promote its norms (related *inter alia* to the environment, energy efficiency) on international forums (e.g. in climate negotiations).

[43] See for instance Germany's idea of an Organisation for Security and Co-operation in Europe related to energy, or Russia's concept of new rules of global energy co-operation.
[44] Art. 101 of the Treaty on European Union enforced the adjustment of contracts for gas supplies from third country companies to the rules governing the EU internal market.
[45] At first Directives 2003/54/EC and 2003/55/EC, then replaced by Directives 2009/72/EC and 2009/73/EC.

The EU does not have a single and efficient financial instrument that would enable it to attain its external energy policy objectives or even to implement infrastructure projects in third countries. So far the majority of projects have been financed under multilateral or bilateral co-operation programmes (see Table 3). Energy investments within the EU for the period of 2007–2013 are supported through the Cohesion Fund[46] and the European Regional Development Fund[47]. Trans-European networks (TEN)[48], i.e. infrastructural projects, including those linking the EU with third countries, are funded (besides the Cohesion Fund and the European Regional Development Fund) under a special line in the EU budget (TEN-budget Line) and by the European Investment Bank[49] (EIB). Energy, and the objective of "ensuring the security of external supplies and economic development", is one of the six areas supported by the EIB[50]. Furthermore, the EU has the possibility of using funds from the European Bank for Reconstruction and Development (EBRD), in which EU Member States are majority shareholders, and those of other financial institutions (e.g. the World Bank) in which EU Member States hold shares.

In 2009–2010 in an unprecedented move, the EU decided to back up a series of energy projects (such as RES and CCS projects and cross-border gas and electricity infrastructure) through a one-off instrument – the European Energy Recovery Fund. The selected infrastructural projects related to Caspian gas imports and interconnections with North Africa (see below) then received co-funding possibilities. Towards the end of 2010 the Energy

[46] For issues related to environment and energy efficiency compare: http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2007/publications/guide2007_en.pdf

[47] For energy infrastructure aimed at increasing security, energy efficiency and renewable sources of energy compare: http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2007/feder/ce_1080%282006%29_en.pdf

[48] Initiated in 1992 by the Maastricht Treaty.

[49] http://www.eib.org/

[50] EU Member States are shareholders in the EIB. When deciding to grant a loan to a particular project they are to a large extent guided by political reasons. The Treaty of Lisbon decreased the possibility of Member States influencing the EIB and decisions about financing projects partly or totally outside the EU will be taken by the EIB Board of Governors.

infrastructure package presented by the EC proposed the establishment of a new financial instrument that would allow the support of key energy infrastructure projects, particularly in cases where barriers to their implementation existed (e.g. their implementation would increase competition and thus has not been in interest of companies operating on specific markets).

Table 3. The financial instruments used, among other functions, to achieve the objectives of the EU's external energy policy

Name of instrument	Recipient	Details
European Neighbourhood and Partnership Instrument (earlier TACIS, MEDA) together with the financial mechanism – Neighbourhood Investment Facility	16 states covered by the European Neighbourhood Policy (CIS and the Mediterranean Sea states)	The budget of the whole instrument for 2007–2013 stands at approximately EUR 12 billion.
Development Cooperation Instrument, together with the financial mechanism – Latin America Investment Facility	47 developing states from Latin America, Asia and Central Asia, the Persian Gulf (Iran, Iraq and Yemen) and the Republic of South Africa	The budget of the whole instrument that supports EU programmes aimed at (among other issues) the protection of the environment, the sustainable management of mineral resources and energy saving, for 2007–2013 stands at EUR 16.9 billion.
European Development Fund (EDF)	Development assistance for Africa, Caribbean and Pacific states (ACP) and 21 states and dependent territories of the Member States (Denmark, France, the Netherlands and the UK)	The budget of the whole instrument for 2008–2013 is EUR 22.7 million.

Instrument for Pre-Accession Assistance (earlier PHARE and CARDS)	Aimed at the Western Balkan states – the candidate countries or potential EU member states	The budget of the whole instrument is EUR 12.9 million.
Nuclear Safety Co-operation Instrument (NSCI)	Increase in nuclear security, transportation of supplies and waste transportation, etc. in third countries	The budget for 2007–2013 is EUR 524 million.
European Investment Bank (EIB)	Approximately 140 countries worldwide which signed co-operation agreements with the EU	
European Development and Co-operation Bank/European Bank for Reconstruction and Development (EBRD)	29 states from South-East Europe and the CIS states	

III. The EU's external energy policy: lessons learned

The EU's policy is to a large extent shaped by practice, which is especially visible in crisis situations (as is proven by the developments following the Russian-Ukrainian gas crises of 2006 and 2009 or the impact of the catastrophe at the Fukushima nuclear power plant). A lot of the instruments which were being created or the applied modes of operation have to date been case-specific or partner-specific; sometimes they were created as precedents. Particular attention was paid to relations with: the EU's most important energy partner, Russia; its key transit country, Ukraine; the priority infrastructure project outside the EU, the Southern Corridor; and North Africa – which in the light of the recent events represents an example of current serious challenges for the EU's external energy policy.

1. The EU energy policy towards Russia

Russia is the EU's strategic energy partner. It is the major supplier of energy resources to the EU as the largest supplier of gas, oil and coal (see above and Appendix). Russia is an attractive market for investments by European energy companies[51] and an increasingly important investor on the EU energy market. Last but not least, it is a substantial consumer of resources and the fourth (after China, the US and the EU) emitter of greenhouse gases.

With regard to this, the objective of the EU's policy towards Russia in the area of energy is to establish strong and sustainable bilateral relations based on binding, internationally recognised principles (e.g. those of the

[51] Member States account for approximately 75% of accumulated foreign direct investments (FDI) of which the energy sector is responsible for the majority.

World Trade Organisation, the Energy Charter Treaty) and/or EU internal regulations. Such relations would be aimed at contributing to:
– the competitive, stable and sustainable supply energy based on transparent conditions;
– the development of a clear and non-discriminatory investment climate;
– the development of binding and transparent energy transit rules also with regard to transit through Russian territory;
– the adoption and implementation by Russia of energy efficiency and climate protection standards.
The achievement of the first of these objectives is particularly important given the EU's growing demand for energy (gas) and the intensifying international competition for access to energy (see above).
The key document regulating overall EU-Russian economic co-operation is the Partnership and Co-operation Agreement (PCA) of 1997, corresponding to the agreements concluded with the majority of the EU's Eastern neighbours[52]. The PCA covers, among other issues, energy relations which, according to the document, should be governed by the principles of the Energy Charter Treaty signed by both parties and its Transit Protocol[53]. As Russia did not accept part of the provisions of the Energy Charter, including those on investments and transit, in 2009 Russia in fact withdrew from the Treaty[54]. In parallel, it presented its own project of new principles for international energy cooperation which in many points was convergent with the provisions of the Treaty, except for what Russia considered to be the most controversial issues, such as for instance the transit

[52] The same type of bilateral agreement was signed with the majority of post-Soviet states (except for Belarus and the Baltic states) – compare: Integration or imitation. The EU and its Eastern Neighbours, K. Pełczyńska-Nałęcz, CES, Warsaw 2011.

[53] The Energy Charter Treaty signed in 1994, by Russia – conditionally for 15 years, since 2000 the Transit Protocol has been undergoing negotiation; to a large extent it is unacceptable to Russia. For more information: http://www.encharter.org

[54] In 2009 Russia's temporary signature of the Treaty expired and Russia did not decide to prolong it. At the same time, from the legal point of view the provisions of the Treaty bind Russia with regard to the investments made on Russian territory before the expiration date of the Russian signature (see the decision of the Permanent Court of Arbitration in The Hague of November 2009 concerning Yukos).

of resources[55]. Thus the Russian proposal enabled interpretations that Russia is de facto still involved in the Energy Charter process and the possibility exists for its re-engagement in a modernisation of the Treaty[56]. The EU is still counting on basing energy relations with Russia on the Energy Charter principles which it plans to include in the new basic agreement currently being negotiated with Russia (a 'new PCA')[57].

An important initiative shaping EU-Russian relations also in the energy field is the Partnership for Modernisation. Actions undertaken under this initiative within this framework are aimed, among other issues, at increasing the energy efficiency of the Russian economy, reducing GHG emissions and harmonising technical regulations and standards with those in the EU[58]. Under the Partnership, Russia is hoping to gain access to Western know-how and technologies and this presents its EU partners the opportunity to try to gain concrete benefits related to energy co-operation in exchange[59].

The main platform of EU-Russian energy relations since 2001 has remained the energy dialogue divided into three thematic groups (focused respectively on the energy strategies of the two parties, the development of the market and energy efficiency). Within this framework the discussion is concentrated in particular on controversial issues in mutual relations, including questions linked to the liberalisation of the EU gas market

[55] For more information see: The External Energy Policy of the European Union: European Energy Foreign Policy and the Relationship with Russia, Roland Gotz, IFRI, Paris, 2008 and The Conceptual Approach to the New Legal Framework for Energy Cooperation, April 2009, Official website of The President of Russia.

[56] See e.g. The Energy Charter Revisited, K. Westphal, SWP, March 2011.

[57] The negotiations have been continuing since 2008 and the chances of finalising them in the coming months are remote.

[58] Other priorities of the Partnership include improving the investment climate and the liberalisation of trade. The initiative was launched in June 2010 (formally by the conclusions of the European Council of October 2010) and aimed at fostering EU and Russia co-operation for the purpose of modernising Russia, see: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/114747.pdf

[59] There are ideas to entice Russia into the process of reforming the Energy Charter Treaty by giving it access to technology.

and its consequences for Russia or the exchange of information concerning unexpected changes in the conditions of energy supplies.

Finally, EU *acquis* that influence the functioning of Russian companies (Gazprom) on the EU energy market are an important instrument of the EU external energy policy in relations with Russia and Russian companies[60] (for more information see below).

Fairly intensive relations have not – so far – contributed to a sustainable and systemic regulation of EU-Russian economic co-operation, including energy relations. The talks about bilateral agreements (see the negotiations for the new PCA) and/or possible multilateral ones (despite the experience with the Energy Charter) have been continuing. Reaching a legally binding consensual agreement appears presently rather unrealistic in both cases due to prevailing differences between the parties. However several current specific issues or concrete cases have been resolved. The ongoing energy dialogue has enabled inter alia: an increase in the safety of maritime oil transport in the Baltic Sea by promoting the use of double-hulled tankers[61]; reaching consensus on the maintenance of the long-term gas supply contracts, despite the ongoing EU gas market liberalisation (on condition that their provisions comply with EU law); the adoption of agreeing to the reinforced Early Warning Mechanism (EWM) by both parties in 2009, which was to enable rapid information exchange in case of possible disruptions of electricity, gas and oil supply (currently, however, it is quite hard to clearly assess the effectiveness of this tool).

Internal EU rules seem to have been the most effective instrument in recent years. They have indirectly pushed Russian companies (Gazprom) to a partial change of their modes of functioning on the EU market and have facilitated gradual adjustments of particular gas supply contracts

[60] For more information, see: http://www.osw.waw.pl/pl/publikacje/tydzien-na-wschodzie/2011-03-02/rosja-ue-spor-o-unijny-rynek-gazu

[61] In response to increased exports of Russian oil through the Baltic Sea (via the extended terminal in Primorsk). In 2001 the parties agreed it was necessary to make better use of the existing pipelines. Despite this, in 2009 Russia launched the construction of the terminal in Ust-Luga, which will increase the transport of oil through the Baltic Sea at the expense of pipelines.

to EU competition law and liberalisation directives. The recently implemented third gas directive contains the requirement for all companies operating on the EU market, including foreign ones, to conform to its regulations (the 'third-country' clause). In consequence of the efforts of the EC continued from 2001, and pressure on European companies, the destination clause has been removed from Gazprom's contracts with Italy's ENI, Germany's E.ON Ruhrgas and Austria's OMV and recently also from the contract with Poland's PGNiG. It is, however, important to bear in mind that in most cases in exchange for withdrawing this clause Gazprom succeeded in securing itself new concessions from its European partners (including access to the internal market). Recently, the EC has been insisting on the enforcement of the third party access (TPA) principle with regard to EU energy infrastructure. It resulted *inter alia* in attempts to modify contracts granting Gazprom full capacity of specific infrastructural facilities (for more on this issue, see below).

There are at least two fundamental causes of difficulties in Russia-EU bilateral energy relations. The first one is the essentially divergent energy interests of both parties, the second is the insufficient level of mutual trust compounded by a series of events that have occurred in recent years[62]. The differences are to a large degree natural – the EU's interests are defined by the fact that the EU is both a consumer and importer of energy resources, whereas Russia's objectives are determined by its role of producer and exporter of resources. The economic systems of both sides also differ[63] – the EU has adopted, supported and promoted a liberal market economy and its solutions, whereas Russia is a proponent of the state's strong involvement in the economy. This also results in an organic difficulty in reconciling the EU's objectives of ensuring security of supply with the Russian need for security of demand, which may be illustrated by setbacks in developing the common energy transit rules binding both Russia

[62] Including gas crises and unannounced halts/restrictions in Russian fuel supplies; changes in the conditions of foreign investors operations in the Russian upstream; blocking Russian investments in the EU (e.g. the case of Centrica).

[63] See e.g. the Energy Research Institute of the Russian Academy of Science's response to public Consultations on the EU's external Energy Policy.

and third countries (and the fiasco of the Energy Charter in this area). The changing rules of the game on the EU energy market (due to ongoing liberalisation) or the process – intensively promoted recently by the EU – of extending the Energy Community both present further challenges for Russia and its energy interests. In particular, if Ukraine and Moldova implemented the Energy Community provisions, it would be equal to the adoption by these countries of the EU model of the energy market and thus a rejection of the Russian solutions[64]. The problem of security of demand that Russia is confronted with has been especially visible recently in connection with the changes in the European gas market (oversupply, competition from LNG and, potentially, non-conventional gas) as in the third quarter of 2010 the consumption of Russian gas in the EU fell on average by 25% and in the case of several important consumers by as much as 50%.

Another challenge for the EU in its energy relations with Russia is the character of the external energy policy and, more broadly, the economic policy pursued by Russia. Russia effectively evades legally-binding commitments which would restrict its autonomy. This often results in avoiding entering bilateral or multilateral agreements, their low effectiveness or insufficient enforcement. The PCA now in force is to a large extent asymmetrical – it is less favourable to the EU and its Member States and does not introduce an effective mechanism for resolving EU-Russian disputes, whereas it grants Russia many privileges and large freedom in pursuing its trade policy. The effectiveness of this document is also limited by the fact that Russia is not a WTO member[65] and withdrew from the Energy Charter Treaty. Consequently, there is no legal framework regulating bilateral energy co-operation, along with other areas. This has negative impli-

[64] This can be exemplified by the prospect of these countries joining the ENTSO-E electricity network and system and thus disconnecting from the IPS/UPS unified power system interconnecting CIS territory (including Russia). At the same time the synchronisation of the Russian and EU systems has reached a deadlock.

[65] It is most likely that Russia will not become a member of this organisation by the end of 2011.

cations in case of disruptions or halts of supply[66] because there are no formal tools or provisions to use in such situations. Moreover, there are no clear investment rules for foreign engagement in the Russian energy sector. Moscow prefers to realise the majority of its vital energy-related objectives directly in cooperation with particular Member States by maintaining strong bilateral political and business relations.

Additionally, the EU-Russian energy relations are also to some degree influenced by the directions and effects of Russia's internal energy policy. The strategy for the development of Russian energy reserves and its consequences represent one of the challenges the EU is confronted with. The excessive exploitation of older deposits, frequent modifications of investment programmes for the development of new ones, insufficient funding available for research and exploration activities, an unfavourable and ever-changing investment climate (e.g. with regard to the protection of property rights) – all of these provoke questions about future access to Russian energy resources and the resource base for supplies to Europe (particularly important in the case of oil). These problems may be further exacerbated by the fact that Moscow is seeking to diversify its exports directions (e.g. by strengthening co-operation with China).

2. Case study: the EC's involvement in the gas relations of 'new' Member States with Russia

The recent examples of the EC's involvement in bilateral gas relations of some of 'new' Member States with Russia provide a remarkable illustration of the EU using its internal market regulations to shape its energy relations with Russia. Since 2010 the EC has become engaged in the following cases:

a) Polish-Russian negotiations of the gas agreement: above all in talks concerning the gas transit provisions and the rules of the functioning of

[66] Since 2006 supplies of Russian gas to European recipients have been restrained three times and supplies of oil – twice, including in 2009 despite the advanced work on the Early Warning Mechanism.

the Yamal–Europe gas pipeline (the EC was insisting on the independence of the transmission system operator and guarantees of TPA);
b) Bulgarian-Russia gas relations: consultations of a draft agreement concerning the construction of South Stream[67] and pushing Bulgaria to modify both this agreement and the intergovernmental one between Bulgaria and Russia from 2008[68] so that the TPA principle is enforced with regard to Bulgarian transmission infrastructure;
c) Lithuanian-Russian gas relations: the EC received a formal complaint and request from the Lithuanian government to examine whether Russia's Gazprom could be abusing its dominant market position (and e.g. increasing prices). Simultaneously, further EC engagement in bilateral gas relations is very likely with regard to the development of the implementation mode for the third liberalisation package in Lithuania. In a move aimed primarily at the defence of its energy interests, Lithuania – as one of few Central and Eastern European countries – has decided to implement a full ownership unbundling. This brings it into a clear conflict of interests with Gazprom, which is the co-owner of Lietuvos Dujos, a dominant company on the Lithuanian gas market responsible for the import and distribution of gas and the operator of the whole transmission infrastructure (structure of ownership: E.ON – 38.9%, Gazprom – 37.1%, the remainder – the state treasury). In the situation where full ownership unbundling is implemented, Gazprom (similarly to E.ON) would be forced to sell off part of its Lithuanian assets.
In all three of the above mentioned cases there is much to indicate that it was the initiative of the new Member States (the governments of Poland, Bulgaria and Lithuania) which resulted in an unprecedented[69] involve-

[67] The Bulgarian-Russian agreement concerning the establishment of a joint venture which would be responsible for the construction of the Bulgarian section of the planned South Stream gas pipeline.
[68] Which according to the media guarantees Russia full and unrestricted transit of Russian gas, compare: http://www.platts.com/RSSFeedDetailedNews/RSSFeed/NaturalGas/8178620
[69] The EC has already used EU competition law in order to push for changes in the terms and conditions of the supply of gas (compare below). In this case however it has for the first time institutionally participated in bilateral negotiations with the supplier with the consent of a Member State (possibly at its request).

ment of the EC in their gas relations with Russia. The primary goal of such an engagement was to increase their bargaining power and chances for achieving at least part of the objectives in negotiations with Russia. At the same time it is quite evident that the EC has been willing to become engaged in those negotiations for several reasons. Firstly, it has been trying to ensure the implementation of EU regulations, so far mainly those of the second liberalisation package (including the TPA principle) to new bilateral agreements and to those already existing. Simultaneously, the EC has been working on developing the modes of implementation of the third package provisions[70], including the ownership unbundling of the activities related to the production and sales of gas from its transmission, also in the case of investments by third country companies. This seems specifically vital in the countries where Gazprom, the biggest single supplier of gas, is also co-owner of part of the transmission networks (e.g. in Poland and Lithuania[71]). The way in which the Russian side will adapt to the changing rules of the EU's liberalising gas market may significantly influence the process of developing future EU-Russian gas relations. Furthermore, in becoming involved in what had so far be seen as the sole competence of Member States, the EC sees an opportunity for increasing its role and competences in energy relations with third countries, not only temporarily but also in a more sustainable manner.

Although the EC becoming engaged in the gas relations of the 'new' Member States and Russia did not bring complete success, it had some visible immediate results. The formal conformity of the Polish-Russian gas agreement with EU liberalisation rules (the second package) was guaranteed.

[70] The Directive came into force on 3 March 2011 but the ownership separation will be implemented by 3 March 2012 and the issuing of certificates that authorise operators controlled by companies from third countries to operate on the EU market will be completed by 3 March 2013.

[71] The implementation mode of the third package provisions will also be essential for Estonia which, as Lithuania has, has decided to fully unbundle its gas sector. Also in Estonia Gazprom is the major shareholder in the most important company on the gas market – Eesti Gaas. So far this question has not been subject to public debate, neither was the possibility raised of the EC's involvement in Estonian-Russian bilateral talks.

What is even more important, the case of Poland constituted a precedent of EC direct involvement in a Member State's bilateral gas negotiations with a third country[72]. It is however unclear how the specific provisions of the negotiated agreement will be implemented – what the actual competences the new transmission operator of the Polish section of the Yamal––Europe gas pipeline (Gaz System) are and whether third party access to this pipeline will be feasible in the coming years. Given the date of signing the agreement it was not possible to ensure its compliance with the third liberalisation package[73] and it is not sure how its implementation provisions will affect the Polish-Russian gas deal. The case of Bulgaria and its consultations with the EC led to some adjustments of the agreement related to the construction of South Stream. However, more important from the EC's perspective is the question of the adaptation of the previous Bulgarian-Russian-transit agreement to the EU rules and it seems to remain unresolved. In the case of Lithuania, the mere vision of implementing a full ownership unbundling has become one of the key leverage methods in Vilnius's gas negotiations with Moscow.

All three cases have led to greater exposure in public debate on the importance of harmonising bilateral energy contracts with EU regulations. In consequence, one of the conclusions of the February 2011 EU Energy Council was to call on Member States to inform the EC from 2012 about their existing and new bilateral energy agreements with third countries[74]. Less directly, the above cases have made the question of ownership unbundling and Gazprom's mode of operation on the EU's liberalising market one of the key topics in EU-Russian energy talks[75].

[72] This type of involvement was made possible thanks to the fact that in the case of Poland (as well as Bulgaria) the intergovernmental gas agreement (in parallel to corporate ones) was in operation.

[73] The agreement was signed on 29 October 2010 and the third package came into effect on 3 March 2011 (see above).

[74] See: Conclusions on Energy, European Council 4 February, PCE 026/11, point 11.

[75] See issues discussed in Putin–Barroso talks in Brussels, February 2011: http://www.eubusiness.com/news-eu/russia-energy-gas.8rf/

However the long-term effects of such activities from the EC depend on many factors, including the EC's consistency in implementing the third package (here the case of Lithuania might appear particularly significant) and the actual possibility of institutionalising this type of EU engagement in gas relations with third countries.

Meanwhile, it is not clear if the Member States would decide to grant the EC such competences. A large part of them regards the EC's involvement in bilateral negotiations of gas agreements (the case of Poland) as a violation of their exclusive competences. It is also difficult to determine how durable the willingness of the 'new' Member States is to formally empower the EU with the rights to participate in their gas relations with Russia in a more sustainable and regular manner. It is not clear to what extent their recent openness to EU engagement was not simply driven above all by current interests and the EC's involvement used as an element of the game (which could be e.g. suggested by the case of Bulgaria: the EC's recommendations of changes in the provisions of the main Bulgarian-Russian gas agreement have not thus far received much understanding). Finally, it is not certain how strong the EU's determination will be to implement the liberalising gas market regulations in the case of its strategic relations with Russia. Russia's firm opposition to several provisions of EU directives (and in some cases the support it can receive from European companies) and Russia's importance as a supplier (growing recently due to the unrest in North Africa and the Middle East) may constitute an argument forcing the EC to seek compromise.

3. The EU energy policy towards Ukraine

Ukraine is the most important corridor for gas transit to Europe – in 2009 74% of Russian gas exports to the EU were sent *via* Ukrainian infrastructure[76]. Ukraine also plays quite a substantial role in Russian oil transit to

[76] According to Gazprom's website (http://eng.gazpromquestions.ru/?id=4), over 99 bcm out of 133.8 bcm of Russian gas sent in 2009 to the EU.

the EU (Central Europe). In parallel, this country is one of the most important countries of the EU's neighbourhood, and also one of the most important partners within its neighbourhood policy (ENP).

There seem to be two general objectives of EU energy policy towards Ukraine. On the one hand, co-operation with Ukraine is vital for the stability and sustainability of the gas supply to the EU, and one of Brussels' priorities has been the development of rules contributing to the security of gas transit *via* Ukrainian territory. On the other hand, the shape, structure and efficiency of the large Ukrainian energy market influence the EU market, the investment opportunities for European companies etc. Consequently, the EU's second general objective is to promote the reform of the Ukrainian energy market (gas, coal and electricity sectors) which would lead to it having greater transparency and stability, a limiting of energy intensity, the increased use of RES, the popularisation of nuclear safety or environmental protection standards etc. The ultimate goal of the EU's policy in that respect would be the integration of the Ukrainian market with the EU's.

In its relations with Ukraine, the EU is using both instruments devoted to energy issues per se and those of a more general scope of bilateral economic co-operation or EU neighbourhood policy. The majority of instruments in use serve the realisation of the EU's two above mentioned fundamental energy-related objectives in Ukraine – ensuring transit security and integrating (on an institutional and physical level) the Ukrainian energy market with the EU's.

The basis for EU-Ukrainian bilateral energy relations provides the Memorandum of Understanding in Energy between the EU and Ukraine of December 2005. This document defined roadmaps and rules of co-operation[77]. Currently the *Joint EU-Ukrainian declaration after the Joint EU-Ukraine International Investment Conference on the Modernisation of Ukraine's Gas Transit*

[77] The roadmaps for co-operation include: the safety of operating Ukrainian nuclear power plants; the integration of the gas and electricity markets; the security of the energy supplies and the transit of hydrocarbons; the coal sector; and, added in 2008, energy efficiency and RES. Progress in particular areas is monitored and recorded in reports, see http://ec.europa.eu/energy/international/bilateral_cooperation/ukraine_en.htm

System constitutes an important instrument aimed at enhancing the stability of gas transit through Ukrainian territory and in fact provides the foundation for EU-Ukrainian gas relations. This document sets numerous goals related to the Ukrainian gas market reform and its rapprochement to the EU's model, the achievement of which should lead to support from international financial institutions for the modernisation of Ukrainian gas pipelines. Earlier, the Energy Charter Treaty, ratified by Ukraine in the late 1990s, was aimed at establishing clear transit rules. In fact it failed to do so as became apparent during the subsequent Russian-Ukrainian gas crises[78]. Furthermore, the EU's actual impact on the transit rules in the case of Ukraine is limited by the fact that majority of Russian gas transmitted *via* the Ukrainian network is being contracted by European companies on the EU-Ukrainian border (and not the Russian-Ukrainian one).

The formal framework and directions for the reforms of the Ukrainian energy sectors is set by the Energy Community which Ukraine joined in 2010[79]. According to the Energy Community's provisions, among what Ukraine is committed to are: the adaptation of its energy law to the *acquis communautaire* in the areas of electricity, gas, the environment, competition, and renewable energy[80]. Within a year it should implement the second liberalisation package. In parallel with the general framework of the Energy Community, specific instruments are used for specific issues related to the reforms of particular sectors. In the case of the gas market it is *inter alia* the above mentioned Declaration of March 2009; the Eastern European Energy Efficiency and Environmental Partnership (E5P)[81] is aimed at boosting energy efficiency; co-operation with ENTSO-E serves the purpose of integrating the Ukrainian and EU markets etc.

[78] The lack of Russian ratification of The Charter was one of the key factors limiting its effectiveness in those cases.

[79] Ukraine's membership was officially approved on 1 February 2011.

[80] See http://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation

[81] It is the instrument developed under the Eastern Partnership and it enables the funding of particular projects with the support of the EBRD and the EIB.

EU-Ukrainian energy relations also from EU's perspective should become the focus of a more general document related to bilateral trade co-operation. Energy constitutes one of the chapters of the Deep and Comprehensive Free Trade Area (DCFTA) currently being negotiated between the EU and Ukraine. The EU wants certain rules already implemented in Ukrainian legislation (following *inter alia* Ukraine's membership in the Energy Community) to be included also in the DCFTA, including the conditions of access to deposits and the transit, transportation and pricing rules. The DCFTA would thus become an essential instrument in bilateral energy relations: the energy trade would be subject to a broader legally binding framework, and a formal basis for bilateral energy-related dispute settlement would be formed.

The EU's energy policy towards Ukraine has not thus far succeeded in the full realisation of any of the EU's two fundamental objectives. Work on them is still in progress, though, although with a varying degree of intensity, e.g. the intensity of involvement in transit issues is flagging. The EU's activities have brought many specific results. One of the relatively recent, concrete results is the partial implementation of the EU directive liberalising the gas market into Ukrainian legislation (July 2010), which marks the beginning of a functional unbundling on the Ukrainian gas market, followed by the decision to raise gas prices (summer 2010). At the same time the future of the implementation of EU liberalisation directives in the Ukrainian market remains uncertain. The problems may occur not only in the case of the gas sector (here *inter alia* due to the conditions of contracts for gas supplies) but also the electricity sector (no actual plans for reform of this sector or the implementation of EU environmental norms to power generation)[82]. Furthermore, the Energy Community has no formal instruments enabling it to enforce commitments made by its member states and Ukraine's is not presently particularly

[82] For more on problems related to the implementation of the rules set by the Energy Community Agreement see: Andriy Chubyk, Ukraine and the Energy Community, EaP Community http://www.easternpartnership.org/

eager to legally bind itself on matters related to energy sector; this may be seen in the context of the DCFTA energy chapter negotiations[83].

There are several further challenges to the EU's effectiveness. The ongoing implementation of new European infrastructural projects[84] and a decreased demand in recent years for Russian gas in Europe have resulted in a gradual decrease of Ukraine's transit significance for the EU. In this context the EU's policy related to transit (mainly towards Ukraine) remains largely reactive. There is no real discussion concerning the impact of Ukraine's diminishing transit role on the hierarchy of the EU energy objectives (or, more generally, those of EU foreign policy) in Ukraine or the directions and possibilities of EU activities. The lack of clearly defined specific interests from the EU behind the push for the reform and the integration of the Ukrainian market with the EU's constitutes yet another crucial problem. The identification and formulation of these kinds of interests would focus the EU's actions and resources and enable the achievement of more concrete results. Nor is it clear to what extent the EU is trying to reach some convergence of its energy objectives (even on the most general level) with Kyiv's strategic and short-term goals. In particular, modifications in the latter, being e.g. the result of a difficult economic situation or political shifts, could influence EU capabilities. Additionally, Moscow's foreign energy policy is an important factor influencing the effectiveness of Brussels' energy policy. The contradictions in the EU's and Russia's visions of the development of the Ukrainian energy sector (in both its internal and external dimensions) are visible. In particular, the liberalisation of the Ukrainian electricity and gas markets envisaged by the EU and their integration with the EU's is contrary to Russia's interests (see above).

[83] Despite the fact that the negotiations about the energy system, launched in 2008, were completed in October 2010 Ukraine declared it was willing to renegotiate part of the agreed points.

[84] The construction of the Nord Stream gas pipeline, the Southern Energy Corridor and South Stream projects, the implementation of BTS-2.

4. The Southern Corridor

The Southern Corridor is an example of what is probably the most complicated EU energy infrastructure project in recent years. It has simultaneously been considered, as confirmed by subsequent EU documents[85], as the key project to the EU's external energy policy and the policy on the security of supplies. The Southern Corridor represents an ambitious concept for establishing the fourth – after those in Russia, Norway and Algeria – corridor for gas supplies from the Caspian region, the Middle East and North Africa *via* Turkey and/or the Black Sea to Europe. The corridor would consist of multiple pipelines which already exist (such as BTE), are under construction (as with the partially built Trans-Arab Gas Pipeline or ITGI) or are planned (as with Nabucco, TAP), and possibly also the LNG/CNG infrastructure.

Launching a new corridor and new gas supplies would enable a counterbalancing for falling internal production in Europe. At the same time, the project aims at diversification of both the sources and routes of supplies, above all to the Balkan and Central European states that are heavily dependent on a single supplier, and at enhancing competition on the European gas market. Thus the creation of the Southern Corridor would in fact contribute to limiting the import dependency on Russian gas supplies. Finally, one of the original ideas behind this concept was to establish infrastructure connecting Europe with the country which possesses the world's second largest gas deposits – Iran. This will allow the launching of Iranian gas imports as soon as favourable circumstances arise.

The EU has been giving its political support to the Southern Corridor and its projects. Although it has not officially determined the infrastructure priorities within the concept, particular support for Nabucco is visible as this project is regarded as having the potential to realise the core objectives of the Southern Corridor. Political support from the EU's institutions has been manifested by: a) explicit formal backing visible *inter alia*

[85] See the key energy policy of the European Commission, e.g. strategy Energy 2020 or the Second Strategic Energy Review.

in the clear statement of the strategic importance of the corridor in the key documents related to the EU's energy policy (e.g. strategy Energy 2020 and the infrastructure package of late 2010 where the Southern Corridor is listed as the first of the EU's gas infrastructure priorities); b) promotion and lobbying for the project outside the EU, including in relations with key producers (best exemplified by the early 2011 visit of EC President Jose Manuel Barroso and the Energy Commissioner Gunther Oettinger in Azerbaijan and Turkmenistan); c) the EU's involvement in facilitating the negotiations of third countries/parties related to the key issues for the implementation of the corridor (including negotiations with Turkey on the gas transit conditions or Azeri-Turkmen negotiations concerning the division of disputed gas deposits on the Caspian Sea shelf). Recently, in parallel to the political backing, the EU has been intensifying its efforts to support the project at administrative, financial and technology levels[86]. Some examples of this support are: financial support for Nabucco and ITGI funded in the European Energy Recovery Plan framework[87]; granting partial exemptions from the TPA rule for Nabucco and ITGI[88]; plans for more efficient administrative measures and the establishment of a new financial instrument enabling the EU to co-fund selected energy infrastructure envisaged in the EC proposals included in the 2010 infrastructure package[89]; and finally, the project to create the Caspian Development Corporation (CDC) – a platform for joint European purchases of Caspian gas (mainly from Turkmenistan) thus increasing the EU's credibility and bargaining power in relations with regional producers.

The Southern Corridor and its evolution provide a good illustration of the process of developing the EU's energy policy and its external dimension.

[86] Financial and technological support was announced in the Declaration on the Southern Corridor of the 2009 summit in Prague.

[87] Altogether EUR 300 million, of which two thirds for Nabucco. Earlier, the projects of Southern Corridor received TEN-E grants of up to several million euros.

[88] In fact the Poseidon project that is part of ITGI.

[89] Earlier forms of support consisted *inter alia* of granting under TEN-E the status of project of pan-European interests or appointing a special coordinator primarily to Nabucco and then the whole Southern Corridor, whose main tasks were project promotion and the facilitation of its implementation (the idea was not successful).

The concept of the Southern Corridor itself can be regarded as a specific example of an instrument created by the EU to realise a specific objective. As such it may be treated as a 'test-case' of the current capacities and limitations of EU policy in reference to a specific project and goal.

Until now (May 2011) the EU and all other sides engaged have not only failed to launch the Caspian/Middle Eastern gas export corridor but also failed to succeed in ensuring its construction in the future. None of the Southern Corridor projects have unambiguous guarantees of gas supplies – supply contracts have not been signed[90] and there are no concrete commitments from exporters. And although exports of Azeri gas to Europe are highly probable[91], its volumes are not sufficient to determine the future of the whole project. Securing at least one more gas sourcing is necessary for the implementation of the Southern Corridor. Several issues related to gas transit remain unresolved. There is no full clarity over the terms of transit through Turkey (e.g. final agreement with Azerbaijan is still pending), nor has it been determined how the Turkmen gas could reach the Southern Corridor and Europe and what the feasible options are for gas transmission from Iraq or Iran. Additionally the demand for gas from the Southern Corridor is not certain due to lowered demand, the greater availability of LNG, contracts for Russian gas supplies signed by companies from Central Europe and the Balkans, and competition from Russian infrastructure projects (South Stream). EU internal competition rules may also present a certain challenge as they may happen to constitute barriers for new suppliers entering the market, to decrease the new route's construction profitability (e.g. TPA rules), and to limit the implementation of innovative solutions (e.g. it is not quite clear whether the CDC idea is consistent with EU competition law[92]). The realisation of the Southern Corridor is also undoubtedly hampered by the multitude of parties involved (states, companies etc.), the differing, and often difficult to

[90] Although the TAP project partner EGL had signed a supply contract (for 5.5bcm/y) with an Iranian company, its feasibility in the current political circumstances is questionable.

[91] Contracts for the export of Azeri gas are set to be signed in the coming months of 2011.

[92] See e.g. http://online.wsj.com/article/SB10001424052748704608504576208470146252788.html?mod=djemITPE_h

reconcile, interests of those parties and the difficulties stemming from that in defining common priorities and the coordination of action. This creates the field for the EU acting as a coordinator determining immediate-, short- and long-term priorities, facilitating talks between different actors and working on at least the convergence of partial interests. However, the EU's role and mandate are not clearly defined due to internal factors and the varying Member States' attitudes, also with regard to infrastructure priorities, and the optimal forms of supporting them[93].

At the same time there have been some achievements related to the Southern Corridor. Along with the EU's noticeable strengthening of its institutional commitment to the project, the interest and intensified activity of several Member States is visible which might be illustrated by last year's visit by Chancellor Angela Merkel in the Caspian region or, among others, Bulgarian and Italian talks about Caspian gas imports. In 2010 a basic gas agreement between Azerbaijan and Turkey was reached[94], whose implementation would enable European companies to conclude contracts for the supply of Azeri gas.

Finally, as the implementation of all current Southern Corridor projects is not feasible, discussions concerning the possible merger of two of them (probably ITGI being the most advanced in realisation and Nabucco which corresponds best to the EU's priorities) have started, probably with the EU's informal backing. That could lead to moving the Southern Corridor forward, also by the possibility of the development of a *de facto* new Caspian and Middle Eastern gas export project which would better fit the current conditions, respond to the parties' expectations and be suited to the realisation of at least some of the priority objectives of the Southern Corridor. Additionally, independently of the EU's or Member States' activities, the developments of recent months (the conflicts in North Africa

[93] Part of EU members support and have become involved in the South Stream project which is in competition with the Southern Corridor; other EU countries are opposed to the EU's strong engagement in the Southern Corridor and/or disapprove of the creation of a new financial instrument etc.

[94] Final agreement defining *inter alia* the terms of gas transit is still to be reached and the negotiations are to continue (next round in late May 2011).

and the instability in the Middle East) increase the attractiveness of Caspian energy resources and may constitute a factor encouraging intensified efforts related to the Southern Corridor.

5. The EU energy policy towards North African states

The North African countries are essential partners for the EU in the energy field. In 2009 nearly 20% of the EU's natural gas imports came from North Africa (three quarters of that from Algeria) and approximately 13% of the oil imports (the majority from Libya)[95]. North African countries are also encompassed by the EU neighbourhood policy. Their importance for the EU energy market and the security of the energy supply is particularly visible in the light of the current political crisis in the region. The dynamics of changes and the lack of clear-cut prospects for a sustainable stabilisation of the political situation make it impossible to currently develop the strategic and long-term solutions. The changes also bring into question the adequacy of the recent ideas on a modification of the EU energy policy towards particular North African countries and the region as a whole.

The EU energy policy's aims with regard to North African countries are to a large extent convergent with the overall energy objectives the EU has set for producing and neighbouring countries. On the one hand, there is currently a particularly relevant need to increase security and the sustainability of energy supplies. On the other hand, the EU is seeking to encourage reforms on regional energy markets in order to harmonise, and eventually to integrate them with the EU market and to promote the EU's internal standards. The EU aims equally to accelerate the implementation of infrastructure projects that serve the interests of both parties (including the Arab Gas Pipeline, MEDGAZ and GALSI, electricity interconnections with the EU including the completion of MedRing, the development of

[95] Sources: the EC, EU Market Observatory and Eurostat.

alternative energy sources, particularly solar power through the Mediterranean Solar Plan (which envisages the production of solar energy in the Sahara desert and the construction of suitable interconnections allowing the import of this energy)[96] and non-conventional sources of oil and gas[97].

The EU has not developed a regional energy policy oriented exclusively towards North African countries. Collaboration with this region has constituted part of a wider framework of the EU's policy towards the Mediterranean region (including some of the Middle Eastern countries). Furthermore, Libya has so far remained to a large extent outside the formal framework of EU policy. Brussels launched dialogue with Tripoli in 2004 and since 2008 has been holding talks on the association agreement which has not been completed. In parallel, bilateral relations with particular Member States, especially Italy, Spain and Germany, played a much more important role than co-operation with the EU. The outbreak of the civil war in Libya in 2011 has halted any energy dialogue with the EU.

EU–North African energy relations have been above all pursued in multilateral platforms (EUROMED) and, to a lesser extent, in bilateral co-operation[98]. Energy issues have been incorporated to a substantial degree into a larger framework of economic co-operation in which the EU is now seeking to establish a free trade area. The key role in EU policy towards North Africa, also in the energy field, has been played by the Euro-Mediterranean Partnership of 1995 (EUROMED, i.e. the Barcelona Process), whose mechanisms are used in current initiatives: the EU Neighbourhood Policy; and above all, the Union for the Mediterranean of 2008.

[96] The objectives according to the EUROMED Energy Action Plan 2008–2013 adopted in Limasol in 2007 and supplemented by the Union for the Mediterranean summit in 2008.

[97] Exploring the potential – mainly in Morocco and Tunisia, searching for the possibilities of oil shale extraction is one of the pillars of co-operation under MED-EMIP (Euro Mediterranean Energy Market Integration Project).

[98] It is illustrated inter alia by the fact that energy issues are to a small extent reflected in Action Plans signed by the EU with specific countries from the region.

Within EUROMED, the EUROMED Energy Partnership[99] was established and it is aimed, *inter alia*, at defining and modifying the objectives of EU's energy policy towards the region and the implementation of the policy. This partnership remains the basic and actually the only EU-North African energy co-operation platform. Key projects of this partnership can be co-funded by EU financial instruments. EIB funding under the Euro-Mediterranean Investment and Partnership Facility has appeared to be the most productive form of financial support[100]. Funds from the European Neighbourhood Policy Instrument, the InfraMed Infrastructure Fund[101], are equally available. The EU and North Africa's "projects of common interest" (e.g. the Arab Gas Pipeline) have also been financed under the European Energy Recovery Plan.

The most tangible effects of the EU energy policy in North Africa can be seen at the infrastructure level – the already implemented and planned gas and electricity interconnections with the region. The EU is actively financially supporting "projects of common interest". For instance the EIB[102] co-funded the construction of LNG terminals and power plants in Egypt, and several gas pipelines (e.g. in Tunisia, the one linking Egypt and Jordan and the TransMed gas pipeline Algeria–Tunisia–Spain). However, despite ongoing work, the key electricity project, MedRing, has not been completed yet and the intraregional interconnections remain insufficient.

Financial support is also visible in the case of the development of alternative energy resources, which has recently become a priority of the EU's

[99] Within EUROMED have been set up among others: the EUROMED Ministerial Conference on Energy, the Rome Euro-Mediterranean Energy Platform (REMEP) and the Mediterranean Working Group on Electricity and Natural Gas Regulation.

[100] In 2001–2007 approximately EUR 2 billion were allocated to the projects of the Energy Partnership (mainly gas and electricity interconnections), whereas direct funding under another instrument in the same period, MEDA, reached EUR 55 million.

[101] Established in 2010 by French Caisse des Dépôts, Moroccan Caisse de Dépôt et de Gestion, Egyptian EFG Hermes, Italian Cassa Depositi e Prestiti and the EIB.

[102] The value of the EIB's funding allocated to the energy sector of EUROMED countries amounted to EUR 3.7 billion in 2002–2009.

engagement in the region. The EIB co-finances, among other initiatives, the Mediterranean Solar Plan[103]. At the same time, the effectiveness of EU activities related to the development of solar power generation is limited. Although North African countries show interest in increasing their solar energy potential and securing EU funds for this purpose, they are not ready to subsidise this sector themselves e.g. by creating legal regulations modelled on EU solutions. Moreover, it is uncertain whether the objectives of the EU and the countries from the region are convergent in this area. The EU is largely interested in enabling power generation mainly for export (to the EU), whereas North African countries need electricity mostly for internal use, particularly in the context of rapidly growing regional consumption[104] and the still poor electrification of some areas.

Energy co-operation between the EU and North Africa, including financial support for specific projects, contributes to the systematically growing involvement of European companies in the region. This facilitates the functioning of those already present and attracts new investments (e.g. to the Desertec Industrial Initiative).

The least effective remains the EU policy of reforming regional energy markets, realised mainly by exporting the EU's internal electricity and gas market regulations. Particularly visible in relations with Algeria and Egypt, it is caused *inter alia* by weaknesses of EU solutions. North African countries regard EU market regulations as excessive, and point to cases where the EU Member States themselves challenge some of the EU's internal rules[105].

A relative weakness in the EU policy oriented towards North Africa was the lack of a cohesive and comprehensive political and economic offer. The effectiveness of the EU's activities was further undermined by the fact that a part of Member States was engaged in intensive bilateral energy co-operation with particular North African countries.

[103] http://www.eib.org/attachments/country/femip_energy_en.pdf

[104] See e.g. the presentation Electricity interconnection project between North Africa and Europe: Challenges and opportunities, M. Benini, A. L'Abbate, RSE SpA, Italy, SECURE Regional Stakeholders Meeting, Cairo 2010.

[105] For instance Germany's opposition to full ownership unbundling.

Although energy relations with the region can mostly be positively evaluated, it is not clear to what extent the concrete successes in the energy sphere can be directly attributed to EU activities. Many link them rather to market forces, geographical proximity, the attractiveness of the EU market[106] and the historical and political context. This latter seems to be indicated by the lack of sufficient instruments of influence that Brussels could use in the region (manifested in the acceptance of authoritarian regimes and the abandonment of the otherwise used principle of conditionality); and the attitude of scepticism towards the EU and its solutions regarding the energy market displayed by particular North African countries (especially Algeria and Egypt). This would mean in fact negligible possibilities for the EU to shape its bilateral energy relations, to promote its objectives and to influence the mode of involvement for particular EU countries and European companies in North Africa.

A substantial setback for the EU's energy policy has been the lack of understanding for or the failure to take into consideration the needs of its partners from the region. This may be proven by the rather complicated EU-Algerian relations and in fact by the EU's withdrawal from the strategic energy partnership proposed by Algeria due to completely different visions of its objectives and formula (the EU wanted a harmonisation of legislation, whereas Algeria expected a comprehensive partnership agreement[107]). Another example is the above mentioned misunderstanding of regional needs in the case of the EU's priority projects for the development of solar energy.

[106] See e.g. Energising EU-Algerian relations, Hakim Darbouche, Oxford Institute for Energy Studies in: The Maghreb Center Journal, Issue 1, 2010.

[107] Algeria offered the EU such a partnership after the first Russian-Ukrainian gas crisis in 2006, for more information see H. Darbouche, *op. cit.* Strategic energy partnership is presently again on the table – see e.g. http://www.elmoudjahid.com/en/actualites/781

Main conclusions

1. The EU's external energy policy is undergoing the process of being defined. Its emergence and eventual shape are not determined yet, in part due to the fact that there are many stakeholders involved in the process (the EU institutions, Member States and energy companies) whose interests are not always convergent.

2. Predictability and prices still determine the attractiveness of the EU energy market for supplier countries despite growing competition from the emerging economies, particularly China and India. In order to fully exploit this asset in relations with producers and to secure the best possible terms and conditions of supply, a greater consolidation of the EU market and a coordination of the activities of particular actors, both internally and externally, is necessary.

3. The EU's energy market *acquis* appears as one of the most important and efficient instruments of influence with regard to energy exporters and investors from third countries. Among the benefits brought about by the application of EU rules is a gradual removal of destination clauses from contracts for the supply of gas.

4. The EU's external energy policy has two main objectives. The first one is to ensure a sustainable, stable and cost-effective energy supply. The second is to promote energy market integration and regulatory convergence with neighbouring countries (often but not always this supports the achievement of the first objective). However, in order to improve its effectiveness, the EU's external energy policy needs to be seen in a broader economic and political context.

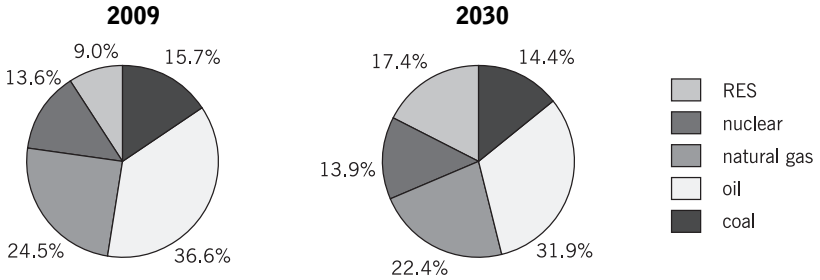
5. The promotion of energy market integration and regulatory convergence in Europe's neighbourhood depend on the nature of the relationship with third countries. In realising this objective the EU was most successful with candidate countries (in the Western Balkans through the Energy

Community) where the successes were connected with the incorporation of energy *acquis* into the accession process. The effectiveness of such measures towards non-accession countries is, however, not certain. Energy dialog needs to be accompanied with an attractive political and economic offer.

6. The Arab spring of 2011 offers a unique opportunity to for the EU to reassess and adjust its policy towards European neighbours. In the context of the communication on the new European Neighbourhood Policy presented on May 25, 2011, energy will remain one of the key areas of cooperation and at the same time a litmus test for EU's ability to build genuine partnerships in the neighbourhood.

APPENDIX

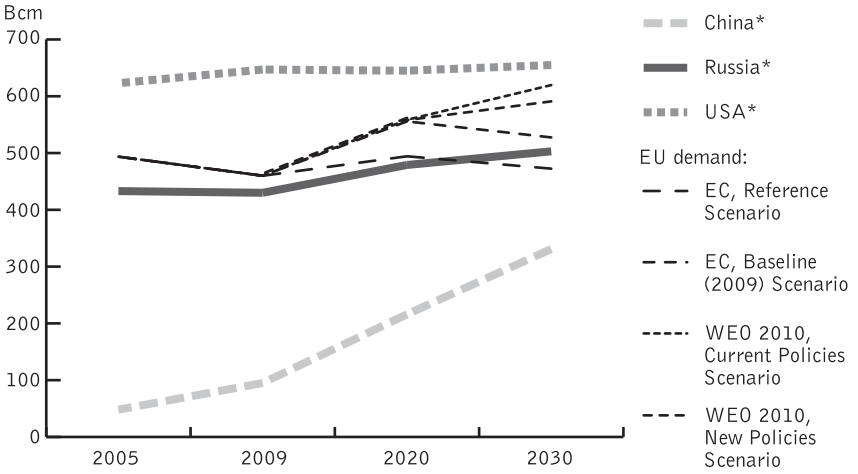
1. EU energy mix



Sources: Eurostat; European Commission, EU Energy Trends to 2030; 2009 update, Reference Scenario

2. Dynamics of demand for energy resources of EU and other major global energy consumers (2005–2030)

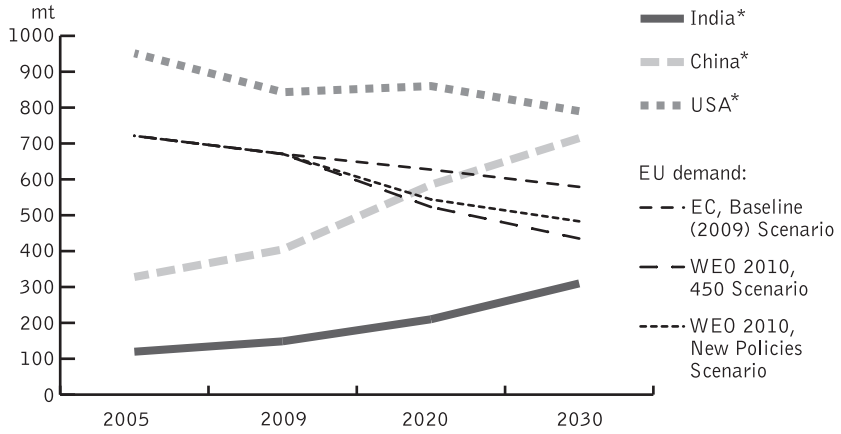
a. Dynamics of natural gas demand



* WEO, new Policies Scenario

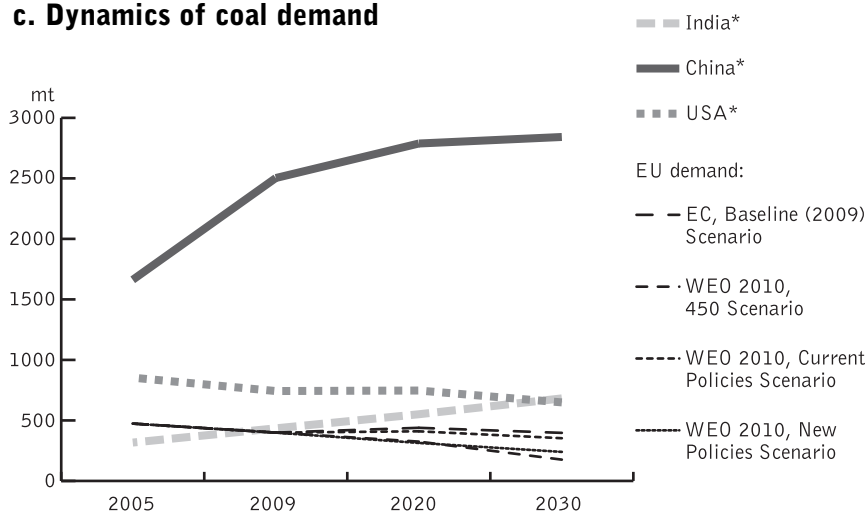
Sources: IEA, World Energy Outlook 2010; IEA, Natural Gas Information; European Commission, EU Energy Trends to 2030; 2009 update; BP Statistical Review of World Energy 2010

b. Dynamics of oil demand



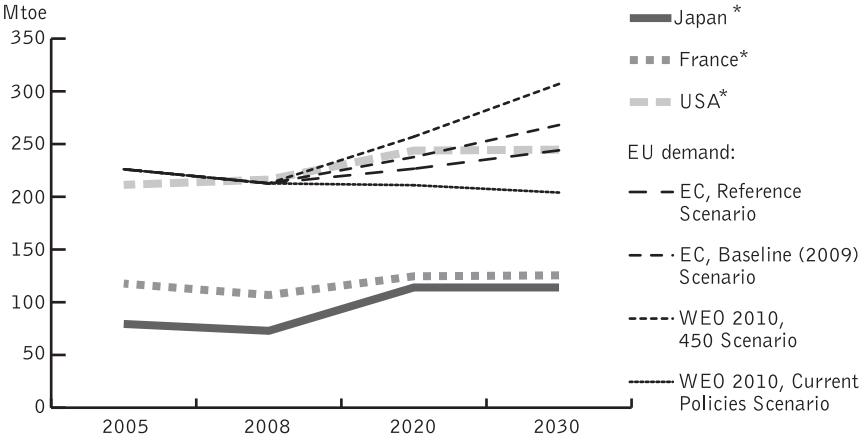
* WEO 2010, new Policies Scenario
Sources: IEA, World Energy Outlook 2010; European Commission, EU Energy Trends to 2030; 2009 update; BP Statistical Review of World Energy 2010

c. Dynamics of coal demand



* WEO 2010, new Policies Scenario
Sources: IEA, World Energy Outlook 2010; IEA, Coal Information; European Commission, EU Energy Trends to 2030; 2009 update; BP Statistical Review of World Energy 2010

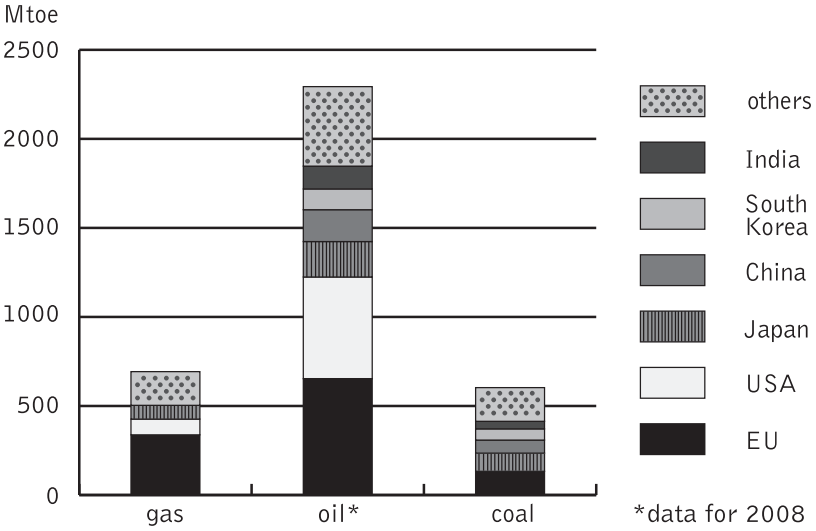
d. Dynamics of demand for nuclear energy



* WEO 2010, new Policies Scenario

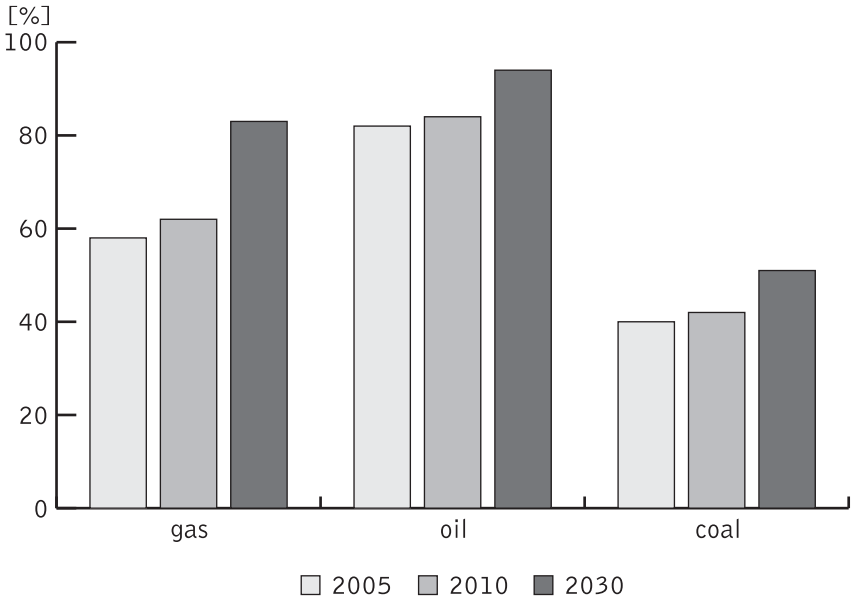
Sources: IEA, World Energy Outlook 2010; European Commission, EU Energy Trends to 2030; 2009 update; BP Statistical Review of World Energy 2010

3. EU and other major energy resources importers, 2009



Sources: IEA

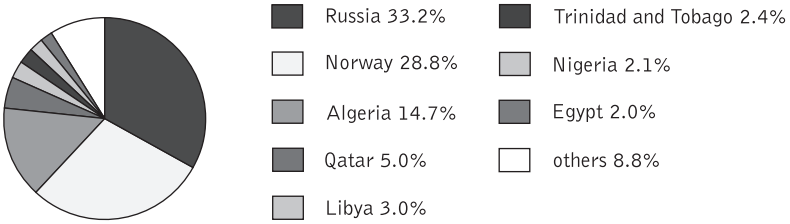
4. EU import dependence



Sources: IEA

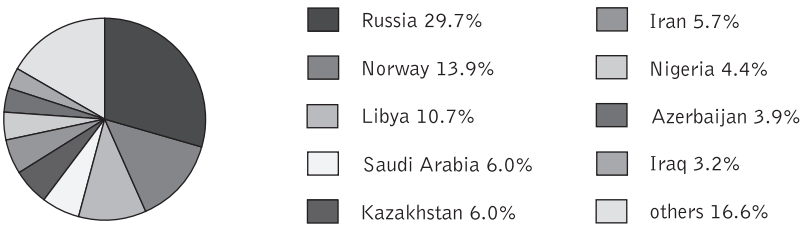
5. EU energy supply sources

a) Natural gas supply sources, 2009 (%)



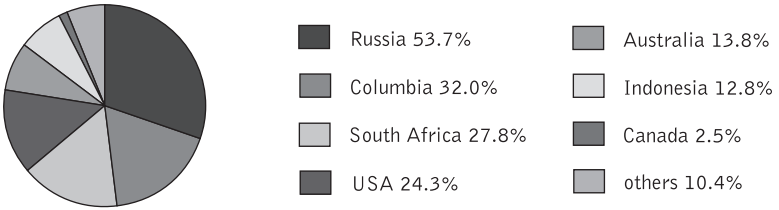
Sources: Eurostat (epp.eurostat.ec.europa.eu/)

b) Oil supply sources, 2010 (%)



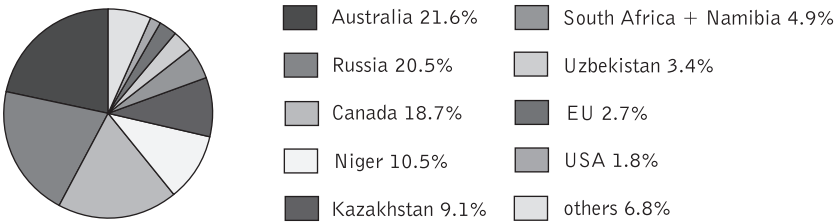
Sources: EC, DG Energy, Market Observatory, Oil (ec.europa.eu/energy/observatory/oil)

c) Coal* supply sources, 2009 (%)



* Hard coal (99% of lignite consumed in EU is satisfied by domestic production)
Source: EC, DG Energy

d) Uranium supply sources, 2009 (%)



Sources: Euratom Supply Agency Annual Report 2009

6. Major global oil producers in 2009 and 2030

	output				reserves	
	2009		2030		2009	
	mt	%	mt	%	bln t	%
Russia	510	13	460	10	10.2	5.6
Saudi Arabia	480	12	660	14	36.3	20
USA	370	9	345	7	3.4	1.9
Iran	215	5	255	5	18.9	10.4
China	190	5	155	3	2	1.1
Canada	160	4	430	9	28.5	15.7
Mexico	150	4	125	3	1.6	0.9
UAE	140	3	195	4	13	7.2
Brazil	100	2	260	6	1.8	1
Kuwait	125	3	165	4	14	7.7
Venezuela	120	3	170	4	24.8	13.7
Iraq	125	3	305	7	15.5	8.5
....						
Kazakhstan	78	2	191	4	39.8	3
Azerbaijan	51	1	54	1	7	0.5

Sources: BP Statistical review of world energy 2010 (for 2009); IEA WEO 2010 (New Policies Scenario for 2030 forecasts)

7. Major global natural gas producers in 2009 and 2030

	output				reserves	
	2009		2030		2009	
	bcm	%	bcm	%	tcm	%
USA	593.7	19	591	14	6.9	3.7
Russia	589.2	19	772	18	44.4	23.7
Canada	159	5	180	4	1.8	0.9
Iran	144	5	210	5	29.6	15.8
Norway	105.9	3	119	3	2.1	1.1
China	90.4	3	167	4	2.5	1.3
Qatar	89.4	3	213	5	25.4	13.5
Algeria	81.4	3	152	4	4.5	2.4
Netherlands	78.7	3	38.2	1	1.1	0.6
Indonesia	75.9	2	102	2	3.2	1.7
Saudi Arabia	71.1	2	113	3	7.9	4.2
Malaysia	69.8	2	82	2	2.4	1.3
....						
Uzbekistan	66.3	2	69	2	1.7	0.9
Turkmenistan	39	1	119	3	8.1	4.3
Kazakhstan	35.6	1	61	1	1.8	1
Azerbaijan	16.7	1	49	1	1.3	0.7

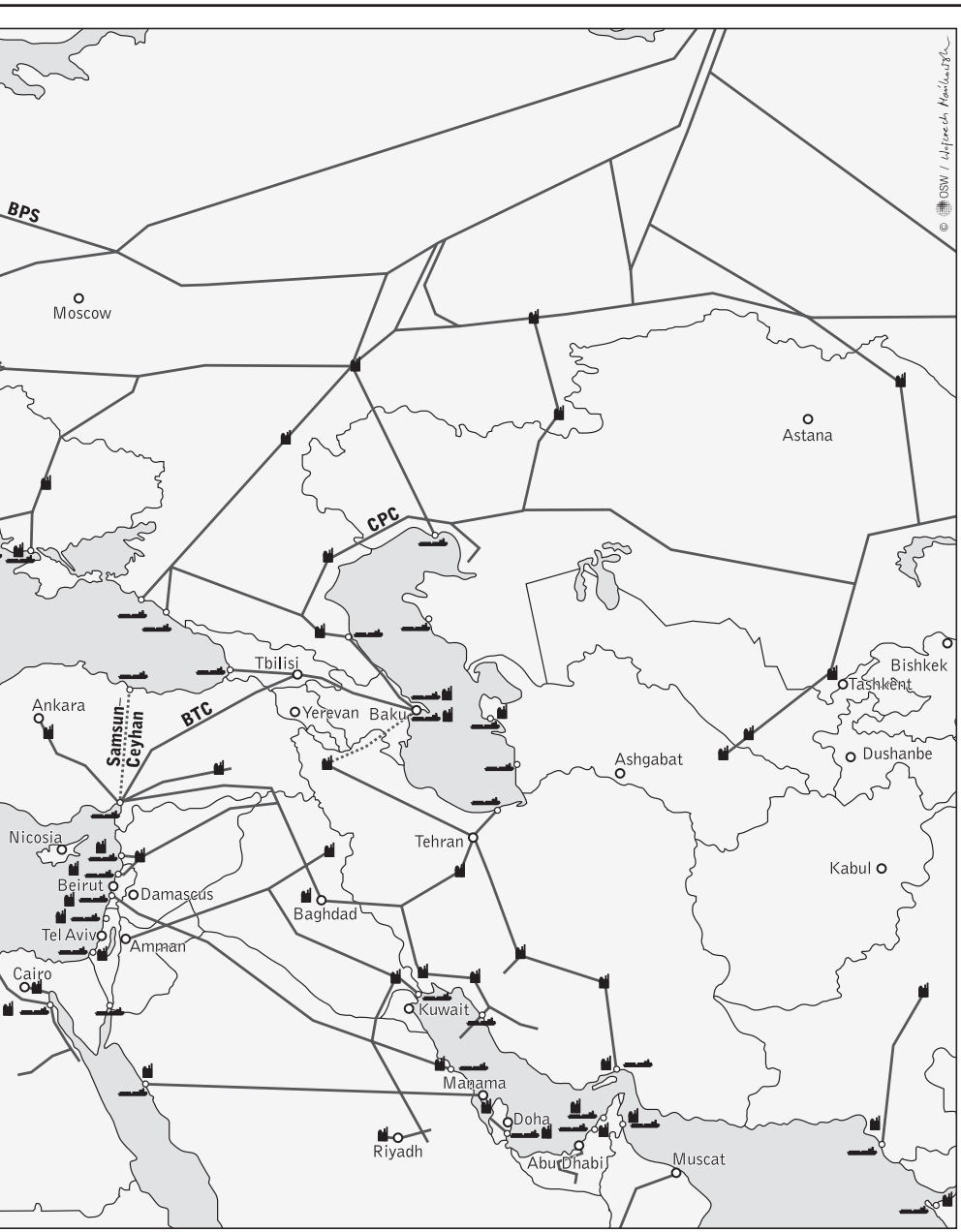
Sources: BP Statistical review of world energy 2010 (for 2009); IEA WEO 2010 (New Policies Scenario for 2030 forecasts)

8. Major global coal producers in 2009 and 2030

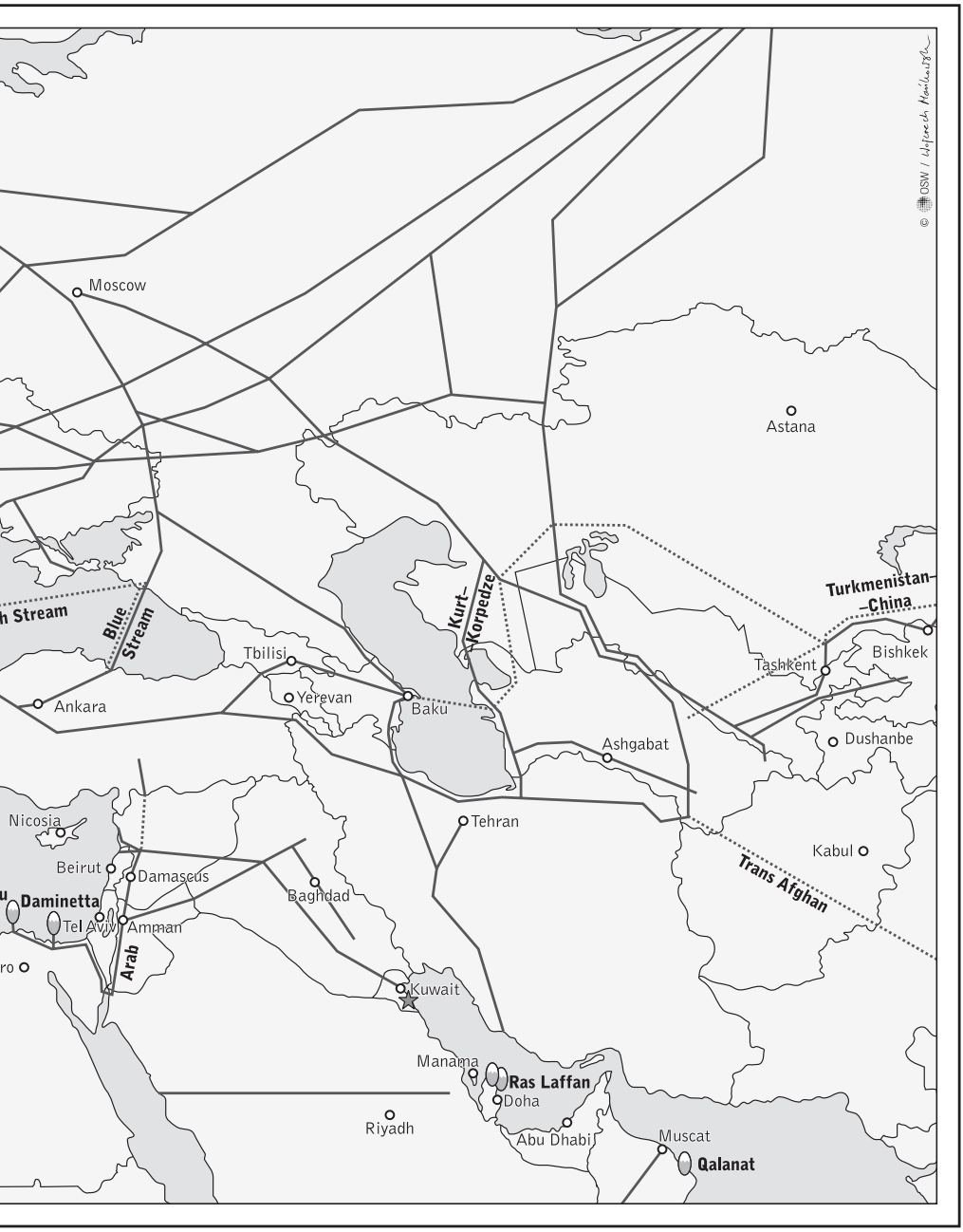
	output				reserves	
	2009		2030		2009	
	mt	%	mt	%	bln t	%
China	2413.3	45	2839	50	114.5	13.9
USA	805.4	15	670	12	238.3	28.8
India	371.2	7	461	8	58.6	7.1
Australia	360.8	7	389	7	76.2	9.2
Indonesia	278.4	5	376	7	4.3	0.5
South Africa	213.5	4	206	4	30.4	3.7
Russia	253.2	5	197	3	157	19.0
Kazakhstan	68.1	1		0	31.3	3.8
Poland	86.2	2	75	1	7.5	0.9
Columbia	72.7	1	89	2	6.8	0.8

Sources: BP Statistical review of world energy 2010 (for 2009); IEA WEO 2010 (New Policies Scenario for 2030 forecasts)

Map 1. Main routes of oil supplies to Europe – existing and planned infrastructure


BPS
Moscow
Astana
CPC
Tbilisi
Ankara
Samsun
Ceyhan
BTC
Yerevan
Baku
Bishkek
Tashkent
Ashgabat
Dushanbe
Nicosia
Tehran
Kabul
Beirut
Damascus
Baghdad
Tel Aviv
Amman
Cairo
Kuwait
Manama
Doha
Riyadh
Abu Dhabi
Muscat
© OSW / Ulfprech Manlewitz

Map 2. Main routes of natural gas supplies to Europe – existing and planned infrastructure


© OSW / Wojciech Konarski
Moscow
Astana
Turkmenistan–China
Kurt-Korpedze
Blue Stream
h Stream
Tbilisi
Yerevan
Baku
Ankara
Bishkek
Tashkent
Dushanbe
Ashgabat
Tehran
Nicosia
Beirut
Damascus
Baghdad
Daminetta
Tel Aviv
Amman
Arab
Kabul
Trans Afghan
Kuwait
Manama
Ras Laffan
Doha
Riyadh
Abu Dhabi
Muscat
Qalanat

Centre for Eastern Studies

The Centre for Eastern Studies (OSW) is an expert institution that monitors and analyses the political, economic and social situation in Russia, the Caucasus, Central Asia, Central and Eastern Europe, Germany and the Balkans.

OSW was founded in 1990 and is fully financed from the state budget. In 2006 the Centre was named in honour of its founder Marek Karp.

Our studies are addressed mainly to state institutions including the Chancellery of the President of the Republic of Poland, the Chancellery of the Prime Minister, ministries and government agencies, as well as the Sejm and Senate of the Republic of Poland.

We are particularly active in discussions concerning the European Union's Eastern Policy, challenges to energy security, as well as the political, social and economic transformation processes in countries neighbouring Poland.

Many of our publications are available online at: osw.waw.pl

PUBLICATION SERIES

■ **Policy Briefs** – short analytical studies presenting the opinions of our experts on current policy issues, published in Polish and in English.

■ **OSW Studies** – large analytical studies devoted to major political, social and economic processes taking place in OSW's area of interest; published in Polish and in English.

■ **OSW Report** – presentations of the results of research projects carried out by OSW.

OSW NEWSLETTERS

■ **EASTWEEK** – a weekly analytical newsletter on Russia, Ukraine, Belarus, the Caucasus and Central Asia (published in Polish as **Tydzień na Wschodzie**).

■ **CEWEEKLY** (Central European Weekly) – a weekly analytical newsletter on the Baltic States, Central Europe, Germany and the Balkans (published in Polish as **BEST OSW**).

■ **OSW Commentary** – a series of more in-depth analyses concerning the most important events and developments in our area of interest (published in Polish as **Komentarze OSW**).

OSW newsletters are available free of charge, subject to subscription