FOREIGN POLICY

An External Energy Strategy for the EU

Sami Andoura Senior Research Fellow, Notre Europe

Agata Hinc "Low Emission Economy" Project Leader, demosEUROPA

A comprehensive European energy policy has to be viewed in a global context. In the energy field, the European Union faces both internal challenges and external constraints. Internally, the EU is committed, in the short term, to the completion of single internal energy markets for gas and electricity, and in the medium to long term to the transition towards a low-carbon economy supported by "near-zero carbon" energy systems. However, despite a spectacular increase in regulatory activity aimed at creating a unified energy market, barely half of the work needed to create a single energy market has been done. Deregulation has been achieved, but there is a long way to go before the various national markets become parts of a homogeneous block.

On the external front, the EU is facing an international energy landscape marked by an unprecedented level of uncertainty. Whereas the international energy competition has become increasingly political, the European Union has remained impotent, with very limited powers in external energy policy. Until now, the external strategic dimension of energy policy remains mainly the prerogative of EU Member States. As a consequence, the European Union struggles to develop a common strategy regarding the selection of different energy sources and geographic origins.

Global energy context and new specific challenges: Unprecedented uncertainty

The future international and European energy context up until 2030 is defined as an "unprecedented era of uncertainty"[1]. The factors of uncertainty that constrain the evolution of the international and European energy context mostly include:

- the global economic downturn because of the strong correlations between economic activity, energy supply and demand, and energy investments in key areas;
- the outcome of current international negotiations regarding climate change, which might have a direct impact on energy systems, i.e. the choice of primary energy sources, on new energy infrastructures and technologies required, etc.;
- the potential impact that "breakthrough" technologies (such as Carbon Capture and Storage or exploration of shale gas) might have on both energy supply and demand.

The external constraints facing the EU remain to be extremely important for the development of a comprehensive European energy policy. To start with, fossil fuel energy will continue to dominate the energy mix across Europe (78%), with oil (36%) and natural gas (24%), followed by coal (18%), nuclear energy (13%) and renewable energies (8%)[2]. In the meantime, fossil fuel resources are becoming increasingly rare, and particularly in the European Union where the production of primary energy has fallen considerably in the last 10 years.

International competition for these fossil fuel resources has become a major issue for the years to come. Increased consumption of increasingly rare fossil energy has stoked major international rivalries. The great economic powers, emerging or otherwise (United States, China, India, EU, etc.), have committed themselves to unprecedented strategies of energy-source diversification. This competition has a particular impact on the European Union with its increasing dependence on external sources for its energy supply. Whereas the Union already imported 53% of its energy needs in 2007 with a relative 83% of its needs in oil and 60% in natural gas, its imports should reach 59% in 2030 with 93% for its oil and 83% for its natural gas needs.

Moreover, Europe's strong feeling of insecurity has drastically increased due to the successive gas disputes between Ukraine and Russia directly affecting the EU. Such increasing vulnerability and dependence of EU Member States are causing intra-European rivalries. Various competing and controversial projects for oil and gas pipelines along diversified supply routes have emerged, such as Nabucco versus South Stream.

In this unstable energy landscape of the twenty-first century, the pressing question for the European Union is how it can deal with the numerous and wide energy issues it faces today and in the future on an unprecedented scale. Indeed, the future of energy policy has become a major long-term geopolitical, economic, environmental and social concern for Europe as a whole.

Current status and achievements during the last Trio Presidency

While major progress has been achieved since 2005 in developing a common internal energy policy, it has been much more complicated to develop a common approach to the external

1. International Energy Agency, *World Energy Outlook (WEO)* 2010, November 2010

2. For all data, see European Commission, "EU Energy and Transport in figures", June 2010; and *World Energy Outlook, op. cit.*, 2010

dimension. The Union remains incapable of speaking with a single voice on the international energy scene. This prevents it from exerting its full economic, commercial and political weight in its relations with producer and transit countries. Hence, the basic principle – strongly defended in the Council – is that the energy policy should fully respect Member States' choice of energy mix and sovereignty over primary energy sources (Art. 194 TFUE).

Initiatives taken at the EU level regarding the external dimension of energy policy remain, so far, mainly in the form of soft law, i.e. communications, statements of objectives and declaratory resolutions adopted by the EU Institutions, but without binding commitments. The only area in which the EU undertook legislative action is related to security of supply and the issue of crisis management, with the new regulation on the security of gas supply adopted in autumn 2010 (Regulation No 994/2010) in order to create a genuine EU mechanism for rapid and coordinated management of external energy crises.

Last but not least, the Lisbon Treaty explicitly recognises energy as a European policy, and stipulates that the policy's objectives must be met in a spirit of solidarity between Member States. Yet, this solidarity has not been defined in concrete terms at the European level. While the European Council of 4 February 2011, recently created political momentum concerning the EU's energy policy, it only resulted in the repetition of vague formulas and rhetoric, without taking any decisions regarding answers to provide or changes to occur. Concretely, the Commission has been tasked to provide a Communication on the external energy policy dimension by June 2011. Meanwhile, The Polish Presidency has made this issue one of its numerous priorities for its EU Presidency.

The need for both internal and external strategies to mitigate the external constraints

A key dimension of a European Energy Policy is to guarantee a high level of diversification of supplies both in term of sources and resources. It is therefore important to diversify energy supplies by supporting and developing a wide variety of energy sources.

Diversification of resources

It is projected that between 2010 and 2020 natural gas consumption in Europe will rise by 90 billion cubic meters (from 540 billion cubic meters in 2009 to 630 billion cubic meters in 2020). Over the same time, the amount of gas produced in Europe is supposed to fall by 102 billion cubic meters – nearly 40% (from 265 billion cubic meters in 2009 to 163 billion cubic meters in 2020). This means that Europe will be in 74% dependent on gas imports. What is more, just after crude oil, natural gas is the main fuel used by the EU countries – the share of natural gas in the primary energy consumption in the EU is approximately 25% and its importance will rise.

Think Global - Act European

At the same time, initial geological analyses have identified numerous areas with potential deposits of shale gas in Europe. In 2009, the EU launched a major international project (GASH), which is to examine potential locations of shale gas in the following Member States: Sweden, the Netherlands, Germany, Austria, France and Poland. If the exploration of reserves for unconventional gas proved successful, the price of gas could significantly fall. Additionally, the continuing electrification of transportation and the use of natural gas to produce electricity could gradually supplant oil and petroleum in these sectors. These factors could also contribute to the reduction of Greenhouse Gas (GHG) emissions. Last but not least, it is argued that shale gas might have the potential to decrease European Union's dependency on natural gas imports, at least partially. Having said that, at the moment the European Commission approaches with caution the potential of shale gas. Investments in fossil fuels are not perceived to be in line with the current policies.

The conclusions by the last EU Council on Energy (4 February 2011) underlined that "in order to further enhance its security of supply, Europe's potential for sustainable extraction and use of conventional and unconventional (shale gas and oil shale) fossil fuel resources should be assessed". The Polish Presidency should then undertake the first step and start the preliminary assessment of shale gas potential in Europe by the end of 2011.

In the nearest future, Europe will not be able to stop burning coal (even if it wanted). This source of energy remains an important component of many EU Member States' energy mix (to name a few: Poland, Germany, Italy). At the same time, due to its climate change policy and commitment to GHG emissions reduction, Europe will have to implement technologies that will enable it to rapidly decrease emissions from burning fossil fuels. One of the key technologies here is Carbon Capture and Storage (CCS). CCS has to be implemented and commercialised if Europe is serious about the transition to a low-carbon economy.

For some EU countries (heavily dependent on coal) clean coal technologies can become the only tool that would enable them not to increase their dependence on external energy supplies. Take Poland as an example. If the carbon dioxide (CO_2) allowances price goes up (as it is projected), the cost of electricity production from coal will be much higher. There are two solutions to this situation: (1) development, deployment and commercialization of clean coal technologies that would make coal (and gas) fired power plants more environmentally-friendly or (2) increase of gas and other energy imports (at least in the short- and medium-term perspective) due to the fact that development of alternative fuels in Poland will take time. The second solution means more dependency on energy supplies from third countries. CCS can therefore bring benefits to the entire European Union (both within its climate and its energy policy), but a number of barriers need to be overcome for this technology to emerge.

CCS is for the time being very costly. However, certain trends on the global energy market show that many decisions will be more political than economic in nature. These include decisions

that bring about widespread use of CCS. In light of the not insignificant role of coal in the production of electricity in the foreseeable future, it is also an important element of the process connected with shaping the global climate and energy policy. Consequently, it cannot be based on a purely economic calculation. Like every political decision, costs are an element that cannot be ignored, but should not be the main factor determining the measures that are taken.

This philosophy applies to both global and European policy objectives. International organisations – such as the European Union, the United Nations, International Energy Agency, the Zero Emission Platform for Fossil Fuel Power Plants, Carbon Sequestration Leadership Forum, or the Global CCS Institute, as well as governments of selected countries around the world whose energy sectors are largely dependent upon fossil fuels, such as the United Kingdom, Germany, Australia, the United States, Canada and China – decided to support the research and development (R&D) phase of CCS.

The EU has already committed some funds to European CCS R&D projects (including the European Energy Programme for Recovery (EEPR) and NER300). There is still a financial gap to be filled, although not financing of the projects, but public acceptance for storage of CO2 is the biggest barrier for CCS implementation for the time being. It is therefore crucial to ensure the safety of storage (by introducing necessary legislation) – every EU Member State is obliged to do so due to the EU CCS Directive – and to increase public awareness on the role of CCS in ensuring Europe's energy security in the years to come. It is again in the very interest of the Trio Presidency, starting with Poland, to engage in a Europe-wide CCS information campaign in the second half of 2011.

Diversification of sources

The second branch of the diversification policy is to launch various projects ensuring diversity of country of origin, and transit of supply for the European Union. The EU is indeed trying to develop partnerships with its neighbours, including Russia, as well as with other main energy producers, transit and / or consumer nations of the world. However, the unilateral approach of the Member States to secure their energy supply remains the rule, and bilateral deals between separate EU states and external energy suppliers continue to prevail over a specific EU approach, as often illustrated for instance in the energy relationship with Russia.

If it wants to succeed, the EU needs above all to remain committed to pursuing this process of diversification and to conclude separate binding international agreements and energy partnerships with producer and transit countries, and other international actors dealing with energy. Whereas the EU has engaged in opening its Southern Corridor to energy imports from the Caspian reserves and Central Asia, mainly through the building of the Nabucco gas pipeline, it needs now to conclude the necessary agreements and align its economic, technical and political means in order to finalise this project in due time.

tgae Think Global - Act European

Liquified Natural Gas (LNG) terminals will also play a very important role in terms of diversification. Potential directions of supply of LNG are countries from North Africa and the Scandinavian Peninsula. This kind of approach is worth following and can help Europe fight with potential shortages of gas from one or the other supplier.

The European Union also needs to project the reach of the internal market beyond its borders, especially in its neighbourhood. The possibility of earning a reasonable return on investment in a stable and prosperous environment will continue to attract private investment – both European and foreign investors as well as energy suppliers. Foreign investment, export of new technologies and trade relations create a mutual interdependence that makes Europe less vulnerable to erratic external decision making.

A coherent external energy policy

Beyond the simple inclusion of energy objectives in foreign relations, the EU further needs to achieve a more systematic, structured and coherent use of the full set of foreign policy instruments that could contribute to the development and strengthening of the Union's external relations in the field of energy (i.e. CFSP, trade agreements, development policy association treaties, the energy community with south-eastern European countries, enlargement process, European Neighbourhood policy, strategic partnerships, etc.). In this respect, the new diplomatic service – the European External Action Service (EEAS) – should play an active role in better coordinating the EU's external action in that field.

Finally, Europe and its Member States will only make themselves heard if they present a united front. Secure access to fossil energy resources mostly situated outside the Union implies, if need be, a pooling of energy supply capacity. When internal market regulation is at stake, the European Union should be in a position to question commercial deals at the national level which may be beneficial to the parties to the deal, but not for Europe's security-of-supply as a whole.

Conclusion

Issues described in this paper have a long-term character. This means they cannot be solved in next 18 months, but they can be substantially brought forward by the Poland-Denmark-Cyprus Trio Presidency of the EU, inter alia with the use of the following instruments:

- Impact assessment of Europe's potential for sustainable extraction and use of conventional and unconventional fossil fuel resources;
- Europe wide information campaign on Carbon Capture and Storage technology;
- To achieve a more systematic, structured and coherent use of the full set of EU foreign policy instruments that could contribute to the development and strengthening of the Union's external relations in the field of energy;

- Supporting a more active role of the European External Action Service in better coordinating the EU energy external action;
- To project the reach of the European internal market beyond its borders;
- The decision of all EU Member States to allow the European institutions to question national commercial energy deals that might influence Europe's energy security in a negative way.