

# The Way towards an Energy Policy for Europe\*

By Jean-Arnold Vinois\*\*

**Summary:** The quest for a European energy policy has been at the heart of the European integration since World War II. Since the aftermaths of the two oil shocks, all attempts to create a Common Energy Policy failed so far. The paper seeks to identify why Europe needs to define a coherent and ambitious energy policy. It examines to what extent Europe today has the opportunity and the instruments to achieve a better solution towards an energy policy which balances the asymmetrical energy positions of the Member States and makes their decisions coherent in the internal and external fields of action. The new triangle of Lisbon-Moscow-Kyoto is at the basis of the European energy policy, combining the goal of competitiveness with energy security and sustainability. By focusing on the current EU proposals, mainly on the 2006 Commission Green Paper on competitive, secure and sustainable energy and the way ahead to an Energy Policy for Europe, it gives insight into the background of the Green Paper and the launch of a new integrated approach in EU policy making in the field of energy.

**Zusammenfassung:** Die Forderung nach einer gemeinsamen europäischen Energiepolitik ist seit dem Zweiten Weltkrieg ein Kernthema der europäischen Integration. Seit den Nachwehen der beiden Ölschocks sind alle Versuche, eine gemeinsame Energiepolitik zu definieren, gescheitert. Der Beitrag identifiziert Gründe, wieso eine solche kohärente und ambitionierte gemeinsame Energiepolitik erforderlich ist. Er untersucht, inwieweit das heutige Europa die Chance und Instrumente besitzt, eine bessere Lösung zu finden, die es erlaubt, die asymmetrischen energiepolitischen Positionen der Mitgliedstaaten auszubalancieren und zu kohärenten Entscheidungen zu kommen. Grundlage hierfür ist das neue Zieldreieck Lissabon-Moskau-Kioto, das für eine Verbindung von Wettbewerbsfähigkeit, Versorgungssicherheit und Nachhaltigkeit steht. Der Beitrag stellt das Grünbuch der Kommission für eine wettbewerbliche, sichere und nachhaltige Energieversorgung vor und vermittelt Einblicke in den Entstehungshintergrund des Grünbuchs sowie des neuen integrierten Ansatzes europäischer energiepolitischer Entscheidungen.

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## 1 Why Europe Needs to Define a Coherent and Ambitious Energy Policy

Energy is at the heart of the European idea since the beginning of the integration process with the creation in 1951 of the European Community for Coal and Steel, based on Jean Monnet's concept of sector integration and, in 1957, of the European Atomic Energy Community (EURATOM). The circumstances demanded cooperation in strategic sectors

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\*\* Head of the unit "Energy Policy and Security of Supply" of the Directorate General Energy and Transport of the European Commission. Email: [Jean-Arnold.Vinois@ec.europa.eu](mailto:Jean-Arnold.Vinois@ec.europa.eu)

and provided for peace and stability after the Second World War. A Common Energy Policy has been proposed by the Commission as early as in the aftermaths of the first oil crisis in 1973. Today the internal and external challenges for the integration process set a new framework for the active engagement on an energy policy for Europe.

Several highly mediatised events have stressed the weakness of the European approach to the strategic issue of energy security. The volatile prices of oil and the tight markets with growing demand by the United States, China and India reminded us of our huge dependence on oil, particularly in the transport sector, a key sector for the competitiveness of our economy. The Russian-Ukrainian dispute on gas prices last winter showed the importance of our relationship with the main neighbour of the European Union and the need to adopt a common approach. In a report on energy security, the *Economist* concludes that for the first time since the 1980's second oil shock power on the markets has swung back to energy producers (Economist 2006). The collapse of the price of carbon in June 2006 demonstrated the need to strengthen the discipline of the Member States in the working on the Emissions Trading Scheme.

In general, energy security refers to the absence of any threat or risk to the supply and demand side in the energy markets, avoiding market and subsequent price distortions. These discontinuities in energy supply include environmental risks (e.g. hurricane Katrina and Rita, nuclear catastrophe and pollution), political risks (international terrorism, internal conflicts, geopolitics, embargos etc.) social and physical risks (e.g. transport risk at choke points like straits and in pipelines), as outlined by the Commission's Green Paper *Towards a European strategy for the security of energy supply* (European Commission 2000). The quest for energy security bears the risk to reduce solidarity and common approaches, at a time when international and supranational cooperation is more than needed. The EU Member States acted according to their asymmetric energy positions and adapted to the challenges differently. The impact of these decisions on each other and the major energy partners were remarkable, enough to remind the tense German-Polish relations in view of the new Baltic Sea Pipeline (EU Observer 2006), or the Spanish and British attempts to change competition rules in order to avoid cross-border mergers thus protecting national energy companies. For the new Member States, for example, energy supply security is particularly crucial, as their import dependence on Russia is high (IEA 2006).

The integration of the Central Eastern European markets remains yet another challenge for a European energy policy. Clearly, individual Member State policies will not bring Europe the solutions to ensure its energy security, this being a sustainable, secure and competitive energy for the European citizens and its economy.

Europe's energy landscape is now changing fast. Today, half of the continent's energy requirements are met by imports (European Commission/Eurostat 2005) – a figure set to rise to almost 70 per cent by 2030 unless policies change (European Commission 2005). Mature hydrocarbon reserves in Europe, which gave us some comfort since 1970, are being exhausted, and demand continues to rise. At the same time, Europe appears to be a world leader in trying to find new responses to energy challenges. These are based on new and renewable forms of energy, the development of low-carbon technologies, and demand management. Through the Emissions Trading System, Europe is the only market in the world where low-carbon energy production is financially rewarded.

Today's energy challenges are easily perceivable. Global oil consumption has increased 20 per cent in the last 10 years (IEA 2005b). World energy consumption could rise by half within 25 years. Competition for resources is growing, with the rapid emergence of China, India, Russia and other emerging economies. Investments have to be made today to ensure the supply of tomorrow. Tough decisions are needed and require clear strategies by the public authorities to give the private investors the right signals.

In Europe alone, 1 trillion Euros is needed over the next 20 years to meet expected electricity demand and replace ageing infrastructure. Worldwide, the figure is around 16 trillion Euros, according to the International Energy Agency (IEA 2005a). In the absence of a secure and transparent investment climate in the world, and functioning markets and infrastructure, will such massive investment be forthcoming?

Finally, according to the Intergovernmental Panel on Climate Change, global warming has already made the world some 0.6°C hotter. In the worst case scenario, temperatures could rise by up to 5.8°C by the end of the century (IPCC 2001). To make its contribution to stabilising global climate change, the EU needs to reduce its CO<sub>2</sub> emissions by at least 50 per cent by 2050, and other countries will have to play their part (IPCC 2000). At present, global emissions of CO<sub>2</sub> are accelerating, and the EU is struggling to meet even its existing emissions targets.

Against such a background, existing policies are not sufficient to tackle the various challenges. The traditional answers to energy security, as diversification since Winston Churchill's strategy in the first World War and Richard Nixon's plan on energy independence after the 1973 embargo, consider only one side of the coin (Yergin 2006: 69–71). "Business as usual" scenario will lead us by 2030 to an unacceptable situation. The question is now whether we are able to take the bold decisions needed or whether we will just accept the crisis that time will inevitably bring with it.

This has well been understood by the Heads of State and Government of the European Union at the Hampton Court summit under the British Presidency in October 2005, following the G8 Summit in Scottish Gleneagles in July 2005 which already had given priority to the energy sector.<sup>1</sup> They therefore invited the European Commission to present a Green Paper for discussion at the summit in March 2006. At the international level, the G8-Summit in St. Petersburg on 15/16 July 2006, dedicated to the topic of energy security, operated as a framework catalyst for the preparation of a new more comprehensive energy approach by the EU. The Commission was the first to mediate in the Russian-Ukrainian gas conflict and intensified its work on the revitalization of a common energy strategy attaching more attention to external policy requirements. In early January the Commission had called for an informal meeting of the Gas coordination group with the two parties to the conflict: Gazprom and Naftohaz in Brussels. The most recent meeting of this Group early October 2006 has shown the willingness of these countries to ensure a continuous supply of the European Union in the winter to come. This is already the evidence of the awareness of the Europeans to be collectively more active, particularly in their relations with neigh-

<sup>1</sup> UK Presidency of the EU 2005 Latest news: Press conference at EU informal summit: UK Prime Minister Tony Blair and European Commission President José Manuel Barroso, 27.10.2005. Available at: [www.eu2005.gov.uk](http://www.eu2005.gov.uk), 02.05.2006.

bouring countries. The current external circumstances allow for action. In addition, according to Daniel Yergin, Chair of the Cambridge Energy Research Associates, high oil prices have a positive impact on investment, the development of supply and production alternatives as well as moderate the demand (Yergin 2006: 74).

## 2 The European Commission Green Paper of March 2006

The European Commission's Energy Green Paper 2006 (European Commission 2006) points the way towards a new energy strategy. It has been quickly endorsed by the Heads of State and Government at their meeting in March 2006, calling for an Energy Policy for Europe (Council of the European Union 2006). They even seem to be ready for further common action along the lines proposed by the European Commission which received the official mandate. The new Green Paper calls for a common strategy at the internal level, as Europe cannot afford to have 25 – soon 27 – different energy policies, and must speak with a common voice on the external level, as Commission President Manuel Barroso outlined in the presentation of the new Energy Policy for Europe (EPE) on 24 March 2006.<sup>2</sup> But the Green Paper opened also a Europe wide debate to last until the end of September 2006, after which the Commission has to produce a Strategic Review and an action plan. Let us first examine the Green Paper and its proposals for action.

### 2.1 Building on the Strengths of the European Union

For far too long, and in spite of two Treaties dealing with energy, European energy policy has been fragmented and therefore lacking in proper focus and less effective than it could be.<sup>3</sup> Working together, the EU is stronger than the sum of its parts. With 480 million consumers on 1<sup>st</sup> January 2007, the European Union, made of 27 Member States, is the largest importer and second largest consumer of energy in the world (about 15%), well behind the United States with 25% and a smaller population (BP 2006). Acting together, we have the weight to defend and assert our interests. Acting separately, as we have seen up to now, is detrimental to each Member State, in the longer term.

A political consensus emerges that the EU needs an integrated energy policy that maintains Europe's competitiveness, safeguards its environmental objectives and ensures its security of supply. The Treaty establishing a Constitution for Europe had provided explicitly for a chapter on a common energy policy: Art. III-256 stipulates, that

"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 to: (a) ensure the functioning of the energy market, (b) ensure energy supply in the Union, and (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy."<sup>4</sup>

<sup>2</sup> The press conference on the Green Paper on Energy, after the Spring Council, 24.03.2006. Available at: [www.managenergy.tv/me\\_portal/mst/home](http://www.managenergy.tv/me_portal/mst/home), 02.05.2006.

<sup>3</sup> For a comprehensive historical analysis of energy policy in the EC/EU see Matlary 1997.

<sup>4</sup> Art. III-256 of the Treaty establishing a Constitution for Europe.

The Constitution, which did not come into force after the results of the referenda in France and the Netherlands, proposed a shared competence between the Member States and the Union.

In its Green Paper, the Commission revitalizes this approach and sets out a vision for a new energy policy, based on functioning markets, on effective collaboration between producers and consumers, on serious efforts to increase energy efficiency at home and worldwide, and a quantum leap in the production of renewable and low-carbon energy. As the Commission President José Manuel Barroso outlines: the magic “geographical triangle” Lisbon (Competitiveness), Kyoto (Environment) and Moscow (Security of Supply, relations to important suppliers) are brought together by the energy policy in the middle of the triangle.<sup>5</sup>

By its nature energy policy consists of external and internal dimensions, combining different policies. This challenge was met by the Green Paper based on the three main pillars of the existing European energy policy.

By agreeing to endorse the Green Paper’s clearly identified energy goals and priorities, and to pursue them rigorously with a single voice, Europe’s leaders have taken the first steps towards managing, rather than following, the new global energy agenda.

## 2.2 Six Priority Areas for Early Common Actions

The Green Paper identifies six priority areas for action, which are mutually reinforcing (European Commission 2006). First is the *need to complete a fully integrated internal energy market for Europe*. We need an open and competitive energy market for electricity and gas with competition between companies striving to become European-wide competitors, not dominant national players. To respond successfully to the many challenges we face, and ensure proper, sustainable investment for the future, consolidation of the energy sector must be market-driven. There is the need to devise ways of tackling weaknesses in the system, and of ensuring that Member States implement the common legislation properly, in the interests of both producers and consumers and to ensure that the markets serve our strategic objectives. This requires the establishment of a level playing field, based on clear and duly enforced regulations in all Member States, clear roles and responsibilities for the market players, transparent information and efficient regulators.

As already said, there must be an investment friendly climate for the projects which will be necessary for energy supply and demand in the future. Further to adoption in September 2006 of the revised guidelines for the trans-European networks for energy<sup>6</sup>, the Commission will propose a Priority Interconnection Plan, based on the status and prospects of each of the 42 priority projects identified in the guidelines. The necessary import infrastructure for Liquefied Natural Gas will also be considered.

<sup>5</sup> The press conference on the Green Paper on Energy available at: [www.managenergy.tv/me\\_portal/mst/home](http://www.managenergy.tv/me_portal/mst/home), 02.05.2006.

<sup>6</sup> Decision 1364/2006/EC of the European Parliament and the Council of 6 September 2006, OJ L262/1

The second priority area for action concerns *security of supply* within these internal markets for electricity and gas, concrete measures which reflect solidarity between Europe's Member States. For example, a new European Energy Supply Observatory could help identify likely shortfalls in infrastructure and supply at an early stage and complement, on an EU level, the work of the International Energy Agency.

Network security will be improved through increased collaboration and exchange of information between transmission system operators. Work has also begun on a new crisis mechanism to enable assistance to a country facing difficulties following damage to its essential physical infrastructure. The review and update of the Community's provisions to deal with oil and gas crises, such as emergency stocks, are also on the agenda.

The third priority area goes to the heart of a European energy policy, the *EU's energy mix*. It tackles a key conundrum head on: how can we reconcile the fact that the choice of a Member State's energy mix is and will remain a matter for the Member State, in line with the subsidiarity principle, with the reality that choices made by one Member State inevitably have an impact on the energy security of its neighbours and the Community as a whole?

The Commission has begun squaring this circle through a comprehensive Strategic EU Energy Review. Due for adoption early 2007, this analysis will consider where Europe is going, where it wants to go, and what it needs to do to get there. It will be a type of "blueprint" for a new energy policy. This Review should become a regular exercise, probably every two years. It could also lead to agreement on an overall 'Strategic European Energy Objective', such as a minimum percentage of low-carbon energy sources in the final energy consumption. This target could provide a benchmark on the basis of which the EU's developing energy mix could be judged. An action plan should be linked to such an objective.

A fourth key area concerns how we tackle *climate change*, which of course, has strong links with our energy policy. The Green Paper addresses how Europe can achieve its climate change goals in an integrated manner, in other words, in a way that positively contributes to its competitiveness and security of supply. In order to do this, one point of departure is that future targets and objectives in this area have to be made on the basis of a robust cost-benefit analysis.

Impact assessments covering namely energy efficiency measures and the use of renewable have been carried out, and conclusions will be drawn in the Strategic EU Energy Review mentioned earlier. However, the two areas mentioned will be subject of proposals for quite concrete actions.

Firstly, the Commission proposed on 19 October 2006 an *Action Plan on Energy Efficiency* whose objective is to outline a framework of policies and measures to save a substantial part of the 20% excess annual primary energy consumption by 2020. This should be the top priority, not least because by reducing the energy intensity of growth, we tackle the issues of climate, security of supply and competitiveness at the same time. Such an action plan will require efforts at all levels and an unprecedented awareness campaign, to incite the required changes of behaviour at all appropriate levels of action.

Secondly, the EU will have to make *greater use of renewable energy*. Not just because of climate change, but because we must lay the foundations today for a time when hydrocarbons supply can no longer cope with demand. Action here will help confirm Europe's world leadership in renewable energy technologies, which represent a rapidly growing global market. To accompany the Strategic EU Energy Review, the Commission will bring forward a Renewable Energy Road Map, with revised targets, review the Biofuels Directive<sup>7</sup> and propose a new Directive on the use of renewable for heating and cooling.

The future role of nuclear energy has been mentioned in the context of controlling emissions from electricity production. This possibility must be available for the countries that choose this option under a very high level of safety and security and with viable solutions to the problem of waste.

The fifth priority area is *research and innovation*, fundamental in our transition to the energy systems of the future. Our Emissions Trading System encourages not only research into low or neutral carbon technologies, but also their implementation on the ground. In the context of the Strategic Review, there is the need to consider further how to improve and extend the existing arrangements as well as how to combine all financial instruments to achieve significant results.

New technologies in the energy sector will represent multi-billion euro global markets in the future. One area is sustainable coal. The Commission will present a Communication on the subject of sustainable coal technologies, including Carbon Capture and Storage, to accompany its Strategic Review.

In 2007, a Strategic Energy Technology plan will be elaborated by the Commission and be presented to the European Council. It should build on the existing Community tools and the Member States programmes, while involving fully the market players.

The final priority area of the Green Paper, maybe the most visible one these last months, concerns *external energy policy* where the lack of coordination of Member States is acting to the detriment of each of its members and does not allow a common position to be taken vis-à-vis third countries. Quite simply, Europe has to use its economic and political weight on the world stage in a much better way than in the past. It needs to define clearly its goals and aspirations regarding its energy partners, and then speak with one voice to promote those interests. It needs to build up its relations with existing suppliers, such as Russia, OPEC, Algeria and Norway, as well as develop new partnerships with a view to diversifying supply, including the Caspian Basin, other parts of North and Central Africa and Central America. The negotiation of a new general agreement with Russia, which will include energy, will be a good test as well as a key priority. Multilateral agreements such as the Energy Charter, still waiting the ratification of Russia, and the Energy Community Treaty, which entered into force on 1<sup>st</sup> July 2006, are important tools to create transparency and functioning markets. In addition, it seems more and more urgent to work on a new initiative to promote energy efficiency globally, both in large energy importing countries and producing countries.

<sup>7</sup> Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport, OJ L123/42, 17.05.2003

In March and lastly in June 2006, based on a Joint Communication of the Commission and the High Representative of the Council, the European Council agreed to consider the building of a coherent external energy policy to be fully part of the new Energy Policy for Europe (EU 2006). It also recognised that achieving our goals in today's energy world requires a combination of internal and external policies. Policies on energy, trade, development, enlargement, competition, research, environment and the EC's financial instruments all need to be harnessed to this end. Two building blocks of an external energy policy are highlighted: the creation of well-functioning world energy markets and the diversification of energy sources, by geographical origin and transit regions.

### 3 The Way Ahead

The Green Paper of the Commission and the subsequent positions taken by the European Council on the need for an Energy Policy for Europe demonstrate the present awareness in the Member States and the European institutions of the need for common action. All the positions received by the Commission from the stakeholders show that there is an important momentum for the European Union to build on. The European Parliament will deliver its opinion on the Green Paper by mid-December 2006.

The Strategic Review to be tabled by the Commission should try to set the objectives on which we need to strive together and establish a comprehensive benchmark for all Member States and players, which would be examined regularly, probably every two years, at the European Council level. This would be a permanent highly visible task as well as a collective responsibility of European and national authorities.

The European Commission will deliver its Strategic Review and an action plan, as requested by the March European Council, early in January 2007. The German Presidency of the European Union, in the first half of 2007 will have to forge an agreement by the Member States on the proposals put forward by the Commission. The debate launched in Germany in June 2006 on its own energy policy, like in other countries such as United Kingdom, France, Ireland, Belgium and Lithuania, will help us to understand all that is at stake in the present energy situation in each Member State and in the European Union globally. The Strategic EU Energy Review will also help to define the common responses that could be made at European, national and regional levels. The challenges are there. It is now time to act in a coherent manner.

### References

BP (2006): BP Statistical Review 2006.

Council of the European Union (2006): Presidency Conclusions of the Brussels European Council 23/24 March 2006, 24 March 2006, CONCL 1, 7775/06, Part Two – Energy Policy for Europe (EPE). Available at: [http://ue.eu.int/ueDocs/cms\\_Data/docs/pressData/en/ec/89013.pdf](http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/89013.pdf), 30.04.2006.

Economist (2006): Energy Security: Power Games – Nervous Energy, A special report on Energy Security. *The Economist*, 07.01.2006, 12–13 and 61–63.

- EU (2006): An External Policy to Serve Europe's Energy Interests. Paper from Commission/SG/HR for the European Council. Available at: [www.consilium.europa.eu/uedocs/cmsUpload/st09971.en06.pdf](http://www.consilium.europa.eu/uedocs/cmsUpload/st09971.en06.pdf), 13.10.2006.
- EU Observer (2006): Poland Compares German-Russian Pipeline to Nazi-Soviet Pact, 02.05.2006. Available at: <http://euobserver.com/24/21486>, 09.05.2006.
- European Commission (2000): Towards a European Strategy for the Security of Energy Supply. Green Paper, 2000. Available at: [http://europa.eu.int/comm/energy\\_transport/doc-principal/pubfinal\\_en.pdf](http://europa.eu.int/comm/energy_transport/doc-principal/pubfinal_en.pdf), 03.05.2006.
- European Commission (2005): Energy Trends to 2030 – Update 2005. Directorate Energy and Transport, 26–27. Brussels.
- European Commission (2006): Green Paper – A European Strategy for Sustainable, Competitive and Secure Energy. SEC(2006) 317, adopted 08.03.2006. Brussels. Available at: [http://ec.europa.eu/energy/green-paper-energy/doc/2006\\_03\\_08\\_gp\\_document\\_en.pdf](http://ec.europa.eu/energy/green-paper-energy/doc/2006_03_08_gp_document_en.pdf), 13.10.2006.
- European Commission/Eurostat (2005): Energy & Transport in Figures. Statistical Pocket Book 2005. European Commission – Directorate-General Energy and Transport in cooperation with EUROSTAT. Brussels.
- IEA (2005a): World Energy Outlook 2005. International Energy Agency. Paris.
- IEA (2005b): Key world energy statistics 2005. Available at: [www.iea.org/dbtw-wpd/Text-base/nppdf/free/2005/key2005.pdf](http://www.iea.org/dbtw-wpd/Text-base/nppdf/free/2005/key2005.pdf), 03.05.2006.
- IEA (2006): Annual Data EU-25. International Energy Agency. Paris. Available at: [www.iea.org/journalists/EU\\_Imports\\_from\\_Russia.htm](http://www.iea.org/journalists/EU_Imports_from_Russia.htm), 08.05.2006.
- IPCC (2000): Intergovernmental Panel on Climate Change: IPCC Special Reports Emissions Scenarios. Geneva.
- IPCC (2001): IPCC Third Assessment Report: Climate Change 2001. Geneva.
- Matlary, Janne Haarland (1997): Energy Policy in the European Union. In: Neill Nugent, William E. Paterson and Vincent Wright (eds.): *The European Union Series*. London, Macmillan Press.
- Yergin, Daniel (2006): Ensuring Energy Security. *Foreign Affairs*, 85 (2), March/April, 69–82.