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Towards a common European Energy Policy?

Preferences of Germany, France
and the United Kingdom

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I. Introduction

During the last two years, energy policy has been one of the central topics in the European debate, particularly in the course of Germany's presidency of the European Union. The European Commission Green Paper on energy, released in March 2006, drew up a wide range of proposals for a European Energy Policy, focussing on the challenges of sustainability, competitiveness and security of supply. Following the Commission's Energy Strategy Review of January 2007, the Spring European Council agreed on the main policy targets and adopted an Energy Action Plan.

But that was just the simple part of the process. In the near future we will see a series of legislative proposals, and tough negotiations between Commission, Member States and the European Parliament. We got a foretaste of it with the Commission's recent proposals regarding the regulation of the European electricity and gas markets. And it is easy to predict that we will see heated debates over the "burden sharing" of greenhouse gas emissions reductions and the share of renewables, starting in December 2007.

Although all 27 Member States agree on the need for a common European energy policy and its main targets, their preferences can differ widely. This not only depends on the fundamental policy preferences of national governments, be they left-wing, right-wing or centrist. It is also strongly influenced by their respective energy mixes.

If we want to predict what a future European energy policy could look like, we have to take the national positions into account. Because the Commission often tends to orientate itself on the largest Member States, this paper will focus on the "Big Three": Germany, France and the United Kingdom. Its object is to contrast the discourse and interests of the three largest Member States on an future common European energy policy, so as to find what their main subjects of (dis)agreement are and which path the EU and the Member States could adopt to achieve results in the areas of sustainability, competitiveness and security of supply.

II. Energy Mixes and Greenhouse Gas Reductions

These are exceptional times now for the production and procurement of energy, both for Europe and globally. Global demand for energy is increasing very rapidly. Oil prices remain relatively high and major new oil discoveries are increasingly rare. Demand for gas is also increasing, and gas supply prospects appear less reassuring than ten years ago. The nuclear debate is alive, but several European countries are far from certain about its future orientation. Climate change is a reality to be tackled; and the present state of the progress of renewable energy technologies means that renewables alone cannot be relied upon to resolve these problems in the near future. The EU's internal energy market is still waiting to be completed.

1. The increasing predominance of imports in EU energy supply

International demand for energy is rising as populations and economies -, especially in fast-developing nations such as China and India - grow. Prices too are rising and it is highly likely that they remain high in the future. Today, the EU is the largest energy importer in the world, and its dependence on imported crude oil and natural gas is steadily growing. According to estimates, the total energy consumption in the EU is expected to increase by 25% over a 30-year period and if no additional measures are taken, Europe will have to import a pro-

jected 65% of its energy by 2030, as opposed to 50% now. The Commission forecast the rise of import dependence from 82 to 93 % in the oil sector and 57 to 84 % in the natural gas sector. The reason for this is not only increasing power needs, but also the decrease of production of energy within the EU and especially in the North Sea.

Share of Total Primary Energy Supply* in 2004 (%)

Oil	38
Gas	24
Coal	18
Nuclear	14
Renewables	6

Source: EU Energy Policy Data 2007)

Fossil fuels (gas, oil and coal) represent up to 80% of the Total Primary Energy Supply (TPES) of the EU. A significant remaining share (14%) is supplied by nuclear power but there is no consensus on the nuclear option among the EU states. As the Member States remain free in the choice of their respective energy mix, the Commission only calls for a debate on the question. Nuclear power, at present, contributes roughly one-third of the EU's electricity production, but careful attention needs to be given to the issues of nuclear waste and safety. Renewable energy (6%), which includes wind, solar, geothermal, biomass, and hydro, is a small but growing share of the TPES. Again, the situation is heterogeneous among the Member States.

2. Energy situation in Germany, France and the UK

Share of Total Primary Energy Supply in 2004

	GERMANY	FRANCE	UK
Oil	36%	33%	35%
Gas	23%	14%	38%
Coal	25%	5%	16%
Nuclear	12%	40%	9%
Renewables	4%	6%	2%

Source: European Commission, Energy Mix Fact Sheets 2007

2.1. Oil

Germany and France have in common the fact that they depend on oil imports to a very high degree, respectively 95% and 99%. What differs though is the degree of diversification in terms of the sources of these imports. While Germany relies mainly on Russia and Norway, France's requirements are provided by a larger range of sources, notably the Middle East and North Africa.

On the other side of the scale, the UK became in 2005 a net importer of crude oil on an annual volume basis for the first time since 1992. However, net exports of refined oil products meant that the UK remained a net exporter of overall oil (crude and refined products). Oil production is expected to decline in the next few years.

2.2. Gas

The situation for gas is similar to that for oil. Germany and France import gas at 84% and 96 % of their consumption. Germany again relies mainly on Russian and Norwegian imports (roughly one third each). The imports come only by pipeline, there is no LNG (Liquefied Natural Gas) infrastructure. France has diversified its gas imports much more: they come mostly by pipeline from Norway, Russia, Algeria, the Netherlands and Egypt, with a growing share of LNG.

Traditionally, the UK has been a gas exporter to the Continent and to Ireland. But the fields will soon be depleted and the UK will have to import large amounts. Gas production from the North Sea has declined in recent years and the UK now imports around 10% of its annual needs. By 2020, it could be importing as much as 90% of its gas. Norway will be an important provider for the next decade but increasingly the UK will be dependent on gas from further afield including from Russia, North Africa and the Middle East.

2.3. Coal

The importance of coal differs from one Member State to another. Germany maintains a significant coal-based electricity generation capacity to avoid over-dependence on imported energies. Hard and brown coals make up 25% of consumption. A pilot plant for carbon dioxide free coal-fired electricity generation is scheduled to enter into operation in 2008. The policy for hard coal is also closely related to social, regional and employment policies. The same context is found in the UK where coal accounts for 16% TPES. Last, coal represents about 5% of France's energy mix, having been largely supplanted by nuclear power for electricity generation over the past four decades.

2.4. Nuclear energy

As mentioned earlier, there is no consensus on nuclear power in the EU. Nuclear power accounts for 12% of TPES and 30% of electricity generation in Germany. The previous governing coalition launched a gradual phase-out under which Germany would shut down all its nuclear reactors by 2020. Germany plans to phase out nuclear power gradually by closing down plants when they reach an average of 32 years of operation. The two current ruling parties, the Christian Democrats and the Social Democrats, are, however, divided over nuclear energy. The CDU/CSU would like to see the issue revisited, but the SPD does not want to hear about it. So far, Chancellor Merkel has chosen not to reignite the debate. This opting-out of the nuclear option and the decrease of coal production for economic and environmental reasons make Germany highly dependent on imports of coal and natural gas.

By contrast, France has invested heavily in nuclear energy (40% of TPES). Nuclear energy distinguishes France from the rest of its European partners: nuclear power generates now more than three quarters of France's electricity; this is one of the highest shares in the world. France exports this electricity to neighbouring countries. In its energy review in 2005, the government decided to stick to the nuclear option. France's large nuclear industry is promoting a new reactor generation (the so-called EPR – European Pressurized Water Reactor), the first one is currently built in Finland.

The UK has also decided to keep the nuclear option open. In its July 2006 Energy Review, the government focused on the UK's dependence on gas imports by 2025, and therefore called for the replacement of nuclear power stations, although the wider public remains sceptical. In 2003, the government's Energy Policy Review had written off nuclear power as too expensive.

2.5. Renewable energy

The focus on renewable energy sources (RES) depends on the public authorities' involvement and initiatives as well as the geographic potential of each country. Renewable energies made up 4% of Germany's TPES in 2004, but with a large growth rate over the last few years. Their expansion is a central goal of the German government's energy policy as they are to compensate the phasing-out of nuclear energy. There has been a particular focus on wind power plants, until now only on-shore. Currently, Germany has the largest installed wind capacity worldwide.

France produces 6% of its energy from renewables; mainly hydro. The late development of solar- or wind-related renewables in France is usually explained by the focus on nuclear energy in the electricity sector. In the UK renewables account for only 2% of the TPES, mainly from hydro and biomass. The government wants to see much more investment particularly in wind power, with huge potentials off-shore.

3. The Challenge of Climate Change

2007 has brought a huge increase in both public and political awareness for the global challenge of climate change. Unfortunately, the EU's performance in emissions reductions since 1990 has been rather poor. Until 2005, the EU-15 has achieved a reduction of only 2%, only a small amount of its Kyoto duties of 8% by 2012.

Germany is the front-runner among the "old" Member States, with a reduction of 18% (its specific Kyoto goal is 21% by 2012), due to the massive de-industrialization in the East Germany. France has been able to reduce its emissions by 2% (Kyoto goal: 0%), the UK has achieved a reduction of 15% (Kyoto goal: 12,5%).

III. Positions on the Europeanization of Energy Policy

In general, Germany, France and the UK welcome a common European approach in energy policy. But in detail, you can not only see some differences among them. There are also foreseeable conflicts between each of them and the Commission.

1. Climate Change and Renewables

Like all Western Member States, the "Big Three" want the EU to be the global leader on fighting climate change. Particularly Germany and the UK pushed for the binding target of a 20% reduction by 2020. In the run-up to the 2007 G8 summit at Heiligendamm they both invested a lot of energy to convince the Bush administration to at least show some signs of proper understanding of the challenge. While the German government has set a national reduction target of 40% GHG by 2020 and the UK wants to follow with around 30%, the French government has not shown that much ambition yet.

France has long resisted a binding target for renewables at the European level, but finally made concessions during the course of the Spring summit. It remains unclear if the government will stick to its former position that nuclear energy is “the largest source of carbon free energy” and therefore has to be taken into consideration when setting up the French fraction of the European ambitions, with a proposal due to be launched in December 2007. While France and the UK are limiting the renewables debate almost to electricity production, Germany does not only want to achieve a large share of “green electricity” (25 to 30% by 2020), the government has also set a target of 14% for the usually neglected heating sector.

2. Liberalising the European Energy Markets

The EU Member States have reached a consensus that further steps are necessary to complete the internal electricity and gas markets. In order to ensure fair competition and lower prices for consumers, but also to promote investment in trans-border grid connections, the Commission wants to split up the energy firms production and distribution activities. Their favourite model is the so-called “ownership unbundling”, in which energy producers will have to sell their networks. The Commission is backed by those Member States, which have already liberalised their energy markets, among them the UK.

Strong opposition is led by France and Germany, which even try to avoid the Commission’s compromise offer, the “independent system operator”. In this option energy producers would be allowed to keep their network assets, but lose control over how the grid is managed. All commercial and investment decisions would be left to an independent operator, to be designated by governments or regulators. Germany and France are clearly trying to protect their national “energy champions” from new competitors. Instead of the models proposed by the Commission they favour a “regional system operator” which would connect the grids of 4 or 5 Member States (there is a initiative for the electricity sectors of France, Germany and the Benelux States), allowing the energy producers more influence over commercial and investment decisions.

3. Strengthening (External) Energy Security

The EU’s energy security policy is mainly focussed on (external) relations with major producer and transit countries. Germany, France and the UK all agree on the EU’s basic principle in external energy policy: to speak with one voice. To date, this has not yielded a transfer of competences to the European Community level, as all Member States are very much attached to their sovereignty in this area. This means that every single Member State has the right to veto any decision, like Poland, which currently blocks the negotiations for a new partnership and cooperation agreement (PCA) with Russia. There’s a reason why the EU is constantly stressing the necessity to “(increasingly) speak with one voice”. An effective external energy policy highly depends on the political will of the Member States.

The energy relations with Russia are a cornerstone of the EU’s External Energy Policy. Germany depends highly on Russian oil and gas, but during the last decades, Germany’s energy importers have established a stable partnership with their Russian partners. The project of the North Stream Gas Pipeline, crossing the Baltic Sea and bypassing Poland and the Baltic States, can be seen as a result of this “special relationship”, but this bilateral agreement has caused resentment in neighbouring countries. Although Germany wants to secure stable investment conditions for Western companies in the Russian energy sector, it’s not pushing that hard for a Russian ratification of the Energy Charter treaty and the transit protocol. While France and the UK stress the importance of the treaty itself, Germany only wants to put some of the main principles into the new PCA.

Regarding the need for diversification, there is a broad consensus in the EU. But the focus is different from Member State to Member State, depending on needs, geographical position and existing links with foreign countries. Some are more focussed on the diversification of providers or transit routes, some on the diversification of fuels. There are also differences in the preferred way to address the task. In the UK's view, security of supply should come with liberalisation, because it adds flexibility to markets and increases the resilience of the system. Therefore, energy companies like BP can be seen as the main drivers in the UK's external energy policy, while in France the government sees the state-controlled energy giants primarily as instruments for the national interest. Here, Germany is taking a middle position.

IV. Outlook

Until mid-2007 the European energy policy debate seemed to be strongly in favour of a (more) common approach. The so-called "target triangle" of sustainability, competitiveness and supply security helped to build this broad consensus. But with the first legislative proposals arriving from the Commission, we'll see more and more differences among the Member States, but also between the Council and the European Parliament. The problem is not only that different actors have different interests, but that the idea of a target triangle without internal trade-offs and priorities is somewhat idealistic. That's why some critics call it the "Holy Trinity of European energy policy".

The crucial project for the next ten years will be to ensure that all Member States have a similar starting point in the debate, and therefore potentially similar interests in the field of energy policy. What we need in order to make a common European approach possible is the creation of a common European interest. Therefore we need the completion of the Internal energy market, with a single, European-wide emissions cap for greenhouse gases, more electricity and gas interconnectors between the Member States and mutual energy security guaranties. That seems to be the only way to eventually overcome national sovereignty concerns.