

Energy Security Lunch Debates 2008**'EU Energy Supply Security: What role for Markets and Foreign Policy?'¹**

With a rising global demand for energy supplies and the dangers of climate change, many states have opted for a state-run approach when it comes to securing their energy needs. This has led to speculations that a new confrontation over the world's remaining resources is imminent. In the context of an increasing resource-nationalism and mounting competition for energy resources, how is the European Union best able to safeguard its future energy supply? What role do markets and European companies play? How do geopolitics and foreign policy figure into the equation? And how does this affect the fight against climate change?

Governments versus Markets?

Before delving into an analysis of the current state of the energy markets and the European Union's supply security it is important to identify the nature of the debate within the topic of energy supply security and its relation to foreign policy because this is a discussion in which an enormous amount of nonsense is talked about. This stems in part because the debate is polarized between those people who think that markets can solve security of supply on the one hand and those on the other who believe that only governments can solve it. Consequently, the debate is saturated by people who advocate either market or government solutions.

Looking at current energy markets one can note that they are far from competitive in some textbook-perfect sense. Energy markets are pervasively covered by oligopolies with significant market power and states are increasingly renationalising their energy industries with a new rise of national oil companies (NOC's) emerging on the international stage. If we look at the energy market in Europe we can see that the upstream market is particularly monopoly in provision. Furthermore, it is important to note that the price of energy had never much to do with its marginal cost. The marginal cost of a barrel of oil is \$2, a number the oil price has never been close to (the same goes for gas as the natural gas price is tied to the oil price). That does not mean markets have not got significant roles to play, but it underlines that the idea that this is somehow only a market-driven world in terms of the price and output is a common fallacy.

The answer to the debate between pro-government and pro-market is in fact very simple: capitalism does not function without governments. Indeed capitalism emerged because of governments. Governments imposed property rights, the rule of law, they provide the framework within which property rights can be exercised, etc. As such, the issue is not governments *versus* markets – its governments and markets. In this vein, the real challenge is how to solve the balance between the two. What kind of framework should be set up by governments within which the maximum amount of markets can function?

¹ Guest speakers were: Professor Dieter Helm, University of Oxford, Dr Pierre Noël, University of Cambridge and the European Council on Foreign Relations (ECFR), and Dr Frank Umbach, German Council on Foreign Relations (DGAP). The meeting was held under Chatham House Rules. This report is based on the presentations and ensuing discussion at the event. The opinions expressed do not necessarily represent the views of the Heinrich Böll Foundation.

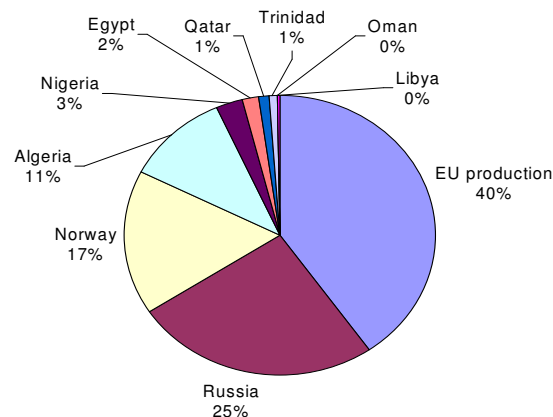
And within this context the major challenge that the European market is confronted with is how to ensure its future energy supplies while at the same time decarbonising its economy. This challenge is extremely difficult as both aims work in many respects across purposes. For example, coal is probably the best way of securing energy security whereas it is the worst way of achieving the climate change objectives. Consequently, it is difficult to bring both goals together. The reason why the current energy policy framework within which markets operate is not well adapted to meet these problems is because of policies that were set in the 1980s and 1990s. Why in these decades? First of all because the fossil fuel price turned out to be the absolute opposite of expectation. Instead of going up from \$39 to \$100 (what would be roughly \$250 today) it went down to \$10 and stayed there. Secondly, the recessions that hit the West in 1980-82 took out a lot of heavy industry. Therefore, the actual energy that was needed was much less than the capacity that had been built for it in the 1970s. As such, Europe had two decades of massive excess supply and very low fossil fuel prices, which led to under-investment and energy inefficiency in the 1990s and today's subsequent energy insecurities.

EU Oil and Gas Market and the Role of Russia

While it is absolutely true that energy markets are imperfect we should not underestimate the contribution of energy markets to energy security. If we had no global oil market we would already have had many wars for oil (countries fighting for access to oil). But there is a global oil market which is functioning extremely well, despite some suppliers having market power, which allocates supply on a purely anonymous basis to people who can pay for the oil. So there is absolutely no need for an oil diplomacy or an oil foreign policy or military capabilities to secure oil. The oil comes to you if you can pay for it – that's it! Consequently, markets contribute to security.

The EU gas market, however, is more restrictive as it predominately consists of pipeline gas, which makes the market regional in nature and limits the construction of a global natural gas market. One fundamental issue concerning EU gas supply, which also affects how one perceives Russia's role as a supplier, is the debate on whether or not the European Union in fact enjoys a very diversified supply.

Fig. 1 EU Gas Supply



While some argue that the EU does enjoy a very diversified supply as the EU has small gas demand growth and as liquified natural gas (LNG) is increasing, others maintain the opposite claiming that over 80% of the EU's gas supply will be covered

by the EU itself, Norway, and Russia. Within this context the latter argue that EU production is rapidly declining², sources like Egypt, Qatar, Trinidad, Oman, and Libya, are negligible, Turkmenstani supplies are limited and there is no direct access without a Trans-Caspian pipeline, and as such the biggest provider is and will remain primarily Russia followed by Norway and Algeria, which has been in close talks with President Putin.

In this vein, Russia's Gazprom is a significant threat to Europe, not because it might turn off the taps, but because it might become a price-setter. Russian market power is a price issue for Europe and not an actual physical interruption issue. Other analysts, however, disagree with this statement claiming that Russia is a non-issue as Russian production is stagnating³ and because the countries that actually are highly dependent on Russia (mostly East European countries) have extremely small gas markets and/or consume very little gas in their primary energy supply. This is a factor that should not be overlooked when looking at European dependence on Russian gas: the countries that are highly dependent consume very little. Particularly when converting the amount of Russian gas into a sensible unit like million ton of oil equivalent (mtoe) the picture starts looking very different: Russian gas is less than 5 mtoe in 19 EU countries and less than 10 mtoe in 25 EU countries (two exceptions being Italy and Germany, which consume large amounts of Russian gas). Furthermore, gas faces tough competition for everything it does from chemical to heating in homes, to producing electricity. As such, gas has no captive markets and can be easily substituted. Therefore, in order to alleviate Eastern European fears concerning Russian gas dependence in the short-term, the EU should subsidise dual-fuel capabilities for power plants and subsidise gas storage in the most exposed countries (especially Hungary).

Nevertheless, there is a real threat that Russian market power will lead to Russian price-setting, which could massively increase the price for natural gas. This might particularly be the case since Russian energy policy is not so much driven by foreign policy concerns as it is by Russia's desire to maximise its rent.⁴ Russia could and does to a limited extent employ its gas wealth as a foreign policy tool but it cannot afford to do so when its revenue is at stake. Furthermore, significant increases in Russian gas prices would undermine the EU's climate change objectives as the EU would have to revert to coal. Alternatively, the EU would have to build more renewable energy capabilities, which would drastically increase electricity prices.

EU Policy Options

In this context of Russian market power, the EU needs concrete domestic policies in order to secure its energy supplies. If the EU wishes to have greater security it needs 'backyard policies' in order to increase the robustness of its markets to potential shocks from outside. This should be undertaken by governments as the market cannot produce optimal solutions in this field. For example, no market produces an optimal

² The United Kingdom has depleted the North Sea as fast as it possibly could at what turned out to be the lowest price because it let the market have a free reign and did not provide an adequate depletion policy.

³ In fact, some, such as Vladimir Milov, argue that Russia will be facing its own gas crisis as early as 2010.

⁴ Although some analysts argue that EU dependence on Russian gas also limits EU foreign policy options and therefore plays into the hands of Russian foreign policy.

grid infrastructure which links people together and brings competition through them. As such, what is needed is an EU-wide grid infrastructure, which increases the portfolio benefits, reduces costs, and increases security. Grids are necessitated prior to competitive markets and should not be some kind of *ex post* benefit that will come later (as the Commission has handled it). Secondly, the EU needs strategic gas storage. No private sector firm will ever go about providing excess supply deliberately. Yet, excess supply is precisely what one needs for supply security. Therefore, one has to pay firms for it and the government needs to provide a policy framework within which that happens. In addition, it is clear that the only way the EU will be able to increase its domestic robustness to absorb external shocks is through building an integrated and competitive EU gas market.

However, there are numerous factors blocking such policy measures, most of which are inside the EU itself. The biggest constraints are intra-European energy competition (and the subsequent bilateral dash of member states to do deals with Russia), the lack of a European regulator to build a market for transit services in Europe, and primarily Europe's so-called energy champions Gaz de France, EON, and ENI because they are making money in the very same business model that Gazprom is (that of concentrated market power). They are sharing Gazprom's huge vertical monopoly rents because the market is segmented in Europe. As such, they would like to keep it that way and therefore effectively resist the integration of a European natural gas market by extensively lobbying European governments (this has made Germany one of the main opponents to an integrated European gas market).

Consequently, if Europe is serious about securing its future energy supply and protecting itself against Russian pricing power, it needs to sort out its internal market by increasing its infrastructure resilience through focusing on energy networks (more interconnections, not just bilateral ones, which can also contribute to reducing CO2 emissions), strategic gas storage, and achieving an integrated and competitive energy market. In addition to this, foreign policy also plays a complementary role – be it with regards to Turkey, an indispensable transit country, the Balkans, the Energy Charter Treaty (ECT), or the Nabucco pipeline.

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