

Comment by Peter Toft (European Commission Joint Research Centre, Institute of Energy, Petten[1]) at the 9th editor's meeting, Paris, 16-17 April 2009, panel III: Russia and the West's problem of energy security

In my comment on Russia, the West and Energy security my overall point is that the EU-Russia energy relationship is likely to remain troubled for at least two reasons. First, the EU and Russia have diverging economic interests in the energy sphere. Second, economic co-dependence/interdependence in energy is not very likely to constrain commercial or political disagreements between the EU and Russia. However, on a positive note, I think that the EU can do a lot on its own to reduce if not brake its energy dependence on Russia.

Before I elaborate on the three points mentioned above a few facts about EU-Russia energy trade may be useful (Eurostat 2008 figures). Oil provides 14.4% of the EU's primary energy production (in 2005) while natural gas fuels 21.2% of the EU's total primary energy. However, the importance of gas varies strongly between European countries. Some countries, especially in Central Eastern Europe have a very high share of natural gas in their energy mix.

The EU imported 58% of its natural gas and 82% of its oil from non-EU countries in 2005. These figures are very likely to grow to almost a 100% percent as the EU's indigenous fossil fuel resources are fast depleting. Russia supplies 42% of the EU's import of natural gas and is the largest supplier of natural gas for Europe followed by Norway and Algeria. Russia is also Europe's main supplier of oil with 32%. However, European oil supplies are more diversified as oil can easily be transported by tanker while gas is primarily transported via pipelines. In short, the EU-Russia energy trade and energy security discussion is primarily about natural gas.

#### 1. Russia and the EU have diverging economic interests in the energy trade

Russia is often being accused for pursuing political objectives using its near supply monopoly in European natural gas trade. This debate aside, from a purely economic point of view Russia has strong incentives to pursue energy policies that are contrary to the interests of the EU.

The strongest way to optimize profits for any seller is arguably to establish a monopoly and become a price-setter rather than a price-taker. I find that the story of Russian energy politics for the past 10 years or so is really a story of Russia trying to extend its monopoly in the Eurasian energy market - and especially in the natural gas trade. This way the Russian state controlled gas monopoly, Gazprom can hope to gain higher rents from its gas sales than it would be able to in a competitive market.

The key to establish a monopoly position in the gas trade is to control the pipelines as this enables vertical foreclosure against potential competitors. Gazprom was given exclusive rights to transport natural gas through Russia in 2005 and has sought to expand its ownership of assets in the European down-stream market. Gazprom backed by the Russian government also zealously has tried to undercut alternative exports routes from central Asia that would bypass Russian territory undermining the Russian monopoly e.g. by suggesting its own competitive pipeline like the South Stream as a rival to the EU-favoured Southern Gas Corridor (formerly the Nabucco pipeline) or striking long-term gas

supply contracts with Central Asian gas producers leaving little or no gas to be sold to alternative supply routes. The attempts to establish some sort of Gas OPEC led by Russia further serves to stifle competition between suppliers of natural gas to Europe.

The bottom line is that Russia has an inherent interest in trying to establish a monopoly position in the Eurasian natural gas trade and it pursues that goal quite effectively. This is contrary to the EU interest which, as an importer, would benefit from a competitive natural gas market for keeping prices as low as possible and by having a high number of suppliers competing against each other. Having many suppliers to choose between would also boost energy security since it would avoid strong reliance on just a single or just a few suppliers. This is a very basic but important fact which has wide implications for the kind of energy policy it is possible to pursue in relation to Russia.

## 2. Interdependence - acting as a constraint on disagreements?

It is often claimed that strong co-dependence in trade between countries acts as a constraint to keep disagreements from turning into outright conflict because hurting your best customer is by implication self-defeating. Whether or not this proposition is correct is not clear historically. In EU-Russian energy trade relations I suspect it may not hold true.

The term of interdependence or co-dependence is often mentioned in relation to EU-Russia energy trade. Basically Russia and the EU are locked together via natural gas pipelines. Russia needs to sell natural gas - and it can only sell to Europe due to the location of the pipelines. Europe needs to buy gas - and can primarily buy it from Russia.

The question is, however, whether interdependence 'adds up'. Maybe interdependence is also a qualitative question? I wonder if there is a hierarchy in goods. Although Russia does about 50% of its trade with the EU and therefore is quite dependent on access to the EU market - import is mostly in manufactured goods while the exports are dominated by energy. While energy is often portrayed as a 'normal' good it is in fact, as put by the political economist Susan Strange, a fourth factor of production. Simply put, you can more easily go without new Volvos than getting along without energy. Moreover, energy does not lose its value. In a trade dispute, a supplier may sustain short-term losses, but the hydrocarbon assets remain intact and can be sold later on. In short, if energy trade is in a different category than other goods, the 'inter' disappears from the equation of interdependence in EU-Russia energy trade - it is simply 'dependence'.

## 3. EU energy policy: Much can be done to mitigate EU energy dependence

Basically, the EU has two different strings to play on in its energy security policy; an external one, and an internal one. I think that the internal one is by far the more promising and that emphasis should be put here.

It is often lamented that the EU's external energy policy fails. The 27 countries cannot seem to find a common voice in their energy relations with third countries - be it in terms of the dialogue with partner and transit countries as well as in terms of common support for new supply

routes to diversity the number of suppliers. However, this should come as no big surprise. Energy is not trivial. It is a matter of state security and the barriers to pool sovereignty in security and defence policy by European countries have proven very difficult to surmount indeed. In short, it should not be too surprising that the EU does not progress too much in its external energy policy due to the security implications of this question.

However, this does not have to be a major problem. In my view a lot can be done through internal measures - measures that the EU Member States control themselves and which do not necessarily challenge the perceived national core interests of individual countries. For instance, measures such as saving energy through energy efficiency requirements will greatly help. Greater efficiency will indirectly bolster European energy security because using less natural gas will mitigate the problem of high prices. Moreover, using less will indirectly boost the capacity of existing storage facilities. In addition, in case of disruptions, relying less of natural gas in the energy mix indirectly boosts the share of other energy sources lessening dependence.

Moreover, building a system of emergency storage for gas is a way to progress. As it is much more expensive and more complicated to store gas than oil, introducing switching opportunities in power plants enabling them to switch to other fuels (as many plants can do already) in an emergency would potentially be a cheaper alternative.

In addition, instead of spending billions of Euros on new natural gas import pipelines locking the EU to fossil fuels for many years it may be wiser to put all efforts into diversifying our energy sources - nuclear energy, renewable energy, as well as carbon capture and storage allowing using coal in a sustainable manner are all options.

Finally, encouraging critical interconnections of the European energy market is crucial. To the extent that natural gas can flow freely and flows can be reversed throughout the EU, this would greatly help cushion the effects of disruptions or price volatility.

I suspect that these and other internal measures can take us a long way towards greater energy security. They will not break dependence in the short to medium term, but they can mitigate the problem and make it less significant.

Best regards,

Peter Toft

1) The Joint Research Centre (JRC) is a Directorate General (DG) within the European Commission with the mission of providing the other DG's with independent scientific research and advice. The JRC is located on 7 different sites across Europe. In Petten, Netherlands, the institute of energy investigates all aspects of energy issues - from technical issues to more political ones like energy security. The unit for energy security is a newly established one in early 2008.