

CIS gas for Europe – the transit issue

Wojciech Paczyński

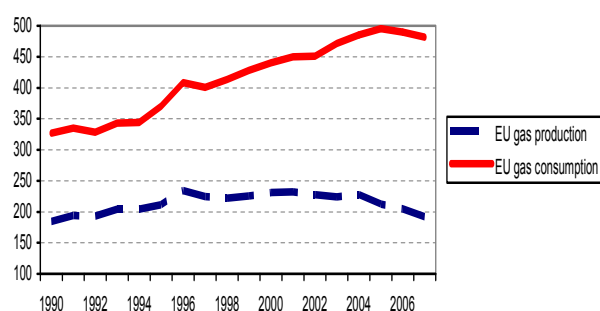
Introduction

The European Union's (EU) consumption of natural gas has been growing rapidly over the last two decades. Gas has become an increasingly important component of the EU's energy mix, with gas-fired power plants gradually replacing less environmentally friendly coal plants. Domestic gas production covered close to 60 percent of the EU's consumption needs during the 1990s, but by 2007 it declined substantially around 40 percent (see Figure 1). The rest is imported from three main sources: Russia (around 40 percent of total gas imports), Norway (around 25 percent) and various African countries among them Algeria, Nigeria, Libya and Egypt which account for around 25 percent. The last few years have also heightened public worries in Europe over the security of its gas supplies, primarily those imports coming from Russia. These fears were partly confirmed in January 2009 when several EU and non-EU countries faced a sudden cut in their gas supplies. The Russian-Ukrainian stand-off only reinforced the argument that more needs to be done to strengthen the reliability of access to vital energy resources.

The 2009 gas crisis

The January 2009 gas crisis was a result of a payment dispute between Russia and Ukraine and highlighted the sensitive role that gas transit countries play within the energy security equation. One frequently asked question is why do transit routes and transit countries matter regarding the EU's gas supply? First, despite gradual expansion of liquefied natural gas (LNG) infrastructure, most parts of Europe rely solely on gas transported via pipelines. Second, investment delays in internal interconnections, new supply projects and maintenance of existing connections imply that several countries in Eastern and Southern Europe rely solely on gas coming from Russia and often by a single transportation route. Some of these countries not only lack any practical ways of obtaining gas from alternative sources, but they also are deficient of the gas storage capacity that is necessary to offset short-term supply disruptions. Third, the nature of energy, economic and political relations between Russia and key transit countries such as Ukraine and Belarus, in addition to their own internal developments, are far from optimal from the perspective of securing Europe's gas supply.

Figure 1. EU gas production and consumption, 1990-2007 (bcm)



Source: BP Statistical Review of World Energy June 2008.

The big picture

Before discussing these issues in depth it is necessary to take a broader perspective of the Eurasian gas market. What is the big picture? The Commonwealth of Independent States (CIS), and Russia in particular, have the largest natural gas reserves in the world. Russia is also the largest global gas producer. While domestic gas demand in Russia and other CIS countries (notably Ukraine) is very high in comparison to the EU, current production levels are sufficient to ensure significant exports to other European countries. The existing pipeline infrastructure does not allow for the diversion of gas extracted from currently used deposits to other markets. The situation is somewhat different in Central Asia which also sits on sizeable gas reserves. The key issue for them is market access, or specifically lack thereof. At present Russia holds strong monopsony power as larger volumes of gas from the region are only allowed to reach final markets through Russian pipelines. Future expansion of the region's export capacity can take place via a multitude of transit routes (e.g. through Russia, the Caucasus, Iran or China). As a result gas can be directed towards various markets, one of which could be the EU.

From the EU perspective, the continued decline of domestic gas production implies that higher gas imports will be needed in order to continue gas-fired electricity production. In particular at least for the next two decades there is no viable alternative to Russian gas. This implies a strong interdependence between gas producing and gas consuming countries. At the same time, there are alternatives to gas-fired power generation (nuclear, renewables, clean coal technologies, etc.). Therefore, investment decisions in the power generation sector and future gas demand trends will be shaped by perceptions of supply security, stability and price.

The critical role played by transit countries and especially Ukraine is unlikely to change at least for the next few years. The volume of gas transported through the Ukrainian pipeline system to other EU countries oscillated around 115 billion cubic meters (bcm) annually in 2006-2008. The planned final capacity of the Nord Stream pipeline (that would directly connect Russia to Germany) is 55 bcm, while the maximum capacity of the South Stream (linking Russia to Bulgaria) pipeline would be around 47 bcm. However, even if both projects are implemented they will not reach these capacities, at the earliest, until the end of the next decade.

This implies that there is a significant opportunity for close cooperation between all interested parties. At the same time, cooperation failures leading to supply disruptions may result in substantial economic and political damage.

Behind the problems

One important problem affecting the security of Europe's gas supply is that several aspects of the Russian-Ukrainian gas relationship are far from being well understood. Most if not all of the external actors lack sufficient information on the true nature of many underlying issues. The following factors play a role:

1. Unreformed gas sectors in both Russia and other transit countries
2. Legacy of arbitrarily set prices in large intra-CIS gas trade as well as a vague price adjustment process
3. Political agenda (on the side of Russia, other transit countries, and to some extent the EU)

4. Involvement of shady businesses profiting from non-transparent rules pertaining to the gas trade
5. Lack of a functioning EU gas market and physical infrastructure (i.e. interconnections)
6. Poor physical condition of transit infrastructure

The relative importance of these issues is subject to controversy. For example, with respect to the events of January 2009, the most serious gas supply disruption to date, competing explanations have underscored the importance of Gazprom's economic interests, the promotion of a specific political agenda by Ukrainian and / or Russian actors and private interests of individuals benefiting from various non-transparent schemes.

The way forward

The challenge to finding the solutions required to help improve gas relations between producer, transit and consumer countries can be summarized by the following:

1. How best to eliminate economic distortions (e.g. in the price structures) and allow market forces to work?
2. How to limit the influence of politics?
3. How to limit the influence of beneficiaries of non-transparent deals?

The task is certainly far from being easy. When big politics meets big money in a non-transparent business environment the incentives to maintain the status quo are extremely strong, especially given the lack of trust between all interested parties i.e. Russia, Ukraine and both EU governments and corporations. The solution needs to include several elements. First, there needs to be significant reform of the Ukrainian gas market, including the rationalization of gas pricing. Second, substantial investment in the physical infrastructure of the gas transit system is required. Finally, there needs to be a shift towards a more transparent and coherent system of gas contracts, including more efficient dispute resolution mechanisms.

It appears that some market internalization would be needed to overcome the gridlock and resulting market failures that result when three separate entities pursue their own interests. This could take the form of Russia entering into an accord with Ukraine on joint control of the Ukrainian pipeline system, a similar deal between Ukraine and the EU or a trilateral agreement. As it stands, all these potential solutions have far reaching political repercussions and so it is not surprising that past attempts to implement them have failed. The most recent EU-Ukraine declaration, which took place in March 2009, can be seen as a step towards the second of the above options (see text box for details). While the provisions of the agreement look perfectly reasonable, the strong Russian opposition to its de facto exclusion from the agreement coupled with extremely difficult internal political and economic developments in Ukraine lead to some scepticism as to the chances that the declaration's provisions will be implemented. Still, as long as no viable alternative is agreed upon, the realization of the EU-Ukraine declaration is worth supporting. The agreement could be aided if a provision was made for stronger inclusion of Russia in the process.

Finally, one should remember that solving the issues related to Ukrainian gas transit is just one of many more general problems related to the transit of gas and other energy commodities as they make their way to the EU market. Russia, Turkey, Belarus, and other Caucasus and Middle East countries also play a very important role in this respect. In turn, transit issues are just one element of the vastly complex interplay between the energy, environmental and economic policies of the EU, particularly as it prepares to face the challenges of the 21st century.

Highlights of the EU-Ukraine declaration of 23 March 2009

The sides recognize Ukraine's intention to gradually integrate into the single energy market of the EU

The Signatories welcome the interest in supporting and modernizing of Ukraine's gas transit system (including the identification of specific projects)

The government of Ukraine will develop the reform programme for its gas sector to be implemented in 2010-2011

The government of Ukraine will ensure the implementation of the Directive 2003/55/EC concerning common rules for the internal market in natural gas

The European Commission, the government of Ukraine and creditors will work together in identifying a more detailed implementation plan of gas sector reforms and modernization of the gas pipeline system; Ukraine can receive technical support and funding for implementation of these tasks

The declaration was signed by the Prime Minister of Ukraine, External Relations and Energy Commissioners as well as representatives of the EIB, EBRD and the World Bank.

For more information on the challenges of the EU-CIS energy cooperation and energy policies in CIS countries see CASE Network Report no. 83 [link to

http://www.case.com.pl/strona--ID-publikacje_raporty_case,publikacja_id-23703723,nlang-710.html] summarising the findings of the energy work package of the FP6 ENEPO project and in the DG ECFIN European Economy, Economic Papers no. 327 [link to http://ec.europa.eu/economy_finance/publications/publication_summary12684_en.htm] summarising the results of CASE's project on the economic aspects of the energy sector in CIS countries.

Wojciech Paczyński is a senior economist at CASE – Center for Social and Economic Research. His research interests include applied macroeconomics, international economics, international relations, game theory and economics of education. He has managed several research, analytical and advisory projects in Europe and Central Asia. He has published on European integration, monetary unions, monetary policy, currency crises and international energy cooperation. He is a member of the DG ECFIN Euro Team. Previously, he worked for the OECD Economics Department, University of Dortmund, and the Polish Ministry of Economy. He also served as a consultant for the World Bank and OSCE..

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E-Brief Series Editor: Ewa Błaszczńska ewa.blaszczynska@case-research.eu

