

Documento de Trabajo

Working Paper

Russia and Europe: Mutual Dependence in the Energy Sector

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17/7/2007

Working Paper 25/2007 (Translated from Spanish)

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Summary

Sustained economic growth in the EU requires a continuous and growing energy supply. However, this geopolitical zone does not have its own supplies. Russia is one of the EU's main energy suppliers, covering a considerable part of its imports. For this reason, there is increasing debate regarding the EU's energy vulnerability vis-à-vis Russia. This paper will look at the various aspects of this dependence. We will consider Russian production and the export of both gas and oil to the EU, as well as the possible creation of a gas cartel. Finally, we will deal with the issues involving third countries through which gas and oil pass on their way from Russia to the EU.

The EU –and Europe in general– now finds itself in a period of sustained economic growth, which has to be fed by a continuous energy supply. However, Europe's energy sources are now insufficient, putting it in a position of energy dependence which often leads to vulnerability in this respect.¹ The Soviet Union used to be one of Europe's traditional energy suppliers and this role has been inherited and even enhanced by Russia.

Comments are often heard that Europe suffers from energy vulnerability because of its dependence on energy produced in Russia. However, while it is true that this vulnerability exists, there are two factors that condition it to some extent. First of all, Russia does not border on Europe; rather, part of the post-Soviet space (Belarus and the Ukraine) sits between the two zones, conditioning the arrival of energy flows to Europe and, as a result, affecting its vulnerability in this regard. Secondly, certain energy sources exist in other areas of the post-Soviet Union –such as the rich oil and gas reserves in the Caspian Sea and in central Asia (Kazakhstan and Turkmenistan)– and these could reach Europe. These areas could diversify Europe's supply sources, reducing its energy dependence on Russia. However, part of these resources could be channelled through Russia, a factor that once again puts that country in a strategic position in terms of European energy dependence.

When considering the EU's energy vulnerability or dependence, we must distinguish between the situation affecting oil and the one affecting gas. Gas use is on the rise and Russia is in a privileged position. Russia is the world's largest producer of gas and, since the number of producers is relatively small, the establishment of a gas cartel could give rise to greater European vulnerability, especially if Russia joined such an association, along with countries such as Algeria or Qatar.²

This paper will consider the mutual energy dependence of the EU and Russia.³ To

¹ Gonzalo Escribano, *Seguridad energética: concepto, escenarios e implicaciones para España y la UE*, Working Paper nr 33/2006, Elcano Royal Institute, 2006.

² Aurèlia Mañé & Alejandro V. Lorca, *África del Norte: su importancia geopolítica en el ámbito energético*, Working Paper nr 11/2007, Elcano Royal Institute, 2007.

³ Thanks to Aurèlia Mané, member of GATE (Tele-education Department at the Universidad de Barcelona) and professor at the Universidad de Barcelona, for her comments and suggestions.

analyse these energy relations, we will look in greater depth at some of the points mentioned above. First, we will study Russian oil and gas production and exports. Secondly, we will discuss the possibilities and consequences of a gas cartel, an issue that has recently become very important. Third, attention will be given to the issue of third countries through which energy is transported from Russia to Europe, highlighting another dimension of European energy vulnerability, but one that has nothing to do with the source of oil and gas production.

Oil and Gas Production in Russia

Part of the debate on European energy vulnerability centres on the continent's great dependence on Russian oil and gas supplies. If we consider European gas purchases, we can distinguish three groups of countries. First, there are those with low or very low dependence: countries whose gas imports from Russia account for no more than 15% of their total gas imports. These include Belgium, Ireland, Luxembourg, the Netherlands, Portugal, Spain, Sweden, Switzerland and the UK. Next is a middle band of countries that cover 20% to 40% of their needs with Russian gas. These include France (23.5%), Italy (31.7%) and Germany (40.3%). Countries that import more than 50% of their gas from Russia are highly dependent: Austria, the Czech Republic, Greece, Hungary, Poland, Rumania, Slovenia and Turkey. At the extreme end of this group, Bulgaria, Croatia, Finland, Latvia, Lithuania, Serbia and Slovakia rely on Russia for all their gas imports.

Dependence can become vulnerability in one-way relationships. In the case of European countries with substantial exports to Russia, it can be argued that there is reciprocity, meaning that vulnerability is diluted. This is the case of Germany, which accounts for 13.8% of Russia's imports, while Italy and France are in a similar situation, supplying 4.5% and 4% of Russia's imports, respectively. Finland, Poland and the UK are lower on the scale of mutual dependence, since each of them supplies about 3% of Russia's foreign purchases.

This ranking shows that within Europe there are different levels of dependence on gas supplies from Russia (see Table 1). This means that energy vulnerability looks different depending on which country we look at. In general, there is no need to discuss the vulnerability of countries with low dependence. It is the most dependent countries that are among the most belligerent regarding Russia and that are applying pressure for the EU as a whole to stabilise its energy relations with Russia. Countries with medium energy dependence (especially France, Germany and Italy) are in a special situation. In these cases, there are two factors affecting energy dependence. First of all, in 2005, these countries accounted for 47.2% of Russia's gas exports: France 7.6%, Germany 24.2% and Italy 15.4%. Secondly, their dependence is diluted by intense trade relations. In the three-year period 2003-05, 22.3% of Russia's imports were from these three European countries. Hence, they are in a state of mutual economic dependence with Russia, rather than simply of energy dependence as such. Given this situation, combined with the EU's current state of indecision, it is no surprise that they are taking far-reaching decisions regarding Russia on a unilateral basis. Indeed, the *de facto* position of Germany, France and Italy is to build relations between the EU and Russia on a country-by-country basis, rather than seeking a unified EU position.⁴

⁴ A. Sánchez, 'El problema energético y el Consejo Europeo', *Expansión*, 13/III/2007, p. 70.

Table 1. European Gas Imports, 2005 (billions of m³ of gas)

	Via gas pipelines			Liquefied gas Imports	Total imports of gas	% Russian gas / total	% Russian imports of products 2003-2005
	Total imports	From Russia	%				
Germany	90.7	36.54	40.3	0	90.7	40.3	13.8
Austria	8.68	6.8	78.3	0	8.68	78.3	1.3
Belgium	18.92	0.3	1.6	2.98	21.9	1.4	1.5
Bulgaria	2.85	2.85	100.0	0	2.85	100.0	0.3
Croatia	1.17	1.13	96.6	0	1.17	96.6	0.1
Czech Republic	9.48	7.13	75.2	0	9.48	75.2	1.1
Slovakia	6.4	6.4	100.0	0	6.4	100.0	0.5
Slovenia	1.1	0.56	50.9	0	1.1	50.9	0.5
Spain	11.59	0	0.0	21.85	33.44	0.0	1.3
Finland	4.2	4.2	100.0	0	4.2	100.0	3
France	36.2	11.5	31.8	12.83	49.03	23.5	4
Greece	2.4	2.4	100.0	0.46	2.86	83.9	0.2
Holland	17.58	2.97	16.9	0	17.58	16.9	2
Hungary	10.82	8.32	76.9	0	10.82	76.9	1.1
Ireland	3.05	0	0.0	0	3.05	0.0	0.4
Italy	70.99	23.33	32.9	2.5	73.49	31.7	4.5
Latvia	1.75	1.75	100.0	0	1.75	100.0	0.2
Lithuania	2.93	2.93	100.0	0	2.93	100.0	0.4
Luxembourg	1.4	0	0.0	0	1.4	0.0	0.1
Poland	10.21	6.4	62.7	0	10.21	62.7	3
Portugal	2.62	0	0.0	1.58	4.2	0.0	0.1
Great Britain	14.65	0	0.0	0.52	15.17	0.0	2.9
Romania	6.25	3.95	63.2	0	6.25	63.2	na
Serbia	2.15	2.15	100.0	0	2.15	100.0	0.3
Sweden	1.03	0	0.0	0	1.03	0.0	2.1
Switzerland	2.84	0.37	13.0	0	2.84	13.0	0.9
Turkey	22.15	17.83	80.5	4.88	27.03	66.0	1.8

Note: this is the list of countries that import gas

Source: the author, with data from the *BP Statistical Review of World Energy 2006*, BP, 2007, and the Russian Federal Customs Service, *Tamozhyennaya statistika vneshnei torgovli Rossiiskoi Federatsii*, Moscow, various years.

The most significant measures taken by these countries have been to reduce their individual vulnerability by signing long-term bilateral gas supply agreements with Gazprom. It should be kept in mind that these agreements have been signed at the same time as large trade agreements have been signed between the respective countries and Russia. In late 2006, the French company Gaz de France signed an agreement with Gazprom, extending gas supplies from 2012 to 2030, while at the same time, starting in 2007, the Russian gas company was able to sell 1.5 billion m³ of gas to French end consumers. Also, the French company was receptive to Gazprom acquiring assets in the future business structure made up of Gaz de France and Suez, while Gazprom accepted participation by foreign companies –French in this case– in the operation of the huge Stockman field.⁵ The case of Germany has a number of particular features, since in addition to the direct investments that have been made in gas infrastructure in Germany,⁶ construction has begun on the Northern European Gas Pipeline which, on the one hand, guarantees a direct supply of Russian gas to Germany, and on the other, makes the country a transport route to the rest of Europe.⁷ Also, the German government is hoping to participate in an international consortium –made up of Russians, Ukrainians and Germans– that would manage the oil and gas transport systems that cross the Ukraine.

In Italy, Gazprom has been granted direct access to the Italian distribution networks, in addition to the long-term contracts that have been signed, while the Italian gas company has been allowed to operate Russian fields.⁸ It has recently come to light that, in the medium term, the UK might also at least partly follow the Italian lead. Specifically, Gazprom could be granted access to the direct distribution network in Britain, through the creation of a mixed company with the British gas company Centrica. Such an agreement could be reached when the Northern European Gas Pipeline begins operating, with Gazprom covering about 10% of Britain’s needs with a volume of 11 billion m³ of gas, up from the approximately 4% it serves today.⁹ This helps diversify Gazprom’s business and reduces the vulnerability associated with dependence.

Indeed, Gazprom’s strategy is to acquire gas infrastructure, while working to gain direct access to European consumers. Table 2 summarises Gazprom’s most significant acquisitions in Europe.

Table 2. Gazprom Holdings in European Gas Companies

Country	Joint venture	Gazprom holding (%)
Germany	Wingas	50
Austria	GWH	50
	Centrex	25
Estonia	Eesti Gaze	37.5
Hungary	E.ON Foldgaz Storage	na
	E.ON Foldgaz Trade	na
Italy	ENI power	10
Latvia	Latvias Gaze	34
	Stella Vital	30
Lithuania	Lietuvos Dujos	37
Great Britain	Pennine Natural Gas (PNG)	100

Note: this chart does not include small companies that Gazprom has set up in Germany, France, Greece, Italy, Holland and the UK.

Source: D. Fiton & C. Locatelli, ‘Russian and European Gas Interdependence. Can Market Forces Balance out Geopolitics?’, *Cahier de Rechercher LEPII*, série EPE nr 41 bis, January 2007, p. 34.

European energy dependence and, in particular, the dependence of the bigger countries, is also diminished by the fact that Russia only delivers through gas pipelines, leaving it with no alternative clients. As a result, the agreements govern bilateral relations between a seller’s monopoly and a buyer’s monopoly, reducing the vulnerability of the countries with the greatest consumption of

⁵ *Nezavisimaya gazeta*, 20/XII/2006, and *Rossiiskaya gazeta*, 19/XII/2006.

⁶ *Nezavisimaya gazeta*, 16/I/2007.

⁷ G. Martyscheyev, ‘Nuevas tendencias organizativas en las redes energéticas rusas’, in A. Sánchez (Ed.), *Gas y petróleo en Rusia: impacto interno y proyección exterior*, Universidad de Valencia, 2006, p. 41-54.

⁸ *Rossiiskaya gazeta*, 23/I/2007, and *Rossiiskaya gazeta*, 24/I/2007.

⁹ *Nezavisimaya gazeta*, 6/III/2007.

Russian gas, since the supplier could face serious problems to find other clients. The situation is different for countries that buy relatively little Russian gas in comparison to other EU members that are connected by gas pipelines. In these cases, Russia can look for alternatives or, in extreme cases, can stop producing without excessively negative financial repercussions.

The situation with oil is different. Russia covers 43.8% of Europe's oil imports,¹⁰ but the supply is more flexible. For this reason, the supply of Russian gas presents less insecurity, since it can be buffered by the creation of strategic reserves in each country aimed at buying time to make the corresponding purchases in other countries if problems develop in the supply from Russia.

In fact, based on the information available for the year 2000, the European countries that imported the most Russian oil were Germany, Italy and Poland. These three countries accounted for 50% of purchases of Russian oil. Much further behind, with about 5% of overall European imports, were the Netherlands, Hungary, Lithuania, Slovakia and Switzerland.¹¹

A more relevant issue is the importance of Russian oil imports for each country. When the needs of each country are compared, the following results become clear: strategic dependence results when Russian imports cover half a country's oil consumption needs. Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia are in this position. Countries that cover 10%-50% of their needs with Russian imports are in the middle. The most independent countries –below 10%– are Romania, Switzerland, the Netherlands, Finland, Germany and Italy. The other EU countries have insignificant dependence.

Eastern European countries are most dependent on Russia, while Central Europe is somewhat less dependent. Southern Europe, with the exception of Italy, is practically free of dependence on Russia.¹² This situation demonstrates that Western Europe has a considerable scope for manoeuvre in terms of Russian oil imports; in other words, if problems should arise with this supplier, it would be relatively easy to find other sources of oil.

In the context of Russian oil imports, the concept of vulnerability varies from country to country and, in particular, between Eastern and Western Europe. EU expansion has put extremely different perceptions of energy vulnerability on the same table, especially regarding Russian supplies. This means energy vulnerability in the EU can become a controversial issue with little common ground, making it difficult to reconcile such differing visions.

Russia and the Creation of an OPEC-style Gas Cartel

As we have discussed, Europe depends to a large extent on oil and gas imports from Russia. However, the situation involving gas is delicate and energy dependence might increase in the future. If, in addition to the technical and production-related aspects of dependence on Russian gas, a change in organisational structure were to take place –that is, if a gas cartel were established with Russia as a member– Europe's vulnerability would increase. For this reason, and since the creation of a gas cartel has become an important issue lately, the following section has been included.

¹⁰ This information does not refer precisely to Russia, but rather to all the ex-Soviet countries. In these countries, of the surplus of production over consumption –that is, the part that can be exported– 85.9% corresponds to Russia, 10% to Kazakhstan, 3.3% to Azerbaijan and 0.9% to Turkmenistan. Part of this gas is purchased by Russia itself; as a result, for practical purposes, it can be assumed that sales from the ex-USSR originate in Russia. See *BP Statistical Review of World Energy 2006*, BP, 2006.

¹¹ Ian K. Lilly, 'European Union-Russia Relations: The Oil and Gas Sector in Mid-2002', presented at the *Inaugural New Zealand European Studies Conference*, European Union Studies Association of New Zealand (EUSA-NZ), Christchurch, 31/V/-1/VI/2002.

¹² In the case of Spain, the situation has changed considerably in recent years. In fact, while in 2000 and 2001 oil imports accounted for 9% of foreign purchases, since then they have accounted for more than 14%, peaking in 2003. It must be kept in mind that during 2002-04, Russia was the largest supplier of oil to Spain. See *Boletín Estadístico de Hidrocarburos*, annual, various years.

The Context of the New Proposal to Create a Gas 'OPEC'

In early 2007, Teheran proposed to the Kremlin that a gas cartel be created, with Russia and Iran as the main founding members. Because of this proposal, the creation of a gas cartel has once again become the subject of public debate.

The proposal was made on 28 January 2007, when the President of the Russian Security Council, Igor Ivanov, visited Iran and met with the country's two top leaders, the Ayatollah Ali Khamenei and President Mahmoud Ahmadinejad. This was the first important meeting between the two countries since UN Resolution 1,737 was passed, establishing sanctions against Iran for its development of its nuclear programme. The resolution determined that the director of the International Energy Agency (IEA) would submit a report in February 2007 and that if Iran continued to enrich uranium, a new resolution would be prepared with further sanctions against this central Asian country. The resolution was supported by Russia after major modifications were made to the original text, focusing the restrictions exclusively on preventing Iran from developing nuclear and ballistic military programmes. These modifications safeguarded some of Moscow's key interests in Iran, as became clear later. Specifically, the US attempted to prevent Russia from completing the sale of Tor-M1 anti-air systems to Iran, but Moscow insisted that these systems were defensive in nature and could not carry nuclear payloads. Also, the Buser nuclear plant, which Russia is building, was excluded from sanctions under the resolution and, in fact, is expected to begin operations at the end of this year.¹³ As a result, resolution 1,737 is essentially a political tool with very little economic impact. This is clear from the fact that Iran has been told that if it paralyses its civilian nuclear programme, resolution 1,737 will be withdrawn.

This resolution led to certain tensions in the relations between Russia and Iran. On the one hand, Iran hoped that Russia would prevent its passing, but on the other, Russian intervention bought Teheran extra time. This was one of the points that Ivanov argued most strongly in his discussions with Iranian leaders.

Above all, Ivanov informed Iran of Putin's desire for closer and friendlier relations, despite the fact that Russia had voted in favour of UN sanctions against Iran. At the meeting various aspects of the conflicts in the Middle East and Central Asia were discussed, but the main issue was the Iranian nuclear programme. Along the same lines, the increasing aggressiveness of the US toward Iran was also discussed. Indeed, since early 2007, Washington's gestures have been more and more hostile: Bush accused Iran directly of fomenting instability in Iraq; six people belonging to the Iranian consulate in Iraq were arrested; the US army was given carte blanche to capture or kill Iranian agents; and a second aircraft carrier was sent to the region to join the one that was already there. In other words, conditions for an armed conflict between the countries were developing.

In this delicate situation, Teheran looked around for support. To ease the situation, the Ayatollah Khamenei offered Ivanov closer relations in the gas sector, with the possibility that the two countries could form the core of an OPEC-style gas cartel. For Russia, this was an unexpected but very attractive proposal, touching on its core economic interests and its international profile. The importance of this proposal is clear when one considers that together, Russia and Iran hold 42% of the world's gas reserves.¹⁴

Russia's Formal Response

The first time this proposal came to light was in 2001, through the Iranian Ambassador in Russia, Mahdi Safari. That same year it took shape in the creation of the Gas Exporting Countries Forum

¹³ Antonio Sánchez Andrés, 'Relaciones político-económicas entre Rusia e Irán', ARI nr 12/2006, Elcano Royal Institute, 2006, and 'Rusia ante la crisis nuclear iraní', ARI nr 53/2006, Elcano Royal Institute, 2006.

¹⁴ *Kommersant*'-daily, 29/I/2007, *Nezavisimaya gazeta*, 30/I/2007, and *Rossiiskaya gazeta*, 30/I/2007.

(GECF) in Teheran. The idea was to build a gas OPEC with Russia and Iran at the core and other members joining later.¹⁵ Since then, the idea of a creating a gas cartel has been floated periodically. For example, in 2002, at a meeting between Putin and the President of Turkmenistan, Saparmurat Niyazov, the idea was voiced of creating a gas alliance between Central Asian countries and Russia, but Niyazov rejected it.¹⁶ There have been two key moments in the past year when the possibility of creating such an organisation has raised suspicions: first, in the summer, when Russia signed energy collaboration agreements with Algeria; and secondly in November, when *The Financial Times* quoted a report by NATO experts that indicated the possibility that Russia, Iran, Libya, Qatar, Algeria and Central Asian countries could reach an agreement on gas sales.¹⁷

However, such proposals have been rejected systematically by Moscow, which claims that they are neither economically nor politically beneficial, casting serious doubts about Russia's interest in establishing a gas cartel. In technical terms, Russia supplies gas to Europe through gas pipelines, which is an inflexible form of supply. Under these conditions, sales are based on long-term contracts. In fact, Gazprom only extracts gas to cover needs expressly stated in previously existing contracts.¹⁸ Furthermore, the long-term contracts (15-25 years) that Gazprom recently signed with France, Germany, Italy and Austria are subject to international arbitration.¹⁹ In political terms, the creation of a cartel of this kind could lead to problems of customer confidence, as well as a major political and economic backlash. Also, if Russia decided to take part in a cartel, it would lose part of its capacity to operate an independent pricing and supply policy to benefit countries it considers friends –a limitation not to the liking of the Kremlin–. The combination of these factors casts doubt on Russia's interest in establishing a formal gas cartel.

Russia's rejection of such an idea has been emphasised recently, both by the Energy Minister Victor Khristenko on his mid-January visit to Algeria, and by Gazprom's President and Russia's Vice-president, Medvedev, who explicitly denied that a gas cartel would be created with Russia and Algeria at the core.²⁰ In addition to the Russian denial, Algeria too has, at least formally and on numerous occasions, rejected the idea of creating a cartel.²¹ Indeed, the proposal to establish a gas cartel headed by Algeria could call into question some of the projects and aid that this country receives from the EU, meaning that such an association would likely reduce Algeria's dynamism.²² Iran's participation in a gas cartel is not significant since, although it has large reserves, its real production is small and its exporting capacity is smaller still. In fact, Iran now imports gas from Turkmenistan.²³ In the case of Qatar, despite a rapprochement between Moscow and Doha, there is lingering distrust between the two countries as a result of the conflicts that arose in 2004, which led to near paralysis in diplomatic relations. The US, meanwhile, has considerable influence over this Arabic country.²⁴ Indonesia and Malaysia, for their part, have not taken any clear position on the creation of a gas cartel. In other words, there are serious doubts as to how a significant group of countries could be brought together to actually bring a gas cartel into being.²⁵

¹⁵ *Kommersant*'-daily, 30/I/2007.

¹⁶ *Rossiiskaya gazeta*, 16/II/2007, and *Kommersant*'-daily, 3/III/2007.

¹⁷ *Financial Times*, 14/XI/2006.

¹⁸ *Nezavisimaya gazeta*, 5/III/2007.

¹⁹ Jonathan Tern, 'Gas-OPEC: A Distraction from Important Issues of Russian Gas Supply to Europe', *Oxford Energy Comment*, Oxford Institute for Energy Studies, February 2007.

²⁰ *Nezavisimaya gazeta*, 30/I/2007.

²¹ *Expansión*, 2/III/2007.

²² Antonio Sánchez, *Relaciones político-económicas entre Rusia y los países del norte de África*, Working Paper nr 22/2006, Elcano Royal Institute, 2006.

²³ *Nezavisimaya gazeta*, 1/II/2007.

²⁴ Antonio Sánchez, *Relaciones económico-políticas entre Rusia y los países de la península arábiga*, Working Paper nr 12/2007, Elcano Royal Institute, 2007.

²⁵ Although a recent report prepared by Price Waterhouse Coopers suggests that a gas cartel might be set up by Russia, Qatar, Algeria, Malaysia and Indonesia, arguing that such a cartel would control world gas production, part of this argument is based on an increase in sales of liquefied gas, which is not the case at present. See *Nezavisimaya gazeta*, 5/III/2007.

Russia's Real Interests

As mentioned, although the proposal to create a gas cartel was initially made some years ago and was rejected, the situation is now different and the Russian perception of the issue seems to have changed. This assertion is based on the fact that the creation of a gas OPEC must be understood not simply as the creation of an organisation, but rather as a series of steps or stages that could lead to a cartel in the future. The significance of these intermediate stages (first of all, the establishment of regular, formal relations between companies and then, secondly, the creation of a *de facto* cartel, though not a formal one) is that, at present, Moscow may have greater interest in the process itself than in the final result (ie, in the final goal of creating a formal gas cartel).

In political terms –in a context of an increasingly aggressive attitude on the part of the Americans and European distrust of Russia– it may seem very attractive to Moscow to stimulate and/or allow a rapprochement between gas companies belonging to the main gas-producing countries. In fact, Putin's recent statements regarding his interest in the creation of an international gas organisation can be interpreted as a response to the US and the EU, as well as an indication of his interest in increasing Russia's role in the Middle East. Indeed, if Iran were included, in line with Teheran's repeated proposals, such a proto-cartel would enable Moscow to improve its political relations with Teheran while possibly gaining access to Iran's gas reserves. At the same time, Moscow would have to help protect Iran from US and European demands, though within the bounds of not developing nuclear military programmes –something that Moscow has made clear–. This would make Moscow a key player in stabilising the region and, as a result, would increase its influence in the Middle East. Putin's statements also take on greater political importance because they were made on the eve of his historic visit to the Arabian peninsula.²⁶ His statements may have been aimed at a rapprochement with Qatar, following very tense relations since 2004, and at showing Saudi Arabia that Russia has international clout similar to the US.

Promoting the early stages we have mentioned could also be useful to improve Russian relations with the EU. There are two significant issues in this regard: in the short term, the signing of a cooperation agreement between Russia and the EU; and, in the long term, the possibility that Europe will develop a strategy to create a single gas buyer for the entire EU.

As for the short term, tensions between the EU and Russia have increased recently, due to their conflicting interests regarding ratification of the Energy Charter and the Transport Protocol. As a result of these differences, tensions have emerged in the form of a veto by Poland, diplomatic brush-offs at the informal EU-Russia summit in Lati (Finland) in late October 2006, discussions arising from the cut-off of the oil supply by Belarus, and the veiled accusations in some of the European media that the Kremlin was involved in the deaths of the journalist Politkovskaya and the ex-KGB agent Litvinenko. Since the cooperation agreement between Russia and the EU expires in November 2007, it is foreseeable that the EU will increase pressure on Moscow to include the content of the Energy Charter and the Transit Protocol in the new agreement. If the Kremlin moves more openly toward establishing a gas cartel, this could weaken EU pressure to have Russia included in its energy projects. In particular, closer association between Russia, Iran, Algeria and Qatar –even on an informal basis– could weaken the European position.

In the long term, the possibility of constructing a well-connected gas pipeline system in Europe, and the creation of a European buyer's monopoly, as some European energy policy suggest, would cast doubt on Moscow's position vis-à-vis its European customers. In this regard, the implementation of such European initiatives could encourage the Kremlin to continue on to the final stages of the process, that is, to promote the creation of a formal gas cartel. Implementing such a proposal would create an oligopoly of producers that would match the European buyer's monopoly. It would also tend to alter how gas prices are set, since the link with oil prices would be broken and gas prices would acquire their own logic.

²⁶ *Kommersant*'-daily, 13/II/2007.

Another long-term consideration that must be kept in mind is that the sale of liquefied gas will continue to grow.²⁷ While in 2005 it accounted for 26.2% of all exported gas, in 2010 this figure is projected to be 28%; by 2020 it is expected to reach 38%, and in 2030 it will account for half of all gas on the international market. The growing presence of liquefied natural gas is reversing the fragmentation of the gas markets and could lead to a single gas price that is independent of oil prices. In these conditions, a gas cartel with worldwide repercussions could indeed be created.

In the current situation, Moscow's foreseeable response will be to continue to gradually seek closer relations with some of its gas-producing allies, but while trying not to raise excessive international suspicion. In this regard, increasingly close collaboration agreements could be established in the gas sector with Iran and Algeria. Neither would it be difficult to include Kazakhstan or Turkmenistan,²⁸ which would also increase Russia's power to negotiate with China.²⁹ Russia could also establish special relations with Saudi Arabia, Libya and Qatar.

Recent statements by Hugo Chávez also come to bear on this discussion of the creation of a gas cartel. Specifically, the Venezuelan President has defended the idea of establishing an association of gas exporting countries in South America. This would include Venezuela itself and Bolivia, but also Argentina and Brazil as privileged consumers. Although this could have certain implications in terms of the creation of a world-wide gas cartel, it is more limited in focus. For technical reasons, it would bring together producer and consumer countries alike and, for this reason, such an association would be different than an actual cartel. Also, Trinidad and Tobago, one of the main gas producers in South America, appears unlikely to join the project. Therefore, only relatively modest gas-producing countries are included in this association and their influence is only regional in scope. For economic reasons, this proposal is linked to the construction of a gas pipeline between Venezuela and Brazil, with an agreement to this effect having been signed by the two countries on January 20, 2007. This organisation would also be linked to the proposed construction of another gas pipeline from Venezuela, through Brazil and on to Argentina –a project that was a key issue at the meeting of the leaders of the three countries on March 10, 2007–. In political terms, this gas association would seem to be manoeuvre by President Chávez to block US initiatives in South America.³⁰

As various countries were taking positions on the creation of a gas cartel, a meeting of the biggest gas exporters and producers was held in Doha in April 2007. Despite the political manoeuvring that had gone on before, there was no discussion of forming a gas cartel. The only significant result of the meeting was the establishment of a working group with a mandate to prepare a report on gas prices and the state of the gas market. It is significant that the next meeting will be held in 2008 in Moscow –a factor that gives Russia a strategic opportunity to stir up gas-related controversy in anticipation of the meeting–.

Vulnerability in Transit Countries

In the sections above, we have discussed European energy dependence on oil and, in particular, on gas. This relationship is to a large extent the root of the EU's energy vulnerability. In this section, we will discuss another factor leading to vulnerability: transit. In this regard, the problem of not receiving oil or gas (or the insecurity involved in this possibility) resides not only in the volatility of the country producing the resources, but also in the fact the resources have to pass through other countries that act as middlemen between producer and consumer. This is where transit insecurity arises: in the risk that the middleman may take the resources for himself. It must be kept in mind

²⁷ *Nezavisimaya gazeta*, 14/II/2007.

²⁸ It is significant that Turkmenistan sells about 5 billion m³ of gas to Iran, while the rest is purchased by Russia (*Kommersant*'-daily, 30/I/2007). Under these conditions, there is a *de facto* coordination of gas prices between the two countries (*Nezavisimaya gazeta*, 1/II/2007).

²⁹ *Nezavisimaya gazeta*, 30/I/2007.

³⁰ *Kommersant*'-daily, 3/III/2007.

that, in this case, vulnerability has a dual nature. On one hand, the consumer risks losing his supply, while on the other, the producer could lose his product or lose the opportunity to sell it.

A substantial part of Russia's exports to Europe are made through pipelines that pass through other countries. Two of these are Ukraine and Belarus. As a result, both the EU and Russia face the problem of vulnerability in transit.

The Problem with Transporting Oil and Gas through the Ukraine and Belarus

Some transit problems have occurred when Russian oil and gas were exported through the Ukraine. Traditionally, the transit of Russian gas and oil through the Ukraine has involved three kinds of payment by Russia. First, a toll; second, subsidised oil and gas prices (significantly lower than world prices); and third, the 'loss' of some of the oil and gas flowing through the pipelines.³¹ Despite the traditional economic relations between Russia and the Ukraine, the latter has been leaning towards the EU in hopes of joining the Union as part of a future expansion. The Ukraine also hopes to join Western security systems, in particular NATO. This political turnaround has distanced it from Moscow, leading recently to heightened tensions between the two countries: the Russian base in the Crimea has been called into question; there is a new Russian migratory policy that could alter the visa system now in place with the Ukraine; and one of Yushenko's close collaborators has been banned from visiting Russia.³² In fact, Kiev's goal has been to take advantage both of Western and Russian prerogatives. However, this position has become politically untenable, especially since Putin has managed to re-centralise a certain amount of decision-making power in Russia.

In this context, Moscow's strategy to eliminate part of its vulnerability as a producer has been to try to purchase –or at least co-manage– the big oil and gas transport networks that cross the Ukraine. However, Kiev has always refused to let this happen. The second option, which Russia has been developing more slowly, is to set up alternate routes that bypass the Ukraine.

As a result of the political tensions between Moscow and Kiev, and because of economic profitability criteria applied to Gazprom, the Kremlin's policy has consisted of gradually raising the price of the gas and oil it sells. This meant that in late 2005, when gas prices were negotiated, Moscow demanded that Kiev should pay a higher price. This demand was refused, so when the current contract ended at the start of 2006, supplies to the Ukraine were cut off. It is important to note that Russia continued to pump gas through the pipelines towards Europe, but that the Ukraine took the gas for itself, in reaction to the Russian move. This clearly demonstrated the vulnerability involved in the transit stage, in which the country in the middle takes gas or oil that has already been purchased by other countries.

Similar problems have occurred with Belarus. First of all, tensions over gas, then oil, arose between Russia and Belarus. Traditionally, Russia also offered Minsk very subsidised oil and gas prices, while paying a toll and experiencing 'leaks', though apparently less than in the Ukraine. To reduce its vulnerability as a producer, Russia offered to buy or co-manage the oil and gas transport networks in Belarus. Although Moscow's relations with Minsk were better than those with Kiev, political and economic problems nevertheless developed.

In late 2006 it came to light that there were problems with price negotiations for gas sales to Belarus, which, from Moscow's perspective, was still paying an extremely subsidised price. Indeed, during 2006, Minsk paid Gazprom US\$46.68 per 1,000 m³ of gas. By comparison, in late 2006, the Russian gas company signed a gas supply contract with Georgia for US\$325 per 1,000 m³ of gas,

³¹ Gennadiy Martyushyev, 'Nuevas tendencias reorganizativas en las redes energéticas rusas', in Antonio Sánchez (Ed.), *Gas y petróleo en Rusia: Impacto interno y proyección exterior*, Universidad de Valencia, Valencia, 2006.

³² *Nezavisimaya gazeta*, 12/II/2007.

with Moldavia for US\$170 (up from US\$160 during 2006) and for US\$110 with Armenia.³³ At the same time, in 2006 Russia had to pay US\$100 to Uzbekistan and Turkmenistan.³⁴ Therefore, the key issue for Belarus was that Russian foreign policy interests –that is, price subsidies to friendly countries– were affecting the company’s economic interests.³⁵

Despite the close political connections between Moscow and Minsk, gas negotiations proved difficult and it became clear there was a possibility that Belarus would keep the gas sent from Russia to Europe in order to cover its own needs, to the detriment of the end consumers.³⁶ In a number of important ways, this case was different than the situation with the Ukraine a year earlier. First, Belarus is in the weak position of only having gas reserves for a period of one or two weeks at the most –a factor that diminishes its capacity to negotiate with Russia–.³⁷ Secondly, while in the Ukraine the gas transport systems are controlled by Kiev, in Belarus the Yamal-Europe gas pipeline is Russian-owned, and the internal gas network is separate and belongs to the Belarusian company, Beltransgaz. However, a number of compressors are common to both systems and Minsk could decide to disconnect the Beltransgaz network. This would cause a pressure drop on the Yamal-Europe line and would interrupt the supply to Europe. The argument in favour of cutting off the supply was based on the idea that, despite there being a gas transit agreement in force between Russia and Belarus until 2010, and despite this agreement being automatically renewed each year, if the gas price paid by Minsk was raised, then the transit agreement would have to be renegotiated.³⁸

Indeed, the supply cut-off by Belarus highlighted Western Europe’s energy vulnerability. However, this action must be kept in perspective, first of all because only 20% of the gas that Russia supplies to Europe passes through Belarus and, secondly, because the resulting vulnerability has varying impacts, affecting mostly Poland and Germany (especially Poland, since it receives half the gas imported through this pipeline). Germany’s supply sources are more diversified, so that a possible temporary cut-off by Belarus is less cause for concern. In fact, the main issue for Germany is whether or not Russia (the producer) will meet the terms its contracts and it seems that Berlin feels that Russia is a secure provider.³⁹

Finally, an agreement was reached between the government of Belarus and Gazprom for the sale of gas at US\$100 per 1,000 m³, with gradual price increases until 2010, when Belarus would pay the equivalent of world prices.⁴⁰ Also, the toll for gas transit through Belarus was renegotiated from US\$0.75 to US\$1.45 per 1,000 m³/100 km, with Gazprom gradually acquiring 50% of Beltransgaz shares during 2007-10 (equivalent to US\$2.5 billion).⁴¹ All these payments are to be made in cash.⁴²

Immediately after solving the gas issue, oil-related problems emerged between Russia and Belarus. These began with a dispute over the tariffs applicable to oil and to petrochemical products. The conflict led to a suspension of sales to Belarus, which led that country to take incoming oil destined

³³ *Kommersant*’-daily, 27/XII/2006, and *Nezavisimaya gazeta*, 10/I/2007.

³⁴ *Rossiiskaya gazeta*, 28/XII/2006.

³⁵ It must be kept in mind that Gazprom and the Russian government have shared interests: first, to increase the prices applied to countries that sell gas from the former USSR to the equivalent of international levels (see *Rossiiskaya gazeta*, 28/XII/2006), and secondly to acquire gas networks, both in the CIS and in other nearby countries, including in Europe.

³⁶ This case is different than events in the Ukraine in 2005. In this case, the Yamal-Europe transport route is controlled by Gazprom, but the Beltransgaz gas pipeline shares several compressors with Yamal-Europae. Therefore, if Belarus shuts these down, gas pressure would fall and the gas would not reach Europe. (*Kommersant*’-daily, 28/XII/2006, and *Rossiiskaya gazeta*, 29/XII/2006).

³⁷ *Vedomosti*, 26/XII/2006, and *Kommersant*’-daily, 28/XII/2006.

³⁸ *Rossiiskaya gazeta*, 28/XII/2006, and *Nezavisimaya gazeta*, 28/XII/2006.

³⁹ *Vedomosti*, 27/XII/2006.

⁴⁰ Since Poland is paying US\$270 per 1,000 m³ of gas, the market price for Belarus would be about US\$260 per 1,000 m³ of gas (see *Nezavisimaya gazeta*, 10/I/2007).

⁴¹ *Kommersant*’-daily, 27/XII/2006, and *Vedomosti*, 27/XII/2006.

⁴² K. Yafimava & J. Stern, *The 2007 Russia-Belarus Gas Agreement*, Oxford Institute for Energy Studies, January 2007.

to Europe and divert it for its own use. For this reason, Transneft' cut off oil shipments through Belarus from 8 to 11 January 2007. An agreement was later reached, which some believe was to Moscow's detriment, since it wanted to maintain its image as a secure supplier to Europe;⁴³ by the same token, Minsk benefited from the events, since its goal was to make up for the losses suffered through the recent gas supply agreement.⁴⁴ Regardless of which country was the winner, this incident highlighted the energy vulnerability inherent in the transit stage, at least in part of Europe.

Alternatives to Transport Vulnerability

To deal with the problems raised by transport vulnerability, both for European consumers and for the Russian producer, a series of initiatives are being promoted to guarantee the safe passage of the product and avoid transit countries. One of the most attractive initiatives is the commencement of the Northern European Gas Pipeline (NEGP) project. It was initially believed that it would be difficult to reach an agreement to build it and for this reason it had been suspended since 1997. However, thanks to the good relations between the German and Russian governments, and due to Germany's problems with economic growth, the project has recently been re-launched and a construction agreement was reached in the second half of 2005. It is significant that this project is supported by a gas supply cooperation agreement signed by the UK and Russia in 2003. This agreement gives particular relevance to the project within the EU (support from Germany and the UK, versus criticism from Poland and the former Soviet republics in the Baltic region). The pipeline would follow a sea route from Saint Petersburg to Germany, then, in a second phase, would continue on to the Netherlands and the UK. The first phase would cost about US\$6 billion. It is important to note that, in the medium term, it is not clear whether the UK will be buying Russian gas, since at least two gas pipelines are now being built from Norway, the UK's biggest supplier. However, British interest in Russian gas may arise from a desire to diversify its supply sources and also because at least some of the North Sea reserves are running out.⁴⁵

As for the NEGP, it must be kept in mind that Gazprom's calculations have traditionally not been very accurate vis-à-vis its undersea gas pipelines. For example, it was over-optimistic in its estimate of the profitability (low level of sales) of the 'Blue Stream' (*Goluboi potok*) gas pipeline. However, this is a political decision that Russia has made and the construction of the gas pipeline is an instrument of Russian foreign policy, both because it avoids Ukraine and Belarus, and because it opens up direct access to Europe –the main market for Russian gas– while at the same time possibly later serving as way to put pressure on Europe when it comes to decisions affecting Russia. This pipeline could gradually take on greater economic importance as oil supplies dwindle and proportionally more gas is used.

The NEGP is one of the most significant lines that Germany has promoted as a way of avoiding transport vulnerability, not only vis-à-vis Belarus and the Ukraine, but also in terms of other middle countries, such as Poland. This project is a specific way for Germany to solve its energy vulnerability issues, while at the same time allowing it to regain its strategic advantage in terms of the energy supplies entering Europe.

Given the problems between Russia and Belarus, the extension or expansion of other oil and gas transport routes is being considered as a way of eliminating transport vulnerability. In this regard, encouragement is being given in Russia to discussions on expanding the oil transport capacity of Baltic Pipeline System (BTS). In 2001, this had a capacity of 12 million Tm, which has been increased to 76 million Tm at present. It is now estimated that it would have to be increased to 120 million Tm to avoid transport problems caused by Belarus.⁴⁶

⁴³ *Kommersant*'-daily, 15/I/2007.

⁴⁴ *Rossiiskaya gazeta*, 25/I/2007.

⁴⁵ Antonio Sánchez, 'Gazprom ¿un instrumento de política económica y exterior rusa?', in Antonio Sánchez (Ed.), *Gas y petróleo en Rusia: Impacto interno y proyección exterior*, Universidad de Valencia, Valencia, 2006.

⁴⁶ *Vedomosti*, 12/I/2007.

Along the same lines, in 2006 an agreement was signed by Transneft', Ukrtransnafta and TNK-BP, increasing the transport of Russian oil from 3.7 million Tm to 9 million Tm a year through the Brodi-Odessa pipeline to the port of Yuzhnyi. An agreement was also being finalised to reduce the tolls on the Russian section of this oil pipeline (Samotlor-Brody), while also reducing tariffs at the port of Yuzhnyi. All in all, an attempt is being made to turn this route into an alternative to routes through Belarus.⁴⁷

One of the most recent alternative routes being proposed involves the construction of the trans-Balkan Burgas-Aleksandropolis oil pipeline. Russia intends to transport the oil from the port of Novorossiysk to the port of Burgas, then transport it through the pipeline to Aleskandropolis. This pipeline would be 285 km long, with the initial capacity to transport 35 million Tm, then up to 50 million Tm. The operator of the pipeline will be controlled 51% by a Russian consortium headed by Transneft', but with the participation of Gazprom and Rosneft'; Greece and Bulgaria, meanwhile, will hold 24.5% each. This project is a major success for Russia, enabling it to avoid both Ukraine and Turkey (the Bosphorus and Dardanelles straits).⁴⁸ The decision to begin the construction of this pipeline was made early this year and was ratified by the Greek government in mid-March 2007.⁴⁹

Another of the options to reduce vulnerability in transit is for producers and/or consumers to take part in transport systems by limiting the unilateral decision-making power of transit countries. Russia has tried on several occasions to participate in the management of oil and gas transport lines through the Ukraine. The most recent episode in the attempt began in June 2002, when an agreement was reached to create an international consortium that would operate the gas transport pipeline network in Ukraine. As a result of this agreement, construction of the Bogorodchany-Uzhgorod gas pipeline was to be completed in August 2004; a comprehensive strategic gas agreement between Russia and Ukraine was also signed in 2004 in Sochi. However, relations between the two countries quickly deteriorated, the construction project was shelved and implementation of the agreement was put on hold. When Yanukovich became head of the Ukrainian government, an attempt was made to jump start these initiatives and, in late January 2007, the Ukrainian cabinet asked the Ministry of Fuels and Energy to prepare a draft bill that would validate the 2004 agreement.⁵⁰ In mid-February 2007, a declaration on strategic collaboration on economic and energy issues was signed by Russia and the Ukraine. However, confirmation of this agreement was postponed at the last moment. On the Russian side, in short, there is a desire to reach agreements to reduce transport risks; however, it is questionable whether this will be possible as long as continual tensions remain between Ukrainian President Yuschenko and Prime Minister Yanukovich.⁵¹

In order to give new impetus to this collaboration, consideration is being given to including Germany in the agreement. Berlin has expressed its interest in this. In fact, the creation of a tripartite consortium to manager gas transport was clearly a major priority during Yanukovich's visit to Germany on February 27, 2007. Nonetheless, the creation of such a consortium faces the legal obstacle of legislation introduced earlier by Yulia Timoshenko, preventing foreigners from participating in the management of Ukraine's oil and gas networks.⁵²

In addition to Germany's participation in the consortium that manages oil and gas transport in the Ukraine, the use of other alternative or complementary mechanisms is being discussed. For example, consideration is being given to the possibility of allowing Kiev to take part in the oil and

⁴⁷ *Kommersant*'-daily, 28/XII/2006.

⁴⁸ *Vedomosti*, 8/II/2007, and *Rossiiskaya gazeta*, 8/II/2007.

⁴⁹ *Nezavisimaya gazeta*, 13/III/2007.

⁵⁰ *Nezavisimaya gazeta*, 27/II/2007.

⁵¹ *Nezavisimaya gazeta*, 12/II/2007.

⁵² *Nezavisimaya gazeta*, 27/II/2007.

gas extraction business in Russia.⁵³

Conclusions

When considering energy relations between the EU and Russia, we must distinguish two different areas: oil and gas. Although both areas are important for Russia in its attempt to promote itself as a major energy producer, the country's greatest scope for action is in the gas sector. Russia, however, has one great weakness: gas is transported only through pipelines. This introduces significant geographical limitations and, in fact, determines which countries can be its customers. As a result, not only are customers (certain European countries) dependent on Russia, but the reverse is also true: Russia is dependent on its customers (those same countries). Rather than considering the EU to be vulnerable to Russia, it is more reasonable to understand the relationship as one of mutual energy dependence. The future dynamics of this relationship will depend on the capacity of each partner to develop its respective energy alternatives over the medium and long term.

Since energy from Russia does not flow in equal amounts to the entire EU, the problem of mutual dependence is particularly complex. How this issue is focused will depend on the strategies adopted by each country in the Union. Given this situation, it is not hard to understand why the European Commission has been unable to coordinate a common vision, nor why some countries, including Germany, France and Italy, have been trying to develop their own relationships of mutual dependence.

European energy dependence could increase if a gas cartel were to be created. This discussion has resurfaced recently; however, given the current structural conditions of the gas market (in which gas is supplied mainly through pipelines under long-term contracts), such proposals do not appear viable in the short term.

Also, energy relations between Russia and the EU depend on oil and gas transit through third countries. In fact, although Europe attributes its 'vulnerability' to Russia, some of the problem corresponds to transit countries, as was the case of events with Belarus in early 2007, and with the Ukraine in early 2006. In this regard, agreements to co-manage transport systems in third countries, as well as the construction of new pipelines that directly connect Europe and Russia, are good ways to reduce energy vulnerability.

In this paper we have dealt with some of the factors that affect energy relations between the EU and Russia. However, we must keep in mind the existence of other factors that could play a very important role in the future –considerations that should be given particular attention–. First of all, Russia will be obliged to begin operations in fields where extraction and transport are difficult, and this could cast doubts on their economic viability or could force prices so high that the EU will have to look for alternatives to Russian energy. Secondly, higher gas prices within Russia itself could shift production from the export market to domestic consumption, calling into question Russia's interest in selling to the EU. Therefore, new factors might appear that could alter energy relations between Russia and the EU, other than those that now exist. However, if gas prices in Russia rise, but the standard of living does not, this would tend to reduce internal demand and increase the need to export –a factor that would increase Russian dependence on foreign markets–. Third, the development of markets for Russian oil and gas that compete with European demand would weaken the EU's negotiating position. In this regard, Russia has made significant efforts to increase its LNG production and to work towards the construction of a comprehensive system of gas pipelines that would offer gas to Asian markets.

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⁵³ *El País*, 2/II/2007.