

The issue of secure energy became a problem of key importance for Europe in 2006, following the dispute on gas between Russia and Ukraine, if not even earlier. It is in this context that the question of diversification of the supply sources has emerged. The EU predicts that Europe's dependence on natural gas will increase particularly strongly. At present, Europe imports about half of its gas, in 2030 it will be almost 85 percent

## Russia at the centre of European supplies

ENERGY 5

by Hans Holzhaecker

The EU imports about one-fifth of its natural gas from Russia. A number of individual countries are however more dependent on Russian gas (*see Table 1*). Gas from Russia covers 100% of Finland's needs, 84% of consumption in Greece, 75% in the Czech Republic and 65% in Austria. Slovakia imports as much as 103% of its gas from Russia, thereby also covering its own (modest) exports. Russia is in the process of further enhancing its status as a Eurasian energy hub, with the gas sector leading the way. To this end the country is protecting its domestic market, partly aided by State intervention, whilst focusing on forging international strategic alliances. Russia is not only the world's largest producer and exporter of natural gas. It is also the country with by far the largest reserves (*cf. Table 2*); and the key transport systems linking Europe and Asia pass through Russian territory. Gazprom, in particular, is focusing on strengthening its presence in export markets and enhancing international cooperation. The company is directly represented in 15 European countries through trading companies, including key markets such as Germany, France and Italy. On account of the opposition from the British government, Gazprom failed to establish a direct presence in the UK in a move aimed at taking over Centrica, Europe's fifth largest gas company in



terms of sales. But Gazprom is represented indirectly also in the UK through its German subsidiary Wingas, in which it has a 50% shareholding.

It is above all the cooperation between Russia and Germany in the North and Russia and Italy in the South which will be of crucial strategic importance for the future of Europe's gas supplies.

### German-Russian cooperation

With 38 bn m<sup>3</sup> (in 2005), Germany is the EU's largest importer of Russian gas. Gazprom is cooperating with E.ON-Ruhrgas, Europe's third-largest gas company, with RWE, the sixth largest, and with the BASF subsidiary Wintershall, Europe's seventh largest. The Baltic Sea pipeline, now called the Nord-Stream, which bypasses Ukraine and Poland though,

is being built by Gazprom, E.on and BASF. Cooperation will be intensified in the future: E.on will participate in the construction of two new pipelines, connecting Nord-Stream with Germany's gas network. E.on is to acquire a stake of 25% less one share in the Yuzhno Russkoye gas field in Western Siberia. Gazprom will in turn receive a minor shareholding in E.on's Hungarian gas companies and in the electricity and gas distribution company E.on Hungária. The cooperation between E.on and Gazprom is all the more significant as E.on wants to take over Spain's Endesa, a move which would put it among the world's leading gas and electricity companies. Wintershall will be entitled to 35% of the profits generated by Yuzhno Russkoye. Gazprom will in turn increase its shareholding in the Wingas joint venture to 50% less one share (Wintershall currently has a shareholding of 65% and Gazprom 35 percent). RWE, as owner of the Czech Transgas company, plays a key role also in Central and Eastern Europe.

### Italian-Russian cooperation

With 23 billion m<sup>3</sup> (2005), Italy is the EU's second largest importer of Russian gas. Gazprom and ENI, the latter the second largest European gas company after the Dutch Gasunie, signed an agreement for strategic cooperation in 1998. This has resulted in the creation of the Blue Stream pipeline running from Russia to Turkey. The project, with an investment volume of USD 3.2 bn, was carried out by Gazprom, ENI and Turkey's Botas. Gas started to flow to Turkey in 2003, and a capacity of 16 billion m<sup>3</sup> per year should be reached by 2010. A new cooperation agreement was to be announced on 15 October 2006, but then postponed, which is to give Gazprom direct access to the Italian market. ENI will in turn participate in Russian gas production projects. There are now also plans for a "Blue Stream 2" from Turkey to South-East Europe; the investment volume is said to be around USD 5 bn. The project however still requires the approval of the Italian competition authority, which has already made a negative decision once before.



\_Burkhard Bergmann, CEO of E.on Ruhrgas, former German Chancellor Gerhard Schroeder, Gazprom CEO Alexei Miller and BASF Vice President Eggert Voscherau confirming Russian-German cooperation

### Algerian-Russian cooperation

Algeria is the only important producer outside, but in the vicinity of, Europe which is not strictly dependent on the Russian gas pipeline network. Gazprom and Sonatrach, Algeria's State-owned oil and gas company, have signed a Memorandum of Understanding. The first measures under the

1. DEPENDENCE ON GAS IMPORTS, 2005, BY COUNTRIES

	Domestic cover *	Imports, bn. m <sup>3</sup>	from OPEC**	from Russia**
Slovakia	2.3%	6.7	0.0%	102.6%
Finland	0.0%	4.4	0.0%	100.0%
Greece	0.6%	2.8	15.4%	84.0%
Czech Republic	1.8%	9.4	0.0%	75.2%
Austria	17.0%	9.5	0.0%	65.2%
Turkey	3.3%	26.6	33.1%	64.0%
Ungheria	20.2%	12.0	0.0%	58.8%
Poland	37.4%	10.4	0.0%	42.5%
Germany	19.7%	90.7	0.0%	37.7%
Italy	13.9%	73.5	37.1%	27.1%
France	2.2%	47.0	24.7%	19.9%
<b>UE-15</b>	<b>46.7%</b>	<b>328.0</b>	<b>16.5%</b>	<b>18.0%</b>
<b>USA</b>	<b>83.3%</b>	<b>121.3</b>	<b>0.5%</b>	<b>0.0%</b>
<b>Japan</b>	<b>3.7%</b>	<b>80.9</b>	<b>41.9%</b>	<b>0.0%</b>

\* Domestic production in % of consumption, \*\* Imports in % of consumption  
Source: IEA / Oil Information 2006, OMV, UniCredit New Europe Research Network



\_Russian President Putin, Turkish PM Erdogan and former Italian PM Berlusconi at the inauguration of the Blue Stream gas pipeline, which runs from Russia to Turkey

memorandum will be gas exchange deals: Algeria can reduce gas deliveries to Italy, with the shortfall being offset by Russian gas. Gazprom will obtain liquefied gas (LNG) and gas liquefaction technology from Algeria. Importers of gas from Russia and/or Algeria fear that Sonatrach and Gazprom may collude on prices.

2. PRODUCTION OF NATURAL GAS AND GAS RESERVES, 2005, IN % OF WORLD PRODUCTION AND RESERVES			
Production		Proved reserves	
Russia	21,6%	Russia	26,6%
USA	19,0%	Iran	14,9%
Canada	6,7%	Qatar	14,3%
United Kingdom	3,2%	Saudi Arabia	3,8%
Algeria	3,2%	Emirates	3,4%
Iran	3,1%	USA	3,0%
Norway	3,1%	Nigeria	2,9%
Indonesia	2,8%	Algeria	2,5%
Saudi Arabia	2,5%	Venezuela	2,4%
Netherlands	2,3%	Iraq	1,8%
Malaysia	2,2%	Kazakhstan	1,7%
Turkmenistan	2,1%	Turkmenistan	1,6%
Uzbekistan	2,0%	Indonesia	1,5%
Others	26,7%	Others	19,7%

Source: BP, UniCredit New Europe Research Network

**Central Asian-Russian cooperation**

The US is Kasachstan’s main partner for oil, but for gas it is Russia. There are plans to renew the Central Asia-Russia, Buchara-Ural and other joint gas transportation routes. The KasRosGas joint venture is also very active on third markets, especially in China. After a protracted dispute Gazprom said it would agree to USD 100 per 1 m<sup>3</sup> until the end of 2009 instead of the USD 65 it had been paying until now for gas from Turkmenistan. There are also price disputes with Uzbekistan, but these too will be settled with a compromise. Despite rivalries, there are hardly any alternatives to cooperation between Russia and the Central Asian republics.

**Protecting Russia's domestic market**

Now that the Russian State has moved to secure a controlling interest in key Russian energy companies such as Yukos, Slavneft and Sibneft, it may be possible that projects with a high level of foreign participation could be targeted for the purpose of protecting the country’s domestic market. Russia’s nature conservation authorities have recently trained their sights on three oil and gas exploration projects on the Sakhalin peninsula (e.g. with the participation of Shell). According to reports in the media, the Ministry of Environment had already announced that it would review the agreements on the exploitation of natural resources on the Sakhalin peninsula (more than 1.2 billion tonnes of oil and 1,500 billion m<sup>3</sup> of gas) on account of allegedly inefficient exploration/production operations. The aforementioned agreements were concluded at a time when oil prices were much lower, but the tax benefits which were then granted are still in place today. Observers however believe that the State above all wants to increase the share of Russian companies participating in the Sakhalin consortia to 51 percent.

**Nabucco**

The objective of the Nabucco pipeline project, with a construction volume of an estimated EUR 4.6 bn, is to tap the gas reserves of the Caspian Basin for Europe. Austria’s OMV is playing a key role in this



project. Other companies wanting to participate in the construction of the pipeline which will cover 3,300 km are Hungary's MOL, Turkey's oil and gas group Botas, Bulgargaz and Romania's Transgaz. RWE and E.on have also expressed interest. All the contracts and preparatory work should be concluded by the end of 2007. Construction of the pipeline could commence in 2008, and gas may start flowing to Europe in 2011. After becoming fully operational in or around 2018, the pipeline could transport 25 to 30 bn m<sup>3</sup> of gas per year to Europe from the Caspian Basin, which includes Iran which has the world's second largest gas reserves. Turkey is however taking its time in giving its final consent, also with a view to strengthening its negotiating position regarding EU membership. It is conceivable that MOL may also change its decision in favour of Blue Stream 2.

### **An alternative to Russia?**

The press often cites the Nabucco pipeline as an alternative to Russian gas. A look at the distribution of reserves, international cooperation agreements and the political risks in the Middle East shows

\_The Russian authorities for environment protection focused recently on three oil and gas exploration projects in the Sakhalin Peninsula (more than 1.2 billion tons of oil and 1,500 billion m<sup>3</sup> of gas)

that this is unrealistic. If the Blue Stream 2 project is realized, it will moreover further increase Russia's influence in southern Europe. While the Nabucco pipeline can make some contribution toward protecting Europe's energy supplies through diversification, its real relevance is to be seen simply as an additional supply source to meet growing demand. Russia cannot be bypassed in the question of gas supply. The EU needs to take a different course in regard to energy security, such as ensuring that it has sufficient stocks and appropriate contingency plans. But what will be most needed is stronger cooperation and support within the EU.