

Russian Natural Gas: Regional Dependence

Bernard A. Gelb Specialist in Industry Economics Resources, Science, and Industry Division

Summary

Russia is the dominant natural gas supplier to Europe and neighboring former Soviet states, as well as a major provider of oil. Some countries are entirely or largely dependent upon Russian energy supplies, particularly other Soviet successor states. As such, Russia has some ability to dictate natural gas prices. Russia cut off the gas supply to Ukraine and to Moldova in January 2006 and threatened to cut off gas supplies to Belarus and Georgia during late 2006 price negotiations. These and other actions in the interim damaged Russia's reputation as a reliable energy supplier, spurred importing countries to seek other sources, and provoked criticism that it is using energy as a political tool.

Russia is the world's largest exporter of natural gas, the dominant gas supplier to Europe and neighboring former Soviet states, and a major provider of oil. Some countries are entirely or largely dependent upon Russian natural gas. Of Russia's total natural gas exports of 7.1 trillion cubic feet (tcf) in 2004, 6.7 tcf went to European countries, including destinations in Eastern Europe.¹ (In comparison, the United States consumed an estimated 22 tcf in 2006.)

Moreover, Russian natural gas is imported in large quantities by European countries and represents very high percentages of the total gas consumption of a number of them. (See **Tables 1** and **2**). For example, Russia exported 1.3 tcf of natural gas to Germany, 0.9 tcf to Italy and to Ukraine, 0.7 tcf to Belarus, 0.5 tcf to Turkey, and 0.4 tcf of gas to France in 2004; and Russian gas represented 98% to 100% of the total natural gas consumed by Belarus, Bulgaria, Estonia, Finland, Georgia, Latvia, Lithuania, Moldova, and Slovakia. Non-Russian Soviet successor states tend to be particularly dependent upon Russian gas. Ukraine's 40% "dependence" shown in **Table 2** is deceptively low. A substantial portion of its natural gas supply comes from Turkmenistan through Russian-controlled pipelines, giving Russia additional leverage.

¹ Energy Information Administration, *Russia Country Analysis Brief*, "Natural Gas," January 2006; Eni, *World Oil & Gas Review 2006*, at [http://www.eni.it/eni/images_static/wogr/pdf/wogr2006.pdf], viewed Dec. 21 and 27, 2006.

Table 1. Dependence Upon Russian Natural Gas by Selected European Countries, 2004

	Natural Gas Imports from Russia	
Country	Quantity (billion cu. ft./yr)	% of Domestic Consumption
Germany	1,290	39%
Italy	855	31
Turkey	506	65
France	406	24
Austria	212	69
Poland	212	43
Finland	163	98
Netherlands	94	6
Greece	78	82
Sweden	39	b
Belgium	7	1
Denmark	a	b
Ireland	a	b
Portugal	a	b
Spain	a	b
United Kingdom	a	b

Sources: Energy Information Administration, *Southeastern Europe Country Analysis Brief*; Eni, *World Oil & Gas Review 2006*, at [http://www.eni.it/eni/images_static/wogr/pdf/wogr2006.pdf], viewed Dec. 21 and 27, 2006; International Energy Agency, IEA Statistics, at [http://www.iea.org/Textbase/stats/index.asp], viewed Dec. 27, 2006.

- a. Zero or less than 500 million cubic feet.
- b. Zero or less than 0.5%.

As a major supplier of natural gas to European countries, Russia has some ability to set prices. Gazprom, Russia's 51%-owned state-run natural gas monopoly, briefly cut off gas to Ukraine and, separately, to Moldova in January 2006 because they did not agree to greatly increase what they were paying for the gas.² As 2006 ended, Russia appeared to

² Much of Russia's gas exports to Europe pass through Ukraine. Russia restored supply after other European countries complained. The dispute has been resolved temporarily by a few compromise agreements. Moldova and Russia reached an interim agreement mid-January 2006.

be preparing to cut off natural gas supplies to Belarus and Georgia unless the two former Soviet republics agreed by the year-end to pay much higher prices in 2007.³

Table 2. Dependence Upon Russian Natural Gas by Selected Former Soviet and Soviet Satellite Countries, 2004

	Natural Gas Imports from Russia	
Country	Quantity (billion cu. ft.)	% of Domestic Consumption
Ukraine	850ª	40ª
Belarus	698	99
Hungary	318	64
Czech Republic	253	77
Slovakia	226	99
Poland	212	43
Romania	138	22
Lithuania	103	100
Bulgaria	99	99
Moldova	77	100
Latvia	62	100
Georgia	39	100
Estonia	34	100
Slovenia	20	52

Sources: Energy Information Administration, *Southeastern Europe Country Analysis Brief*; Eni, *World Oil & Gas Review 2006*, at [http://www.eni.it/eni/images_static/wogr/pdf/wogr2006.pdf], viewed Dec. 21 and 27, 2006; International Energy Agency, IEA Statistics, at [http://www.iea.org/Textbase/stats/index.asp] viewed Dec. 27, 2006.

a. Estimate by CRS based on several disparate published and Internet sources.

The cutoffs to Ukraine and Moldova in price-dispute contexts damaged Russia's reputation as a reliable energy supplier and reportedly have prompted former Soviet Union and West European countries to investigate where they might obtain non-Russian gas.⁴ Also reportedly, during late 2006 price negotiations, Gazprom warned Belarus that

³ Neil Buckley and Arkady Ostrovsky, "Gas dispute threatens Belarus, Georgia," *Financial Times*, Dec. 13, 2006.

⁴ "Russia Turns up the Gas," *Guardian Weekly*, Dec. 23, 2005, Jan. 5, 2006, p. 41; Peter Finn, "Russia Reverses Itself on Gas Cuts," *The Washington Post*, Jan. 3, 2006, p. A12; Andrew E. (continued...)

its failure to agree to higher prices could jeopardize the country's energy supply.⁵ In addition, the actual and threatened cut-offs have provoked criticism that Russia is using energy as a political tool.⁷

⁴ (...continued)

Kramer, "Russia Restores Most of Gas Cut to Ukraine Line," *The New York Times*, Jan. 3, 2006, at [http://www.nytimes.com/2006/01/03/international/europe/03ukraine.html?pagewanted=print], viewed Jan. 3, 2006.

⁵ Yuras Karmanau, Associated Press, "Belarus Braces for Russia to Turn off the Natural Gas Spigot, *The Washington Post*, December 26, 2006; "No Deal for Gazprom, Belarus," *Oil Daily*, December 27, 2006.

⁶ On January 1, 2007, Belarus and Gazprom signed a five-year contract providing that Belarus will pay increasingly more for gas (starting at more than twice the old price) and Gazprom will purchase 50% of Belarus' gas pipeline network. Alan Cullison, "Belarus Yields to Russia," *The Wall Street Journal*, January 2, 2007, p. A4; "Belarus, Russian Firm Sign 5-Year Deal for Gas," *The Washington Post*, January 2, 2007, p. A10.

⁷ Ed Reed, "Shtokmnanovskoye: the Wait Continues," *NewsBase CIS Oil & Gas Special Report*, July 2006; "G8 Adopts Energy Plan; Shtokman Slipping Away from U.S. Firms?" *Oil Daily*, July 18, 2006; "Russian State Interference" and "Test Drilling on Shtokmanovskoye Begins," *FSU Oil & Gas Monitor*, July 26, 2006.