



Russian Energy Policy Toward Neighboring Countries

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Summary

The Russian oil and natural gas industries are key players in the global energy market, particularly in Europe and Eurasia. Another trend has been the concentration of these industries in the hands of the Russian government. This latter phenomenon has been accompanied by an authoritarian political system, in which former intelligence officers play key roles.

Russian firms have tried to purchase a controlling stake in pipelines, ports, storage facilities, and other key energy assets of European countries. They need these assets to transport energy supplies to lucrative western European markets, as well as to secure greater control over the domestic markets of the countries of the region. In several cases where assets were sold to non-Russian firms, Russian firms cut off energy supplies to the facilities. Russia has also tried to build new pipelines to circumvent infrastructure that it does not control. Another objective Russia has pursued has been to eliminate the energy subsidies former Soviet republics have received since the fall of the Soviet Union, including by raising the price these countries pay for natural gas to world market prices.

It is not completely clear whether the pursuit of Russian foreign policy objectives is the primary explanation for the actions of its energy firms. Few would disagree in principle that the elimination of subsidies to post-Soviet countries is a sound business decision, even if questions have been raised about the timing of such moves. Even the pursuit of multiple pipelines can be portrayed as a business decision. On the other hand, many countries of the region are concerned that Russia may use their energy dependency to interfere in their domestic affairs or to force them to make foreign policy concessions. Countries of the region also fear that by controlling energy infrastructure in their countries, Russian energy firms are able to manipulate the internal political situation by favoring certain local businessmen and politicians. However, the current global economic crisis has hurt Russia's energy firms and Russia's international clout, as energy prices have tumbled.

Bush Administration officials repeatedly criticized what they viewed as Russian efforts to use its energy supplies as a political weapon. The Obama Administration, like its predecessor, has urged European countries to reduce their dependence on Russian energy, but has said the United States is trying to cooperate with Moscow on the issue. The United States has strongly advocated the building of multiple pipelines from Central Asia and Azerbaijan to Europe. Members of Congress have expressed concern about the impact on European countries of their dependence on Russian energy. In the 111th Congress, committees have held hearings that have touched on the issue. Congress has also passed resolutions that refer to worrisome aspects of Russian energy policy.

Contents

Introduction	1
Russia’s Oil and Gas Industries and Russian Foreign Policy	1
Gazprom	2
Russian Oil Companies	3
Russia’s Objectives: Exploiting Dependency or Just Good Business?	4
Selected Recent Cases	6
Ukraine	7
Moldova	10
Georgia	11
Baltic States	12
Belarus	13
Armenia	14
U.S. Policy	15
U.S. “Pipeline Diplomacy”	16
Obstacles to U.S.-Supported Pipelines	17
Other Policy Issues	19
Congressional Response	20

Figures

Figure 1. Pipeline Map	22
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Contacts

Author Contact Information	22
----------------------------------	----

Introduction

In recent years, Members of Congress, Bush and Obama Administration officials, and analysts have noted the dependence of many European countries on Russian energy. Some experts have expressed concern that Russia is using this energy dependence as part of a larger effort to limit the sovereignty and pro-Western orientation of vulnerable neighboring countries such as Ukraine, Moldova, and Georgia. In addition to bolstering the sovereignty of these countries, the United States has also had a vital interest in keeping strong ties with NATO and EU member states. Some observers believe that these relations could be harmed in the long term if many of these states became too dependent on Russian energy.

In 2008, the European Union depended on Russia for 23% of its natural gas consumption.¹ However, this figure conceals the fact that this dependence is unequally distributed. Some EU countries, many of them in central and eastern Europe, are dependent on Russia for most or all of the oil and natural gas they consume. For example, the Baltic states are entirely dependent on Russia for natural gas. Non-EU countries bordering Russia are also overwhelmingly or entirely dependent on Russian oil and natural gas.² Moreover, EU countries may become more dependent on natural gas supplied by Russia in the future, as deposits in the North Sea decline. In 2008, 40% of the EU's natural gas imports came from Russia and 33% of its oil imports.³

This report begins with a brief discussion of the Russian oil and gas industries, including their efforts to purchase energy infrastructure in central and eastern Europe and reduce energy subsidies to neighboring countries. A second section deals with the impact of Russian energy policy on neighboring countries, all of them formerly part of the Soviet Union, *de facto* or *de jure*, and all heavily dependent on Russian energy imports. Many of these countries are concerned about what they see as Russian efforts to manipulate that dependency to achieve political goals. A final section deals with U.S. efforts to promote the energy security of these countries and on Congress's response to the issue.⁴

Russia's Oil and Gas Industries and Russian Foreign Policy

Russian oil and natural gas industries are very important players in the global energy market, particularly in Europe and Eurasia. Russia has by far the largest natural gas reserves in the world, possessing over 30% of the world's total. It is eighth in the world in oil reserves, with at least 10% of the global total. Another key trend has been the concentration of these industries in the hands of the Russian government in the past decade. This latter phenomenon has been accompanied by an authoritarian political system under the tight control of President Vladimir

¹ Data is from the Eurogas website at http://www.eurogas.org/figures_statistics.aspx.

² U.S. Department of Energy, Energy Information Administration, Country Brief: Russia, May 2008, from the EIA website <http://www.eia.doe.gov>.

³ EU Energy Portal website <http://ec.europa.eu/energy>.

⁴ This report focuses on Russian oil and natural gas industries, due to their central importance to the countries concerned. Other energy issues, such as Russia's nuclear power industry, as well as electricity and coal exports, are not dealt with in this report.

Putin, a former officer of the Soviet KGB intelligence service. Both the leadership of state-controlled Russian oil and gas firms and the Russian government are dominated by former members of the Russian intelligence service, now called the Federal Security Service (FSB), or are personally close to Putin, or both. In late 2007, Putin designated First Deputy Prime Minister Dmitri Medvedev (whose functions included overseeing Gazprom) as his successor. Medvedev was elected president of Russia in March 2008, in a vote viewed by many observers as not free and fair. Medvedev, although a close Putin associate, is not a former FSB officer. After Medvedev took office, Putin took the post of Prime Minister.

The personal and political fortunes of Russia's leaders are tied to the energy firms, as Russia's economic revival in the past decade has been due in large part to the massive revenues generated by energy exports. However, many experts believe that the Russian leadership's state-oriented approach may be counterproductive for Russia in the long run, as output growth in Russian oil and gas fields is stagnating. They say Russia's oil and gas industries will likely need foreign investment and expertise, more efficient management, as well as less government regulation and taxation. The global economic crisis hurt Russia's energy firms, Russia's economy, and Russia's international clout, as energy prices tumbled.

Gazprom

Since the collapse of the Soviet Union in 1991, the largest firm in Russia has been the state-controlled natural gas monopoly Gazprom. (The Russian government holds just over 50% of its shares.) It has a monopoly on gas pipelines in Russia. It controls about 85% of Russian gas production and over a quarter of the world's reserves of natural gas. Its impact within Russia is even more significant. It is the single largest contributor to the Russian government's budget, providing about 25% of tax receipts. It also controls banks, industrial holdings, farms, and media outlets.

Gazprom has been useful domestically to Russian leaders. It provides most of its production at a loss (at prices much lower than those in Europe) to Russian companies and consumers, who often cannot or will not pay, thereby helping to ease social pressures. In exchange for subsidizing Russian domestic consumers, Gazprom receives a virtual monopoly on exports to richer customers abroad. Two-thirds of Gazprom's revenue comes from European customers. Many experts say Gazprom needs to substantially increase domestic prices for gas if it is ever to become a viable business. Russia has agreed to gradually increase some domestic gas prices to bring them closer to world market levels by 2011. The move was taken in response to EU criticisms of the price subsidy in negotiations over Russia's entry into the World Trade Organization (WTO).⁵

Gazprom's key current gas fields are in decline, its infrastructure is aging, and substantial investment will be needed just to maintain current, nearly stagnant production levels. Most foreign observers believe Gazprom could use foreign investment to provide expertise and capital. In late 2005 Russia abolished the "ring fence" that barred foreigners from owning Gazprom shares. Foreign ownership of Gazprom shares is modest; the largest foreign investor is the German firm E.ON, with a 6% stake.⁶

⁵ EIA Country Brief: Russia, May 2008, from the EIA website <http://www.eia.doe.gov>.

⁶ "France Wants Stake in Russia Gas Giant," Reuters news agency, October 10, 2007.

However, Gazprom's actions in other areas appear to point toward more state control and not toward more foreign investment. For example, in 2006, Gazprom bought out half of the interest of Shell and other foreign companies in the Sakhalin-2 gas field project at a very low price after the Russian government found alleged environmental problems in Shell's management of the project. Russia is also pressuring the Russian-British TNK-BP oil firm to hand over its Kovytko gas field in Siberia cheaply to Gazprom, after Gazprom refused to approve an export route for the gas.

Russian Oil Companies

In the 1990s, the Russian government did not have a large stake in Russian oil production. The major oil companies were controlled by politically well-connected businessmen, dubbed oligarchs. This policy changed in 2003, when Mikhail Khodorkovsky, head of the giant Yukos oil firm, was arrested on tax evasion and other charges. However, most observers believe that the real reason for the arrest was that President Putin believed Khodorkovsky was showing unacceptable signs of political independence from the Kremlin. Yukos was hit with government claims for back taxes and declared bankrupt. In 2004, its key oil field assets were bought very cheaply by the Russian state-owned oil firm Rosneft. The Yukos affair is not the only example of this trend. In 2005, Gazprom bought another major oil company, Sibneft, from oligarch Roman Abramovich, at a cut-rate price. The firm is now called Gazprom Neft. After the move, the Russian government controlled over 30% of Russia's oil production.⁷

In 2006, Putin said that the state would not take control of additional Russian oil companies. However, the strengthening of state control over the industry may be conducted by other means. The Russian government has placed pressure on foreign oil companies to sell their stakes in lucrative Russian oil fields to Russian state firms. The non-state oil firms that remain, such as Lukoil, are careful to retain close connections to Russian political leaders, in order to retain control of their businesses. Despite increasing direct and indirect state control, Russian oil firms continue to seek ties to foreign oil companies, provided that they are satisfied with a minority ownership stake.

In addition to increasing control over oil production, the government controls Russia's oil and refined product pipelines, through the state firm Transneft. This monopoly gives the Russian government leverage against Russian private firms, foreign investors and foreign countries, if needed. For example, Transneft is the largest shareholder in the Caspian Pipeline Consortium (CPC). The CPC pipeline carries oil from Kazakhstan to the Russian port of Novorossiysk on the Black Sea. This gives Russia a near monopoly on the transport of Kazakh oil destined for western markets. Other members include ExxonMobil and Chevron, which are involved in the exploitation of the Kazakh oil fields. In addition, Moscow has presented the Western oil companies with repeated financial demands, and threatened them with legal proceedings for allegedly unpaid taxes to Russia if they do not comply.⁸

⁷ "Peter Finn, "Russian Giant Expands Control of Oil," *Washington Post*, September 29, 2005, D06.

⁸ For background on Russia's oil and natural gas industries, see CRS Report RL33212, *Russian Oil and Gas Challenges*, by Robert Pirog.

Russia's Objectives: Exploiting Dependency or Just Good Business?

Through its energy firms, Moscow has pursued several objectives. Russia has tried to purchase a controlling stake in pipelines, ports, storage facilities, and other key energy assets of European countries. Russia needs these assets to transport energy supplies to Western European markets, as well as to secure greater control over the domestic markets of the countries of the region. In several cases where energy infrastructure was sold to non-Russian firms, Russia cut off energy supplies to the facilities.

Russian firms have attempted to buy energy infrastructure in western European countries, provoking unease in the EU. The EU has pressed Russia to open up its pipelines to western firms and to provide stronger protections for foreign investment in Russia's energy sector. Russia flatly rejected EU demands that it ratify the 1994 Energy Charter Treaty, which enshrines these principles. EU efforts to include the key components of the Energy Charter into a new Russia-EU Partnership and Cooperation Agreement (PCA) have also been stymied. The EU Commission has proposed an EU energy policy called "unbundling" that would prohibit energy-producing companies from owning distribution networks. It would also bar foreign companies from investing in EU distribution networks, unless that country permitted such investment in its own networks. Russia strongly criticized the Commission proposal. Indeed, Russian officials have said that participation of foreign companies in energy projects in Russia may be conditioned on an ownership stake for Russian firms of "downstream" assets in those countries.

EU countries have also been concerned about Russian efforts to coordinate export policy with other natural gas-producing countries such as Algeria, evoking the specter of a cartel, or "gas OPEC." Russia has also hinted that the bulk of Russian energy exports could be provided to Asia or even the United States instead of Europe in the future, once new pipelines to Asia are completed and new liquefied natural gas facilities are built.

It is unclear whether the EU can adopt an effective common policy on the Russian energy question. Central and eastern European countries within the EU want the EU to take a stronger stance against dependence on Russia for energy. On the other hand, energy companies and other influential voices in countries such as Germany, France, and Italy have forged close links with Moscow in order to secure access to Russian energy supplies and opportunities to invest in Russian energy projects. They assert that a mutual dependence exists between Russia and consuming countries. They note that roughly two-thirds of Russia's export revenues and half of its state budget comes from oil and gas exports. They insist that the current system of gas pipelines gives Russia little choice but to sell its gas exports to Europe.⁹ Many European countries are less dependent on oil supplies from Russia, as they can draw on a more flexible global oil market, with the oil delivered by tankers.

Facing difficulties in securing control of energy infrastructure in central and eastern Europe, Russia has tried to bypass countries in the region entirely where possible. It is expanding the use of the Baltic Pipeline system and its oil terminal at the port of Primorsk and reducing the use of oil terminals in the Baltic states, such as Butinge in Lithuania and Ventspils in Latvia. In addition,

⁹ For background on EU energy policy, see CRS Report RL33636, *The European Union's Energy Security Challenges*, by Paul Belkin.

Russia is considering oil pipeline projects involving Murmansk and other ports in northern Russia.

Russia's plans for natural gas pipelines have attracted the most attention. Gazprom has started work on the North European Gas Pipeline (NEGP), also known as Nord Stream, which would start transporting natural gas from Russia to Germany via a pipeline under the Baltic Sea as early as the end of next year, bypassing the states of central and eastern Europe. Ultimately, it would have a capacity of 55 billion cubic meters per year. In November 2007, Gazprom and the Italian firm ENI signed an agreement to build a "South Stream" gas pipeline that would run from Russia under the Black Sea through the Balkans, with branches to Austria and Italy. Bulgaria, Serbia, Croatia, and Hungary have also signed on to the project. Gazprom hopes to complete South Stream in 2015. South Stream would also bypass Belarus, Ukraine, Poland, and other central European countries. In May 2009, ENI and Gazprom agreed to expand South Stream's capacity to 63 bcm per year.

Another possible natural gas pipeline project is Yamal-Europe 2. This long-proposed pipeline, which would parallel a currently operating one that has a capacity of 33 bcm, would run through Belarus and Poland, bypassing Ukraine. The pipeline is unlikely to be built, as the Russian government and Gazprom have rejected Belarusian proposals to reactivate the Yamal-Europe 2 plans.

By seeking a range of transit routes through the region, Russia may be trying to reduce the leverage that transit countries, including those in central and eastern Europe, have in negotiations with Russian energy firms. Experts note that the capacity of these new routes, if built, would likely outstrip Russia's capacity to produce oil and gas to fill them, allowing Russia to allocate scarce production to "favored" transit countries. Russia may also be trying to reduce the attractiveness of other routes for oil and gas pipelines from Azerbaijan and Central Asia to Europe and Asia that would bypass Russia.¹⁰

Another objective Russia has pursued has been to eliminate the energy subsidies former Soviet republics have received since the fall of the Soviet Union, including by raising the price these countries pay for natural gas to world market prices.¹¹ These actions may be seen as paralleling the reduction of subsidies to Russian domestic consumers. However, Russia has also used the withdrawal of price subsidies and the unpaid energy debts of countries in the region as leverage to secure key energy infrastructure in those countries.

It is not clear whether the pursuit of Russian foreign policy objectives is always the primary explanation for the actions of its energy firms. Few would disagree in principle that the elimination of subsidies to post-Soviet countries is a sound business decision, even if questions have been raised about the timing of such moves. In support of their actions, Russian leaders point to the fact that Russian allies such as Armenia and Belarus have also been subject to energy price hikes. The pursuit of multiple pipelines can also be portrayed as a business decision, although some analysts disagree about its wisdom. They assert that Russia would do better to invest more in boosting production rather than building pipelines that it may not be able to fill as its current oil and gas fields decline.

¹⁰ Vladimir Socor, "South Stream; Gazprom's New Mega-project," Jamestown Foundation Eurasia Daily Monitor, June 25, 2007.

¹¹ Keith C. Smith, "Russian Energy Pressure Fails to Unite Europe," CSIS Euro-Focus, January 24, 2007.

Many countries of central and eastern Europe are concerned that Russia may use their energy dependency to interfere in their domestic affairs or force them to make foreign policy concessions. Gazprom's increases in energy prices to Georgia and Ukraine came after elections in 2004 brought to power pro-Western leaders in what were termed respectively the "Rose" and "Orange" Revolutions, in reference to their campaign symbols. Analysts asserted that Russian leaders feared so-called "color revolutions" elsewhere in the former Soviet countries that could reduce Russia's influence, and even perhaps threaten Russia's own authoritarian regime. Countries of the region also fear that by controlling energy infrastructure in their countries, Russia is able to manipulate the internal political situation by favoring certain local businessmen with participation in local business ventures of Gazprom or other Russian energy firms. These businessmen are in a position to assume a powerful political role themselves or bribe politicians to do Moscow's bidding.¹²

Critics of Russian policy say Moscow's motives become even clearer when viewed in the context of other actions to apply pressure to neighboring states. For example, Moldova's economy was seriously harmed by a wine import ban Russia imposed, ostensibly for health reasons, from 2005 to 2007. Georgia has been hurt by Russian immigration restrictions and a wine ban. Both countries have also faced problems with Russian support for breakaway regions on their territories. Russia's August 2008 military assault on Georgia and its subsequent recognition of the independence of breakaway regions South Ossetia and Abkhazia sent a powerful signal to Russia's neighbors about the costs of angering Moscow. NATO and EU member Estonia suffered from cyberattacks that may have been instigated by Russia, in the wake of a controversy over the removal of a Soviet-era military statue from Estonia's capital in April 2007. Russia's critics also point to Russia's "National Security Strategy to 2020," released in May 2009, which states that "the resource potential of Russia" is one of the factors that has "expanded the possibilities of the Russian Federation to strengthen its influence on the world arena."¹³

While Moscow is often charged with using energy policy to pursue foreign policy goals, it may also at times use foreign policy issues to benefit its energy firms. In January 2008, the Russian natural gas monopoly Gazprom reached an agreement with Serbia to buy NIS, the Serbian national oil company, at what some observers believed to be a below-market price. Gazprom may have been able to achieve this in part due to then-Serbian Prime Minister Vojislav Kostunica's appreciation for Moscow's opposition to independence for Serbia's Kosovo province.

Selected Recent Cases

The countries discussed in this report have all faced the impact of Russian energy policy. All are heavily or entirely dependent upon Russia for their natural gas and oil imports. They face common issues of cost, reliability of supplies, and Russian efforts to control downstream infrastructure such as pipelines, refineries, and domestic distribution networks. The countries differ in their geopolitical orientation. Ukraine and Moldova seek eventual EU membership, while Georgia seeks to join the EU and NATO. The Baltic states are EU and NATO members, but Russia maintains a strong hold on their energy sectors. On the other hand, Belarus is Russia's

¹² Testimony of Zeyno Baran before a House Foreign Affairs Committee hearing on "Central and Eastern Europe: Assessing the Transition," June 25, 2007.

¹³ The text of the National Security Strategy can be found at the website of the Russian National Security Council at <http://www.scrf.gov.ru/documents/99.html>

most loyal supporter in Europe, while Armenia is a strong ally of Moscow in the south Caucasus region.

Ukraine

Although it possesses modest oil and natural gas reserves of its own, Ukraine is dependent upon Russia for most of its oil and natural gas, both from Russia's own oil and natural gas fields and from Russian-controlled pipelines from Ukraine's suppliers in Central Asia, especially gas from Turkmenistan. In 2006, half of Ukraine's energy consumption came from natural gas. Sixty-six percent of Ukraine's domestic natural gas consumption came from Russia. In 2006, Russian oil imports accounted for 78% of Ukraine's oil consumption.¹⁴ Most Ukrainian homes are heated by natural gas. Ukraine's steel and other heavy industries, which play a key role in Ukraine's exports, are highly inefficient users of energy. However, Ukraine's vulnerability to Russian pressure has been mitigated by the fact that the main oil and natural gas pipelines to central and western Europe transit its territory. Ukraine's gas pipeline system has a capacity of 120 billion cubic meters per year. Ukraine owns the sections of the pipelines that run through its territory as well as large gas storage facilities. Ukraine has received transit fees from Gazprom, paid partly in gas and partly in cash. According to a 2006 report of the International Energy Agency, 84% of Russia's natural gas exports and 14% of Russian oil exports pass through Ukraine.¹⁵

Energy issues have played a key role in Russian-Ukrainian relations since the breakup of the Soviet Union in 1991. Russian firms supplied energy to Ukraine at prices far below market rates. In the early 1990s, these firms cut off supplies to Ukraine at times due to unpaid energy debts. Energy sales have been conducted by non-transparent intermediary institutions, offering the elites of both countries opportunities to profit.

Since achieving independence in 1991, Ukraine has tried to strike a balance between improving ties with the West, including nominal support for Euro-Atlantic integration, while not offending Moscow. However, in 2005 Viktor Yushchenko was elected President of Ukraine, overcoming the previous regime's attempts at electoral fraud, in what was termed the "Orange Revolution." Russian leaders, who had strongly backed his opponent, Prime Minister Viktor Yanukovich, reacted angrily to Yushchenko's victory. Yushchenko, Ukraine's first clearly pro-Western leader, said Ukraine would conduct serious reforms so that it could join NATO and the European Union as soon as it was ready.

Soon after Yushchenko took office, Gazprom started to demand a sharp increase in the price of natural gas that it supplied to Ukraine. When Ukraine rejected this proposal, Russia cut off natural gas supplies to Ukraine on December 31, 2006. Ukraine then diverted to its own use some of the gas that Gazprom intended for European customers. After western European governments protested sharply, Gazprom resumed gas deliveries on January 2. Two days later, the Russian government and Gazprom reached an agreement with Ukraine for ensuring gas supplies to Ukraine. The agreement called for gas to be purchased by Ukraine through an intermediary firm, RosUkrEnergo. This firm paid for gas from Central Asia at a price lower than market levels, and

¹⁴ U.S. Department of Energy, Energy Information Administration, Country Brief: Ukraine, August 2007; and Country Brief: Russia, May 2008, both from the EIA website <http://www.eia.doe.gov>.

¹⁵ International Energy Agency, Ukraine Energy Policy Review 2006; from the IEA website at <http://www.iea.org/textbase/nppdf/free/2006/ukraine2006.pdf>

adds gas from Russia at market prices. The agreement also provided for higher transit fee payments to Ukraine (now entirely in cash rather than partly in gas).

Perhaps more troubling for Ukraine, the accord called for the creation of UkrGazEnergo, a joint venture between RosUkrEnergo and the Ukrainian state-controlled gas firm Naftogaz that grants the former access to one-half of Ukraine's domestic market. Ukraine's intelligence service reportedly believes the owners of RosUkrEnergo are using their control over energy supplies to secure ownership of energy intensive industries such as fertilizer plants and a titanium plant.¹⁶

Some analysts are concerned about possible involvement of organized crime groups in RosUkrEnergo, as well as corrupt links with Russian and Ukrainian officials. The U.S. Justice Department reportedly investigated the firm.¹⁷ Nominally, Gazprom owns 50% of RosUkrEnergo, Ukrainian businessman Dimitry Firtash owns 45%, and another Ukrainian businessman owns 5%. In 2005, Ukrainian Prime Minister Yuliya Tymoshenko, who was an important player in the natural gas industry in the 1990s, called for the elimination of RosUkrEnergo as a middleman. She was dismissed by Yushchenko in September 2005, in a move that some observers believed was aimed in part at appeasing Gazprom and its supporters within the Ukrainian government.

Yanukovich's party won Ukraine's March 2006 parliamentary elections, and Yanukovich once again became Prime Minister. Gazprom's discussions with the Yanukovich government in late 2006 went more smoothly than those of the previous year. In 2007, Russia and Ukraine agreed on a moderate increase in the natural gas price. The two sides agreed to gradually increase the price of Russian natural gas to Ukraine over the next five years, until it reaches the world market price. Some observers have seen Gazprom's tough attitude toward Ukraine in the 2005 negotiations and its relatively benign stance in 2006 as evidence that Russia has manipulated the gas issue to undermine Yushchenko. In September 2007, Putin appeared to verify this view when he said that Russia had no desire to provide cheap energy to "Orange" forces.¹⁸

On September 30, 2007, Ukraine held closely contested parliamentary elections. On October 2, as the vote count showed a narrow victory by "Orange" parties, Gazprom announced that it would reduce gas supplies to Ukraine, if Ukraine did not pay outstanding debts to Gazprom by the end of the month. Gazprom officials hinted that Ukraine's energy debts could be solved if it turned over shares in the gas pipeline system to Gazprom as payment. However, the crisis was resolved when the Ukrainian government agreed to provide gas in Ukrainian storage facilities as payment. Gazprom and the outgoing Yanukovich government agreed to a sharp increase in the natural gas price, but still well short of world market levels. Nevertheless, the percentage increase was double that given to neighboring Moscow ally Belarus.

In December 2007, Yuliya Tymoshenko was elected by the new Ukrainian parliament as Prime Minister. She vowed to remove RosUkrEnergo and UkrGazEnergo from Ukraine's gas market. Gazprom reduced gas supplies to Ukraine by 50% on March 3-5, 2008, over disagreement on the price Ukraine should pay for gas delivered in January and February 2008. Ukrainian gas company officials warned that they might divert gas intended for Western Europe to offset Gazprom's

¹⁶ Roman Kupchinsky, "Russia/Ukraine: Pipeline Conflict Resurfaces," Radio-Free Europe Radio Liberty Newline, June 28, 2007.

¹⁷ Glenn R. Simpson and David Crawford, "Supplier of Russian Gas Draws Investigation," Wall Street Journal, April 21, 2006, 1. For background on the gas crisis, see CRS Report RS22378, *Russia's Cutoff of Natural Gas to Ukraine: Context and Implications*, by Jim Nichol, Steven Woehrel, and Bernard A. Gelb.

¹⁸ *The Times* of London, September 15, 2007, 4.

supply cut. The two sides reached agreement on March 5 and supplies were restored. On March 12, the two sides agreed to eliminate UkrGazEnergo from the domestic gas trade, but gave Gazprom direct access to the most lucrative part of Ukraine's domestic market—supplies to large enterprises. The agreement said the fate of RosUkrEnergo would be determined by future negotiations. However, Tymoshenko appeared dissatisfied with parts of the accord. She remained determined to eliminate RosUkrEnergo as soon as possible. The Ukrainian government made significant unilateral changes to the agreement, including barring RosUkrEnergo from the profitable practice of re-exporting Central Asian gas from Ukraine to other markets.

On January 1, 2009, the state-controlled Russian natural gas firm Gazprom halted gas supplies to Ukraine after the two sides failed to reach agreement on several issues, including a debt allegedly owed by Ukraine to Gazprom and the price that Ukraine would pay for gas supplies for 2009. The cutoff was supposed to affect only supplies for Ukraine; Russia continued to send gas through Ukraine destined for other European customers. However, within a few days, Russia accused Ukraine of diverting these supplies for its own use, and by January 6 cut off all deliveries through Ukraine to the rest of Europe. The European Union sharply criticized the cutoff, calling for a rapid resumption of supplies, but refused to take sides in what it termed a commercial dispute.

Many large European countries (including Ukraine) did not suffer greatly from the cutoff, despite frigid temperatures, due in part to substantial amounts of gas in underground storage facilities. However, some countries, particularly in the Balkans, were hit hard. Negotiations between Russia and Ukraine repeatedly broke down, with each side accusing the other of bad faith and trying to enlist European support for its views. Finally, on January 18, Russia and Ukraine reached an agreement, and gas supplies to Europe resumed on January 20th.

According to the agreement, RosUkrEnergo was eliminated as a middleman in the gas trade. In the first quarter of 2009, Ukraine was charged more than double what it paid in 2008 for gas. However, Ukraine was able to avoid this price increase by using supplies it had in storage until the gas price declined in the second quarter, as the sharp drop in oil prices was reflected in natural gas prices. The poor financial situation of Naftogaz and its customers, as well as the devastating impact of the global economic crisis on Ukraine, threatened to lead to further gas crises, as Gazprom threatened to cut off supplies again if it was not paid the full amount it was owed each month. However, Ukraine was able to find the money to make the payments and a crisis was avoided in 2009. In November 2009, Russia and Ukraine reached a revised gas deal that confirmed Moscow's earlier pledges that Russia would not impose fines on Ukraine for not taking enough gas from Russia.

Russia has pursued a long-standing goal of ownership of Ukraine's natural gas pipelines and storage facilities, as well as its local gas distribution network. In February 2007, Putin announced that he and Prime Minister Yanukovich had agreed on joint Russian-Ukrainian control of Ukraine's natural gas assets, in exchange for a Ukrainian stake in Russian natural gas fields. However, this statement provoked a strongly negative reaction in Ukraine, and the parliament quickly approved a law banning any transfer of control of the pipelines by a vote of 430-0. Russia has tied possible support for upgrading Ukraine's pipeline network to greater Gazprom ownership of Ukraine's pipeline system.

In July 2009, the EU Commission brokered an agreement under which the European Bank for Reconstruction and Development (EBRD) and World Bank agreed to provide loans to help Ukraine modernize its gas pipeline system. Ukraine would be required to create greater transparency in how its gas sector is run. In the short term, \$300 million in EBRD loans would be

aimed at helping Ukraine improve its natural gas storage facilities and other infrastructure. In 2010, the EBRD may loan Ukraine another \$450 million for Ukraine to reform its gas sector. The World Bank is willing to loan Ukraine up to \$500 million for structural reforms, including of the gas sector.

In March 2009, Prime Minister Putin sharply criticized the initial announcement of the EU-Ukraine gas sector agreement as “ill-considered and unprofessional.” Russian officials said that any agreement about Ukraine’s pipelines should include Russia. Russia’s anger may be caused by fears that the EU plan could foil Gazprom’s own efforts to secure control of Ukraine’s pipelines and Ukraine’s domestic gas distribution network. The EU plan soon stalled, due to Ukraine’s unwillingness to undertake reforms during the impending Ukrainian presidential election campaign.

Balked in its efforts to control Ukraine’s pipelines for the time being, Russia is working on ways to bypass Ukraine’s gas transport system, at least in part. It is developing new energy export routes through the Baltic Sea (the Nord Stream pipeline) and the Balkans (the South Stream pipeline) to western Europe beginning as early as the end of 2011 in the case of Nord Stream and 2015 in the case of South Stream. If successful, these efforts could reduce Ukraine’s leverage over Russia on energy issues. Such a development could have broader consequences. Russia could feel it would have a freer hand to put greater pressure on Ukraine on other issues. Key western European countries could feel they have less of a stake in Ukraine’s future, if they, like Russia, were no longer dependent on Ukrainian gas transport infrastructure.

The victory of Viktor Yanukovich in Ukraine’s 2010 presidential elections may result in a change in Ukraine’s energy relationship with Russia. Yanukovich is expected to pursue a more pro-Russian foreign policy than Yushchenko did. President Yanukovich has criticized the current gas agreement between Russia and Ukraine, saying that the gas is too expensive. He wants Russia to return to its old policy of providing gas to Ukraine at subsidized prices, in exchange for Russia’s gaining a large minority stake in Ukraine’s pipeline system. Companies from western European consumer countries would also gain shares in the system, according to Yanukovich. However, it is not completely clear whether Gazprom, in its present financial difficulties, would be willing to cut gas prices for Ukraine. Secondly, the Ukrainian parliament would have to pass a law permitting the deal, which could prove highly controversial. Many in the parliament could accuse Yanukovich of breaking the law and selling off the country’s chief strategic asset to Moscow.

Yanukovich may also revive the role of non-transparent middlemen in the gas trade, given the presence of persons in his government who were closely associated with RosUkrEnergo. It is unclear whether Ukraine will move forward with the EU-Ukraine gas sector reform plan, which calls for greater transparency in the Ukrainian gas system.

Moldova

Moldova is the poorest country in Europe, according to the World Bank. It is entirely dependent upon Russia for its energy resources, and also as a market for the wine and agricultural products that are its main exports. In 2005, Russia restricted wine and other agricultural imports from Moldova, allegedly over health concerns, dealing a very heavy blow to the country’s economy. Russia has stalled on implementing pledges to end its embargo on Moldovan wine, still citing health concerns. In addition, Russia has supported a breakaway regime in the Transnistria region of the country, including by deploying 1,500 troops there.

In part due to its vulnerable position, Moldova has tried to balance ties between Moscow and Western countries since securing independence from the Soviet Union in 1991. However, Moldova's Communist leaders increasingly sought greater engagement with the West, irritating Russia. Perhaps even more irksome to Moscow, in 2005, Moldova, with EU help, began to tighten its customs policies to stop profitable smuggling operations from Transnistrian territory. Powerful groups in Ukraine and Russia have profited from the Transnistria regime's activities. Russia provides subsidies to Transnistria, which include grants and loans as well as subsidized energy. In return, Russian firms have received stakes in Transnistrian businesses.¹⁹ All but a small fraction of Moldova's current debt to Gazprom for gas is owed by Transnistria.

Russia has pressured Moldova on the issue of energy supplies. On January 1, 2006, the Russian government-controlled firm Gazprom cut off natural gas supplies to Moldova, after Moldova rejected Gazprom's demand for a doubling of the price Moldova pays for natural gas. Gazprom restored supplies on January 17, when Moldova accepted a slightly smaller increase. Moldova also agreed to give Gazprom, already the majority shareholder, Transnistria's 13% stake in MoldovaGaz, which controls Moldova's natural gas pipelines and other infrastructure (Moldova had earlier ceded majority control to Gazprom in exchange for settling Moldova's gas debts). As a result of the agreement, Gazprom holds 63.4% of MoldovaGaz's shares and has control of Moldova's domestic gas infrastructure. Gas supplies to Moldova were cut off during the January 2009 Russia-Ukraine gas crisis, and were restored afterwards. The global economic crisis has resulted in a drop in the price of Moldova's gas supplies. The establishment of a pro-Western government in Moldova after the victory of anti-Communist parties in 2009 parliamentary elections has not led so far to dramatic changes in the country's energy relations with Moscow.

Georgia

Georgia began to follow a clearly pro-Western orientation after the "Rose Revolution" of November 2003, which swept out of power political forces with close ties to Russia after they had tried to use electoral fraud to win legislative elections. Mikhael Saakashvili won presidential elections in early 2004. Georgia is seeking NATO membership. Georgian-Russian relations deteriorated in the wake of the Rose Revolution. Russia has many ways to pressure Georgia, including supporting the breakaway regions of South Ossetia and Abkhazia, and disrupting economic ties between Georgia and Russia, including in the energy sphere.

In late 2005, Gazprom announced substantial increases in the price of gas shipped to Georgia. In the winter of 2005-2006, unknown saboteurs bombed gas pipelines in Russia, temporarily cutting off supplies to Georgia. Gazprom announced in November 2006 that it would cut off gas supplies to Georgia by the end of the year unless Georgia agreed to a 100% price hike or sold its main gas pipeline to Gazprom.

However, Georgia's geographical position neighboring energy-rich Azerbaijan has allowed it to counter Russian pressure more effectively than other countries. Georgia is a transit state for a pipeline completed in mid-2006 carrying one million barrels per day of Azerbaijani oil to the Turkish port of Ceyhan (the Baku-Tbilisi-Ceyhan or BTC pipeline). Another pipeline completed in early 2007 initially carries 2.2 billion cubic meters of Azerbaijani natural gas to Georgia and

¹⁹ International Crisis Group, "Moldova's Uncertain Future," August 17, 2006, from the ICG website <http://www.crisisgroup.org>.

Turkey, lessening their dependence on Russia as a supplier. Another pipeline carries oil from Baku to the Georgian port of Supsa.²⁰

The August 2008 Russian military assault on Georgia resulted in temporary interruptions of some oil and gas pipeline shipments, but these were soon resumed. Gazprom also continues to supply Georgia with natural gas, in part because a pipeline that delivers gas to Armenia passes through the country. Nevertheless, the conflict demonstrates Russia's ability to disrupt pipeline routes through Georgia to European customers, by military means if necessary. Georgian officials believe that the gas Georgia would receive from participating in the U.S.-sponsored Nabucco pipeline project, if it is built, would meet all its natural gas needs.

Baltic States

The Baltic states of Lithuania, Latvia, and Estonia are members of NATO and the EU. They have often had difficult relations with Moscow. About 90% of their oil comes from Russia, and 100% of their natural gas. They faced Soviet energy supply cutoffs in the early 1990s, as they were trying to achieve independence and shortly thereafter. They pay world market prices for their energy supplies.

In the past few years, the main concern in the Baltic states has been Russian efforts to increase control over the energy infrastructure in their countries. Gazprom has a large equity stake in domestic natural gas companies of each of the three Baltic countries.²¹ When Russian takeover efforts have failed, Russia has cut off energy supplies to Baltic energy facilities. One striking case involves the Mazeikiai oil complex in Lithuania. Mazeikiai includes a large refinery, the Butinge maritime terminal, and a pipeline. It is the largest enterprise in Lithuania (accounting for about 10% of Lithuania's GDP) and provides vitally needed tax revenue. In 1999, the U.S. firm Williams International bought a large stake in Mazeikiai and also received the operating rights. In response, the Russian oil firm Lukoil, which supplied the oil to the refinery, slowed deliveries to a trickle, making Mazeikiai unprofitable. This led Williams, which had financial problems of its own, to sell its stake to Yukos in 2002.

Under Yukos, the refinery became profitable again. However, when Yukos later fell afoul of Russian authorities, and was driven into bankruptcy, Yukos attempted to sell its stake in Mazeikiai. The Polish oil firm PKN Orlen agreed to buy out Yukos, despite an effort by the Russian government-controlled oil company Rosneft to purchase the refinery. At the end of July 2006, the Russian government-owned oil transport company Transneft announced that the part of the Druzhba oil pipeline that supplies Mazeikiai was temporarily shutting down for repairs following an oil leak. Transneft later said that it would not reopen the pipeline, due to its unprofitability. Transneft blocked Lithuania's efforts to secure supplies from Kazakhstan through Transneft's pipelines. Critics charged that once again Russia was manipulating energy supplies to punish Lithuania for seeking to diversify ownership in its energy sector.²² In February 2010,

²⁰ For more on Georgia, see CRS Report RL33453, *Armenia, Azerbaijan, and Georgia: Political Developments and Implications for U.S. Interests*, CRS Report RL30679, *Armenia, Azerbaijan, and Georgia: Security Issues and Implications for U.S. Interests*, and CRS Report 97-727, *Georgia [Republic]: Recent Developments and U.S. Interests*, all by Jim Nichol.

²¹ U.S. Department of Energy, Energy Information Administration, *Baltic Sea Regional Fact Sheet*, July 2006, from the EIA website <http://www.eia.doe.gov>.

²² *Eurasia Daily Monitor*, Volume 3, Issue 161, August 18, 2006.

Lithuanian Prime Minister Andrius Kubilius said that a 25% stake in Mazeikiai could be sold to a Russian oil firm in exchange for oil supplies.

Another example of a Russian company using its control over energy supplies in an effort to strong-arm a Baltic country into handing over key infrastructure occurred in January 2003. The Russian government-controlled Transneft oil pipeline company cut off all oil shipments to the Latvian oil terminal at the port of Ventspils, after having decreased shipments in late 2002. The move was a large blow to Latvia, as Ventspils has been important to Latvia's economy. Transneft diverted the oil shipments to its own Baltic Pipeline System and the Russian port of Primorsk, which it controls. Transneft claims that there is no demand for using Ventspils, a claim viewed with skepticism by outside observers. Most saw the move as a power play by Transneft to secure a controlling share of the firm Ventspils Nafta, which operates the oil terminal.²³

Estonia has also felt the effects of Russian pressure on its energy supply. On May 2, 2007, Russia's state railway monopoly halted delivery of oil products and coal to Estonia in the midst of a political furor over the relocation of a Soviet war memorial statue from a square in central Tallinn, Estonia's capital.²⁴

Belarus

Belarus, under the authoritarian leadership of President Aleksandr Lukashenko, has been Moscow's most loyal ally in Europe since the collapse of the Soviet Union. Belarus's unreformed, largely Soviet-style economy is heavily dependent on cheap Russian natural gas and oil. Gazprom long supplied Belarus with energy at Russian domestic prices, providing a large indirect subsidy to the Lukashenko regime.

However, in 2006, it appeared that Russia had decided to reduce its subsidies to Lukashenko. In late 2006, Gazprom strongly pressured Belarus to sell to it control of the Beltransgaz natural gas firm (which controls the pipelines and other infrastructure on Belarusian territory) and other key Belarusian energy firms, or face the quadrupling of the price Belarus would pay for Russian natural gas. Gazprom threatened a cutoff in supplies on January 1, 2007, if Belarus did not agree to pay the higher price. Just hours before the deadline, however, the two sides reached an agreement that averted a gas shutoff. Belarus agreed to pay more than double what it paid in 2006. Belarus's natural gas prices were scheduled to rise steadily, reaching world market levels in 2011. Belarus also agreed to sell Gazprom a majority stake in Beltransgaz.

After settling the gas dispute, the two countries were soon embroiled in conflict over oil supplies. In addition to receiving cheap natural gas, Belarus has also benefitted from inexpensive and duty-free crude oil supplies that are processed at Belarusian refineries. Belarus then sold the bulk of these refined products to EU countries at a hefty profit. In January 2007, Russia moved to sharply reduce this subsidy to the Belarusian economy. Russia imposed a tariff on oil exports to Belarus. Belarus retaliated by increasing transit fees for Russian oil supplies to Western Europe. When Russia refused to pay, Belarus cut off oil supplies to Western European countries, angering their governments. Belarus and Russia ended the crisis by agreeing that Belarus would raise its export duty on crude and refined oil products to Western Europe to match that imposed by Russia.

²³ Keith C. Smith, "Russian Energy Pressure Fails to Unite Europe," CSIS Euro-Focus, January 24, 2007 from the CSIS website <http://www.csis.org/europe>.

²⁴ Russian authorities cited track repairs and a shortage of wagons. RFE/RL, *Newsline*, May 3, 2007.

Russia would then exempt Belarus from most of the new Russian oil export duty. The drop in this subsidy from Moscow caused Lukashenko to cut some government spending and to look to Western banks for loans

Another oil crisis occurred in January 2010. Russia demanded a revision in the oil export arrangements between the two countries. Russia wanted to supply a fixed amount of oil duty-free for Belarus's domestic use, but any amounts over that would be subjected to the full duty. In addition to a reduction of the Russian subsidy to Belarus, the plan would also put Russia's own refineries on a more equal footing with the subsidized Belarusian ones. Russian Deputy Prime Minister Igor Sechin (who is also chairman of the state-owned Rosneft oil company) said that if Belarus wants better terms it will have to sell equity stakes in its refineries to Russian firms. In order to put pressure on Belarus, Russia cut its supplies to Belarus by as much as 70% on January 23. Faced with a shutdown of its refineries, Belarus quickly agreed to a modified version of Russia's terms on January 27. It is estimated that the new oil supply deal will cut Russia's subsidy to Minsk by about \$1.8 billion. Some analysts believe that it may make Belarus's refineries unprofitable. The crisis did not have an impact on oil supplies to Western Europe.²⁵

Belarus continues to ask Russia to moderate future energy prices. Belarus paid about \$148 per bcm for gas in the first quarter of 2009, far below that charged to Ukraine. Belarus also wants Moscow to increase the transport fees it pays to Belarus for use of its pipelines to Europe, so far without success. To hedge his bets, Lukashenko has called for diversification of Belarus's energy supplies by imports from such countries as Venezuela, Iran, and Azerbaijan, as well as development of coal reserves and a nuclear power plant within Belarus. Belarus has also explored receiving oil supplies from Kazakhstan. The world economic crisis has eased Belarus's energy burden somewhat. Gas prices paid by Belarus since the second quarter of 2009 have dropped due to the fact that market rates for gas are tied to those for crude oil, which have plummeted in recent months

Armenia

Armenia and Russia have close political and military ties, in large part due to Armenia's desire for support in its struggle with Azerbaijan over the Nagorno-Karabakh region of Azerbaijan. However, in early 2006, Russia informed Armenia that it would sharply increase the price it would have to pay for gas. In May 2006, Armenia agreed to relinquish various energy assets to Russian firms as partial payment for this price increase. Some critics have alleged that Russia now has virtual control over Armenia's energy supplies.

In October 2006, Armenian officials announced that Gazprom would assume effective management control of an Iranian-Armenian gas pipeline. According to some experts, this acquisition may indicate Russia's intent to block use of Armenia as a pipeline route independent of Russian control. Some of the gas will be used to generate electricity for Iran and Georgia, but the remainder may satisfy all Armenia's other consumption needs, removing its dependence on Russian gas transported via Georgia.²⁶

²⁵ Economist Intelligence Unit, Country Report: Belarus, February 2010.

²⁶ For more on Armenia, see CRS Report RL33453, *Armenia, Azerbaijan, and Georgia: Political Developments and Implications for U.S. Interests*, and CRS Report RL30679, *Armenia, Azerbaijan, and Georgia: Security Issues and Implications for U.S. Interests*, both by Jim Nichol.

U.S. Policy

The United States has criticized what it has viewed as Russian efforts to use its energy supplies as a political weapon. During the January 2006 natural gas standoff between Russia and Ukraine, State Department spokesman Sean McCormack criticized Russia for using “energy for political purposes.” He stressed that while the Administration supported a gradual increase in prices to market levels, it disagreed with a “precipitous” increase and cutoff. Secretary of State Condoleezza Rice likewise on January 5 stated that Russia had made “politically motivated efforts to constrain energy supply to Ukraine.”²⁷ In May 2006, Vice President Dick Cheney criticized Russia’s tactics of “supply manipulation or attempts to monopolize transportation” against vulnerable countries in the region as “blackmail” and intimidation.²⁸

In testimony before the Commission on Security and Cooperation in Europe in June 2007, Bush Administration officials cast doubt on the reliability of Russian oil and natural gas supplies to Europe and criticized Moscow’s “nationalistic interventions in its energy sector.”²⁹ On October 23, 2007, Secretary Rice noted that “we respect Russia’s interests, but no interest is served if Russia uses its great wealth, its oil and gas wealth, as a political weapon, or that if it treats its independent neighbors as part of some old sphere of influence.”³⁰ A State Department spokesman reiterated U.S. opposition to the use of energy supplies as a political weapon after a March 3-5, 2008, gas supply incident between Gazprom and Ukraine.

The Obama Administration has also expressed concerns about European energy security. On January 22, 2009, after the resolution of the second major Russia-Ukraine gas crisis, a State Department spokesman said the conflict “underscores the need for transparent, market-oriented arrangements for the sale and shipment of natural gas and the importance of diversifying energy supplies.”³¹ In April 2009, the Obama Administration appointed Richard Morningstar as State Department Special Envoy for Eurasian Energy.

While the United States has been active on the issue of Eurasian energy supplies, skeptics might argue that key U.S. interests are not at stake, given the fact that the problem is one of European dependence, not that of the United States. Moreover, the EU and other European countries will have to be the main players in finding a solution (if they have the will to do so), with the United States playing a secondary role.

²⁷ The State Department. Statement, January 1, 2006; Daily Press Briefing, January 3, 2006; Secretary Condoleezza Rice, Remarks at the State Department Correspondents Association’s Breakfast, January 5, 2006.

²⁸ “Vice President’s Remarks at the Vilnius Conference,” May 4, 2006, from the White House website <http://www.whitehouse.gov>.

²⁹ Testimony before the Commission on Security and Cooperation in Europe of Gregory Manuel, Special Advisor to the Secretary of State and International Energy Coordinator, Matthew Bryza, Deputy Assistant Secretary, Bureau of European Affairs, and Steven Mann, Principal Deputy Assistant Secretary, Bureau of South and Central Asian Affairs, June 25, 2007.

³⁰ Secretary of State Condoleezza Rice, “Opening Remarks at the Office of the Historian’s Conference on U.S.-Soviet Relations in the Era of Détente, 1969-1976,” from the State Department website, <http://www.state.gov>.

³¹ “Statement on Agreement to Restore Gas Flows to Europe,” January 22, 2009, <http://useu.usmission.gov>

U.S. “Pipeline Diplomacy”

The United States has urged European countries to diversify their energy supplies, reducing their dependence on Russia. The United States has strongly advocated the building of multiple pipelines to supply energy from Central Asia and Azerbaijan to Europe. These projects include the Baku-Tbilisi-Ceyhan (BTC) pipeline, which carries 1 million barrels per day of Azerbaijani oil to the Turkish port of Ceyhan. Another important project supported by the United States has been the South Caucasus Gas Pipeline (SCGP), which taps Azerbaijan’s Shah Deniz gas field.

In the longer term, through about 2020, the United States supports expanding the SCGP. The United States also strongly supports the Nabucco pipeline, an EU-sponsored project that would supply natural gas from Central Asia and Azerbaijan to Europe through Georgia, Turkey, Bulgaria, Romania, Hungary and Austria. Nabucco received a further boost on July 13, 2009, when Austria, Hungary, Romania, Bulgaria, and Turkey signed an intergovernmental agreement on the project. It is hoped that work on the pipeline could begin in 2011, with the first gas supplies available by 2015. The full capacity of the pipeline, planned at 31 bcm, would be reached a few years later.

Another U.S.-backed proposal is the Italy-Turkey-Greece Interconnector (ITGI) gas pipeline. The connection of the Turkish and Greek gas pipelines was completed in November 2007. The Greek and Italian gas transport systems are scheduled to be connected by 2012. The pipeline will have a capacity of 8 bcm per year, substantially smaller than Nabucco or South Stream. ITGI may be linked to Nabucco, if it is built.

Turkey plays a central role in all of these pipeline projects. Turkey limits shipping in the Bosphorus Strait due to environmental concerns. This reduces the potential for tankers to use the Black Sea to ship oil and gas to European markets. Therefore, supplies from the Caucasus and Central Asia must cross Turkey’s territory or transit across the Black Sea from the Caucasus in the east to the Balkans in the west. The United States has supported the American Macedonian Bulgarian Oil pipeline (AMBO), another Bosphorus bypass project. It could supply Caspian oil from the Bulgarian Black Sea port of Burgas through Macedonia to Albania’s Adriatic port of Vlore. It is expected to be completed in 2011.

Turkey appears to be using its prime geographic location as bargaining leverage with both Russia and the EU, in hopes of making Turkey a regional energy hub. After signing the intergovernmental agreement on Nabucco in July 2009, Turkey agreed in August to allow Russia to use Turkey’s territorial waters for South Stream. In exchange, Russia will provide support for a trans-Anatolian oil pipeline crossing Turkey from the Black Sea to the Mediterranean. Russia and Turkey will also discuss expanding the Blue Stream natural gas pipeline between Russia and Turkey. In addition, Russia also agreed to build a nuclear power plant in Turkey.

Another proposed gas pipeline is White Stream. It would provide gas from the Caspian through a pipeline under the Black Sea from Georgia to Crimea, in Ukraine. The pipeline would have to pass over Russia’s Blue Stream pipeline to Turkey on the seabed.³² In April 2009, Georgia and the White Stream Pipeline Company signed a memorandum of understanding on the project. However, it is unclear whether the pipeline can find financing in the current economic climate, or a source of supply.

³² Eurasia Daily Report, October 12, 2007.

Bush Administration officials criticized Nord Stream, which would traverse the Baltic Sea floor, supplying Germany and other western European countries with natural gas, and bypassing the central and eastern European countries through which the main current pipelines run. The U.S. supported discussions by Poland, the Nordic countries, and the Baltic states on alternatives, including delivering Norway's expanding gas production to northern Europe via Danish pipelines and by developing liquefied natural gas terminals in Poland and the Baltic states.³³ Bush Administration officials also criticized South Stream, saying that it will not reduce dependence on Russian supplies.

However, Germany strongly supports Nord Stream, as it is looking for a dependable source of natural gas, particularly after the natural gas crises between Russia and Ukraine, which briefly interrupted supplies to central and western Europe in 2006 and 2009. Gazprom owns 51% of Nord Stream, while two German firms and a Dutch firm, own the rest. A French company has also agreed to join the consortium. Former German Chancellor Gerhard Schroeder is chairman of the Nord Stream consortium. On the other hand, the Baltic countries, Poland and Ukraine have expressed concerns about Nord Stream, fearing that it will give Moscow more leverage on energy issues with them. After delays due to environmental concerns by Sweden, Finland, and Denmark, through whose waters the pipeline would pass, Nord Stream is expected to begin laying the underwater segments of the pipeline later this year, with hopes that the pipeline will begin operation in late 2011.

The Obama Administration has been less critical of Nord Stream and South Stream than the Bush Administration. Part of the change in tone may be due to an effort to "reset" ties with Russia that were frayed during the Bush years. U.S. Eurasian energy envoy Richard Morningstar has denied that the United States and Russia are involved in a "great game"—that is, a geopolitical struggle—for Central Asian energy supplies. He has said that the United States should at least try to work with Russia on the issue. In contrast to statements by Bush Administration officials, Morningstar has said that the United States does not oppose Nord Stream and South Stream; that the United States does not see Nabucco as being in competition with South Stream; and that it is possible that Russia could provide gas for Nabucco.³⁴

The United States has advocated extending an existing oil pipeline that currently runs from the oil terminal at Odesa in Ukraine to Brody, on the Polish border. This pipeline could then be extended to Gdansk in northern Poland. At present, however, the Odesa-Brody pipeline runs in the reverse direction, pumping Russian oil to Odesa.

Obstacles to U.S.-Supported Pipelines

These U.S. efforts at "pipeline diplomacy" face challenges. The success or failure of these projects will likely depend more on whether private energy firms find them profitable than on U.S. diplomatic skill and energy. A particular concern is whether there is enough oil and natural gas to supply the various pipelines. Russian-supported pipelines appear to have the upper hand because they have supplies available. Their potential profitability makes them tempting even to central and eastern European countries that are trying to reduce dependence on Russia. In

³³ Testimony of Gregory Manuel, Matthew Bryza, and Steven Mann in a hearing before the Commission on Security and Cooperation in Europe, June 25, 2007.

³⁴ Morningstar's testimony before the Senate Foreign Relations Committee hearing "\$150 Oil: Instability, Terrorism, and Economic Disruption, July 16, 2009; State Department Foreign Press Center Briefing, June 23, 2009.

addition, Moscow can offer them and western European firms participation in exploiting oil and natural gas fields in Russia.

For example, the prospects for Nabucco are clouded. Some observers believe Russia developed South Stream, which would take a similar route as Nabucco, as an effort to undermine the rival pipeline. South Stream has the support of Italy, Bulgaria, Serbia, and Hungary. The Austrian state-controlled energy firm OMV has agreed to sell a 50% stake in its Baumgarten gas storage and distribution center to Gazprom. The move could allow Moscow to block Nabucco, as Baumgarten is the planned terminus of the project.³⁵ In March 2009, in what some observers viewed as another possible effort to block Nabucco, the Russian firm Surgutneftegas acquired from OMV a large stake in the Hungarian energy giant MOL, a key player in the Nabucco project. The Hungarian government has supported both Nabucco and South Stream.

It is unclear whether sufficient natural gas supplies exist for Nabucco. The United States is strongly opposed to tapping Iran's energy resources, due to Iran's support of terrorism, its nuclear ambitions, its policy in Iraq, and other factors. Political uncertainty in Iraq makes it uncertain whether supplies can be drawn from there in the near future. For the present, therefore, the main U.S. hopes lie with Central Asia and Azerbaijan.

Russia and Iran have placed an obstacle in the way of U.S.-supported efforts. They have asserted that no country bordering the Caspian Sea can legally undertake projects such as building a pipeline on the seabed or drilling for oil and gas there without the consent of all Caspian littoral states. Although the other littoral states reject the Russo-Iranian view, this position could make potential investors leery of investing in such a project. Shipments via tanker across the Caspian to Baku can be increased, but would be more expensive. Long-standing tensions between Azerbaijan and Turkmenistan over their Caspian Sea border could also hinder U.S. plans.

On the other hand, Russia's own pipeline routes face supply questions as well. Current Russian gas fields in Siberia are in decline, and the development of new ones, such as Shtokman in the Barents Sea and the Yamal Peninsula, have been hit by delays. In the past, Russia has been able to make up for any supply shortfalls by delivering supplies from Central Asian countries. However, Russia's grip on Central Asian supplies has been called into question. A dispute erupted between Russia and Turkmenistan over responsibility for an explosion in a gas pipeline in Turkmenistan in April 2009, which led to a halt in Russian gas imports from Turkmenistan. Supplies resumed in 2010, albeit at a reduced level.

Turkmenistan is moving to diversify its supply routes by developing pipelines toward China and the rest of Asia. A pipeline from Turkmenistan to China opened in 2009, delivering 30 bcm of gas per year. Turkmenistan has also expanded its gas pipeline capacity to Iran, which is expected to reach 20 bcm eventually. Turkmen leaders have also expressed interest in providing gas via Nabucco, if it is built, but no commitments have been made.

Azerbaijan is the most eager advocate in the region of the U.S.-supported pipeline plans, but has the disadvantage that it has only modest amounts of natural gas to export at present. The United States hopes that this will change by 2015 or 2016 as Azerbaijan develops its Shah Deniz gas fields.³⁶ However, Azerbaijan has shown impatience with delays in the Nabucco project. In March

³⁵ Eurasia Daily Monitor, November 19, 2007.

³⁶ Testimony of Gregory Manuel, Matthew Bryza, and Steven Mann in a hearing before the Commission on Security and Cooperation in Europe, June 25, 2007.

2009, Russia and Azerbaijan signed a memorandum of understanding to sell Azerbaijani gas to Russia. The decision could deal a serious blow to Nabucco, depending on the volumes of gas that are exported to Russia in the future. The signing of the intergovernmental agreement on Nabucco was a step forward, but prospects for the pipeline continue to be clouded by the failure of Azerbaijan and Turkey to come to terms over pricing of gas supplies.

Other Policy Issues

The Europeans, supported by the United States, may be able to take other steps to diversify their energy supplies. Oil and natural gas pipelines in Europe run in a mainly east-west direction. More north-south interconnections within Europe could help to buffer any shortfalls in a particular region, such as occurred during the gas crises of 2006 and 2009. Larger storage facilities could also be helpful in this regard. European leaders have endorsed European Commission proposals to enhance interconnections within Europe and increase storage. In 2010, the European Union agreed to allocate 1.39 billion Euro (\$1.9 billion) for projects to improve the interconnectivity of European natural gas pipelines. Included in the amount is 200 million Euro for Nabucco.

Liquefied natural gas (LNG) delivered to terminals throughout Europe may be an economical substitute for natural gas from Gazprom pipelines. Interconnections and LNG could help create an integrated gas market in Europe. This would make it easier for countries to diversify their supplies and find the best price, rather than have to rely on long-term “take or pay” contracts signed with Gazprom. These contracts require consumers to buy at least a minimum amount of gas, even if they do not need it. Moreover, although the price for the gas is determined by a formula that includes the market price for oil and other fuels, these contracts can result in prices that are higher than in the growing “spot” market for gas.

Already, LNG (largely from North Africa) makes up 15% of Europe’s gas imports, and is particularly important for some western European countries. For example, 65% of Spain’s gas imports are LNG.³⁷ Poland intends to build an LNG terminal on the Baltic Sea in order to diversify its supplies. It hopes to have the terminal in operation by 2014. The new terminal will be able to serve countries in central Europe and the Balkans as they pursue efforts to interconnect their pipelines. Another option for these countries is a planned LNG terminal on the Adriatic Sea in Croatia.

Advances in tapping “unconventional gas”(that is, gas from sources such as shale deposits or coalbeds that once had been viewed as too difficult technically or too expensive) could result in increased LNG production from a wider variety of suppliers, perhaps resulting in a further erosion of Russia’s leverage. The United States is a leading producer of unconventional gas. U.S. and European officials have stressed the need for countries of the region to improve energy conservation and develop alternative fuels, although they acknowledge that these efforts will take time.

In the long run, Russia’s statist, manipulative approach to energy policy may eventually be moderated by its own needs. Some observers believe that Russia will need Western investment and expertise to fully exploit new oil and natural gas fields in remote areas as current ones decline. This may provide an opening for the United States and other countries to persuade Russia

³⁷ See CRS Report RL33636, *The European Union’s Energy Security Challenges*, by Paul Belkin.

to liberalize its energy sector. On the other hand, the current statist system has provided Russia's leaders with immense personal wealth and power, and afforded them the satisfaction of overseeing Russia's renewed international strength. They may not want to change this system, even if it might be in Russia's long-term interest to do so.

In addition to diplomacy, the United States has other tools to deal with the energy dependency question. The United States has funded feasibility studies for some pipeline routes through the Trade and Development Administration (TDA). For example, in August 2007, the TDA provided \$1.7 million for feasibility studies on building both an oil and a gas pipeline across the Caspian Sea to link to the BTC pipeline and the South Caucasus gas pipeline.³⁸ The Export-Import Bank has also provided funds for pipeline projects. The United States and EU are working with Ukraine to develop an energy efficiency action plan for that country. The United States and EU have also urged Ukraine to improve its investment climate to encourage foreign investment in tapping Ukraine's own considerable natural gas and oil resources. The United States provides small amounts of aid to the countries of the region to help build their energy security.

Congressional Response

Members of Congress have expressed concern about the impact of Russian energy dependency on the countries of central and eastern Europe. Members have sharply criticized Russian policy and called on the European Union to work with the United States in helping these countries diversify their energy supplies. Senator Richard Lugar has called for a greater NATO role in energy security issues, including providing emergency energy assistance to member states facing a sudden energy cutoff.³⁹ Bush Administration officials said NATO could play a greater role in the security of pipelines and other energy infrastructure, but that broader energy issues are best dealt with in other venues.

In the 111th Congress, the Senate Foreign Relations Committee has held hearings on policy toward Russia in March 2009 and energy security in May 2009. In both hearings, Senator John Kerry, Chairman of the committee, Senator Lugar, and witnesses before the committee expressed concern about Russia's use of energy supplies for political purposes. In July 2009, the Senate Foreign Relations Committee held a hearing on energy security during which Senator Kerry and Senator Lugar hailed the signing of the intergovernmental agreement on Nabucco, at which Senator Lugar was present. Nabucco was also discussed at an August 2009 Senate Foreign Relations hearing on Georgia.

In February 2009, in a hearing of the House Foreign Affairs Committee on U.S.-Russian relations, Chairman Howard Berman and several witnesses criticized Russia's political use of energy in Europe. In hearings of the Europe Subcommittee of the House Foreign Affairs Committee in June and July 2009, Members expressed concerns about Russia's energy policy in Europe with Philip Gordon, Assistant Secretary of State for Europe and Eurasia, who repeated Administration calls for European energy diversification. In a March 2010 hearing on Trans-Atlantic security, Chairman Berman and several witnesses referred to energy security as an issue in the relations between Europe, the United States, and Russia.

³⁸ "Promoting Technology in the Oil and Gas Sector," TDA website, <http://www.ustda.gov>.

³⁹ "Remarks to the German Marshall Fund Conference," Congressional Record, December 7, 2006, S11483-S11485. For a discussion of NATO's role in Western energy security, see CRS Report RS22409, *NATO and Energy Security*, by Paul Gallis, updated regularly.

Congress has also passed resolutions that refer to concerns about Russian energy policy. S.Res. 530, in a list of criticisms of Russian policies on the eve of the St. Petersburg G-8 summit in July 2006, expressed disapproval of Russian energy policy toward Ukraine, Georgia, Moldova, and other countries. H.Res. 500, passed in July 2007, charged that Russia and other countries in creating a gas OPEC, and criticized Russia's use of its gas supplies as a political tool against Georgia, Ukraine, Belarus, and other countries. In July 2008, the Senate passed S.Res. 612, which called on the United States and other countries to build a constructive relationship with Moscow at the 2008 G-8 summit, but criticized some Russian policies. It said that "the conduct of Russian trade and energy policy has created a widespread perception that the Government of the Russian Federation is using oil and gas exports and economic policy as a means of political pressure on countries that seek closer ties with the United States and Euro-Atlantic partners."

In the 111th Congress, Representative Ros-Lehtinen introduced H.Con.Res. 61, which calls on Russia's G8 membership to be conditioned on its compliance with its international obligations and commitment to democratic standards. The resolution says that the Russian government has apparently used its energy resources as a political tool against neighboring states, harassed domestic and foreign energy companies to gain control over these industries; and tried to gain control over energy infrastructure in Europe in order to dominate European energy markets.

Figure I. Pipeline Map



Source: U.S. Department of Energy, Energy Information Administration.

Country Brief: Russia, April 2007, from the EIA website <http://www.eia.doe.gov>

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