

CHAPTER 1

THE POLITICAL AND ECONOMIC IMPORTANCE OF GAS IN RUSSIA

Tatiana Mitrova

The macroeconomic background

Although it seems to be a commonplace, oil and gas really are the main drivers of the Russian economy. Russia is a world leader in crude oil and natural gas production and exports. Between 2000 and 2010 exports rose dynamically: oil by 70 per cent; gas by 15 per cent. In the same period, annual production of oil rose by more than half and exceeded 500 million tonnes per year, while annual production of gas rose by 10 per cent. Revenues from oil and gas exports equated to more than a quarter of Russia's gross domestic product (GDP), and amounted to a third of the national budget.

During the last two decades, the Russian economy has become increasingly dependent on commodities exports (particularly hydrocarbons), despite numerous statements about the need to reduce dependence and the setting of targets. While, as mentioned above, the role of energy export revenues in the Russian economy keeps growing, the manufacturing sector's share keeps falling – reaching 4.8 per cent in 2010. Fuel exports as a proportion of total exports have risen from 43 per cent in 1996 to 64 per cent in 2010, and to 70 per cent in 2012 (Figure 1.1), while the share taken by manufactured goods in total exports fell from 26 per cent in 2005 to 14 per cent in 2012. At the same time the composition of imports changed: the share taken by manufactured products increased from 45 per cent to a peak of 79 per cent before the financial crisis, falling back to 69 per cent in 2010.¹

Ways in which Russia's dependence on global fuel prices can be reduced, while increasing the contribution of the domestic market and of high-value-added products (engineering, chemical, and other products) to economic growth, have been discussed since the early 2000s. But it cannot be said that these aims have been achieved. The structure of the Russian economy has not changed significantly since 2006; the effect of the announced 'modernization' is modest, if not invisible, and the share of

¹ Covi, G. 'A case study of an advanced Dutch disease: The Russian oil', IMEF Ca Foscari University of Venice, May 2013.

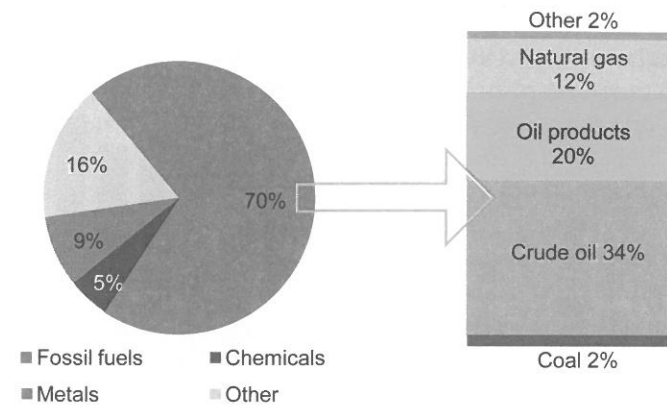


Figure 1.1: Structure of Russian exports by value, 2012

Source: Russian Federation Custom Statistical Yearbook 2012.

high-tech industry has not grown at all.² In fact, according to statistics compiled by Rosstat, the national statistics agency, the share taken by high-technology industries in Russia's GDP fell from 1.14 per cent in 2003 to 1.04 per cent in 2012. Such an insignificant level of high-tech activity is unable to make any impact on an economy entirely focused on raw materials.

Moreover, Russia's economy is demonstrating increasingly strong signs of the Dutch disease.³ In 1994, the share of the oil and gas sector's proceeds in the national budget was below 2 per cent, by 2012 it had reached about 50 per cent (Figure 1.2). This leap has been driven by the oil price hike since 2004. Indeed, Russia's GDP growth is largely explained by rising international prices of oil, gas, and other raw materials, rather than by the successful development of other industries. Against the background of stagnation in other industries, the oil and gas sector has become the main source of growth both for GDP and for budget revenues (see Table 1.1), and this trend shows no sign of slowing⁴ – although the share taken by the oil and gas sector in Russia's GDP (18.6 per cent in 2012) is still quite low compared to services (51 per cent in 2012).

² van der Marel E. 'Beyond Dutch Disease: When Deteriorating Rule of Law affects Russian Trade in High-Tech Goods and Services with Advanced Economies', London School of Economics, July 2012, pp. 1–26.

³ Dülger F, Lopcu K., Burgaç A., and Balli, E. 'Is Natural Resource-Rich Russia Suffering from the Dutch Disease?', International Conference on Eurasian Economies 2012, pp. 54–9; Covi G. 'A case study of an advanced Dutch disease', pp. 1–27.

⁴ Novak A. 'Priorityty gosudarstvennoi politiki v rossiiskoi neftegazovoi otrasli', Natsional'nyi Neftegazovyi Kongress. 19 March 2013.

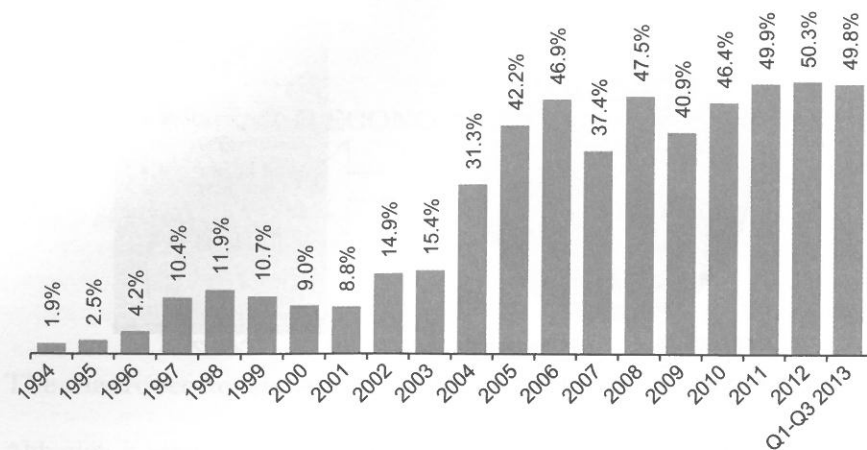


Figure 1.2: The share of oil and gas in Federal budget revenues
Source: www.roskazna.ru/reports/fb.html, Ministry of Finance.

Table 1.1: Oil and gas in Russian GDP, budget revenues, and total exports in 2011–12

	<i>Oil</i>	<i>Gas</i>
GDP	15.4	3.2
Budget revenue	36%	5%
Export	34%	12%

Sources: Russian Federation Ministry of Finance, Customs Service, The World Bank Database <http://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>.

The significance of oil and gas sector revenues for the entire Russian economy can hardly be overestimated. Oil and gas sector activity has a tremendous multiplicative effect, as it creates a hefty domestic demand for other industries' products and ensures provision of the infrastructure development required for economic growth. Proceeds from hydrocarbon exports have an impact on the financial resources of manufacturers and service providers and, therefore, on business activity in the country and, thereby, on its economic development prospects.⁵

These revenues play an even more crucial role in meeting such budget expenditures as allocations for military and social purposes, and hence in

⁵ Vliianie vneshnikh tsen na otsenku perspektiv razvitiia ekonomiki Rossii, *Voprosy Ekonomiki*, 2012, No.4, pp. 84–96.

the maintenance of the country's social stability and integrity. The government is now trying to implement the president's electoral assurances, which require greater budget expenditures, and its main hopes are placed on the oil and gas sector. Thus a direct significance for national security is attributed to all events in this key economic sector. Special emphasis is hence laid on the oil and gas industry by government and the country's top authorities, together with the desire to exert maximum control over it.

However, in recent years we have arrived at an impasse. On one hand, external challenges to the oil and gas sector's further sustainable development are increasing: there is a growing likelihood of a fall in world prices and in the volumes of Russia's hydrocarbon exports. On the other hand, the national economy itself is gradually sliding into a recession, and the authorities have no tools to stop this, other than their traditional recourse to oil and gas.⁶

In this context the situation in international markets gains critical significance. A comparison may be made with the Soviet Union in the mid-1980s, when changes in the international oil markets led to a collapse in the USSR's export revenues – which became one of the reasons for the country's demise. Now, changes in the international oil and gas markets and, in particular, uncertainties associated with the rapid development of shale oil and gas production, are creating new risks for the sustainability of Russia's economy.

First and foremost, there is a threat of a potential decrease, or even just of a stabilization, in oil prices. The price of Urals oil is the most influential factor for Russia's economy, not only because oil exports account for more than a third of federal budget revenues (more than 36 per cent in 2012) but also because gas prices in Europe are related to the oil price. Each 10 per cent rise in world oil prices can increase Russia's GDP growth rate by 0.75 percentage points. The role of gas is less significant, though not insubstantial. In 2012 it accounted for slightly over 5 per cent of federal budget revenues. Each 10 per cent rise in the European price of Russian gas can increase Russia's GDP growth rate by 0.21 per cent.⁷ However, as of late 2013 oil prices have actually stabilized, and some researchers even predict that they will fall. And given their high level, they are no longer supporting economic growth in Russia. The break-even oil price, necessary to balance the Russian budget, is really high: in 2013 the official target was \$97/bbl.⁸

⁶ Gurvich E. 'Dolgosrochnie perspektivi Rossiiskoi ekonomiki', *Ekonomicheskaiia politika*, No.3, 2013, pp. 7–32.

⁷ Malakhov V.A. 'Otsenka zavisimosti VVP i sprosa na energonositeli ot udorozhaniia topliva i energii na vnutrennem i vneshnem rynke', [Assessment of dependence of the GDP and demand for energy resources on the growth of fuel and energy prices in internal and international markets], *TEK Rossii*, No. 1, 2012, pp. 16–24.

⁸ 'Nefi' i gaz prinesut v biudzhnet Rossii v 2013 godu bol'she zaplanirovannogo', 17 September 2013. <http://lenta.ru/news/2013/09/17/dohod/>.

If world oil prices fall, economic resilience and prospects of maintaining social stability will be questioned. This scenario is a direct threat to the Russian authorities.

Another threat is a potential reduction in hydrocarbons export volumes. Favourable transformations in the world energy sector, and particularly in hydrocarbons markets – such as the growth of production from shale – represent a major risk for Russia, and the Russian energy sector has not previously been faced with such difficult conditions. The gravity of the risk is manifested in the stagnation in oil and gas production and exports: thus gas exports in 2013 are at the level of 2000. Recent studies⁹ show that owing to the lack of development of an institutional framework, an outdated tax system, low competition, and low investment efficiency Russia will be the most sensitive of all the largest energy producers to fluctuations in global hydrocarbon markets.

The serious risks facing Russia, which have arisen from the transformation of global energy markets, include declining oil and gas exports and export revenues, relative to planned official indicators; this may lead to slower-than-expected GDP growth and to deterioration of the main parameters of the Russian energy sector. Falling revenues from exports of gas and, especially, oil could considerably reduce the contribution they make to GDP.¹⁰ The powerful multiplicative effects typical of these sectors, together with lower inflows of foreign capital, could magnify the impact of decreasing export revenues and slow down economic development. A preliminary assessment of the effect of these factors on economic growth indicates a slowdown of one percentage point each year, due to decreased energy exports.¹¹

As far as export volumes are concerned, at least with regard to oil exports, in addition to external factors there are also *very serious internal limitations*. As early as in 2006, OECD researchers warned that hydrocarbons production stagnation was highly probable, citing as the main reasons governmental regulation of the sector (which has become more pronounced in subsequent years); an unfriendly tax regime; restrictions on foreign investment; and a generally unfavourable business environment.¹²

The Russian oil and gas sector is now approaching the exhaustion of capacities created in Soviet times. The greater part of Russian production is

⁹ Makarov, A., Grigoriev, L., and Mitrova, T. (eds.), 'Global and Russian Energy Outlook up to 2040', ERI RAS – ACRE, 2013, p.110.

¹⁰ Gurvich, E. and Prilipskii, I. 'Kak obespechit vnesniiu ustoichivost' rossiiskoi ekonomiki', *Voprosi Ekonomiki*, No. 9, 2013, pp. 4–39.

¹¹ Makarov A., Mitrova T., and Malakhov V., 'Prognoz mirovoi energetiki i sledstviia dlia Rossii', op. cit., pp. 34–51.

¹² Ahrend R. and Tompson, W., 'Realising the Oil Supply Potential of the CIS: The Impact of Institutions and Policies', OECD Working Paper. No ECO/WKP (2006)12.

based on discoveries made in the Soviet era: 90 per cent of oil output, and an even higher proportion of gas output, is from fields discovered before 1998. In order to sustain production, Russia needs to develop new provinces, such as Eastern Siberia and the Arctic offshore; to develop its vast unconventional reserves; and to apply more efficient production techniques to existing fields. But such development is not competitive under the current tax regime.

For example, Russia has huge potential for Enhanced Oil Recovery (EOR). According to Lukoil,¹³ the use of best practices would provide an additional 4 billion tonnes of oil reserves without the need to build new infrastructure, but this would require the use of technologies that are not economically justified under the current tax regime. The Mineral Extraction Tax (MET) and export tax require much lower break-even costs than those currently applying to all significant sources of new supply (\$30–40/bbl, compared to the costs of new sources of around \$70–220/bbl). This destroys incentives to increase oil production. At the same time, the government is not prepared to replace the existing system with profit-based taxation, claiming that it is much more difficult to administer and that a transitional period from the existing system to a new one could be dangerous for the country. Therefore all exemptions and adjustments are made on a case-by-case basis, giving some temporary relief, but not solving the problem. If the government prefers short-term revenues to longer-term sustainability, and does not make the appropriate changes to the taxation regime, there is a danger of a rapid oil production decline by the end of this decade, with a corresponding slowdown of GDP and decline of its budget incomes.

Of no less significance are *domestic macroeconomic challenges*. A period of rapid economic recovery, from 2000 to 2008, ended with the onset of the global economic crisis in 2008. Since then, the Russian authorities have been struggling with an increasingly evident economic slowdown (Figure 1.3). In 2013 Russian economic performance turned out to be much weaker than expected, despite high hydrocarbon prices. The annual growth rate slowed to 1.4 per cent in the first half of 2013, compared to 4.5 per cent in the first half of 2012, due to a slowdown in consumption, stalled investment demand, and a continuing weak external environment.¹⁴ The economics ministry downgraded its 2013 GDP growth estimate from 3.6 per cent to 2.4 per cent in its baseline, or 'moderately optimistic', scenario. This scenario assumes 'active government policy aimed at improving the investment climate, competitiveness and economic efficiency', which seems now, as of

¹³ 'Global Trends in Oil and Gas Markets to 2025', Moscow: Lukoil, 2013, p. 49, www.lukoil.com/materials/doc/documents/Global_trends_to_2025.pdf.

¹⁴ Russia Economic Report. 'Structural Challenges To Growth Become Binding', The World Bank, No. 30, September 2013.

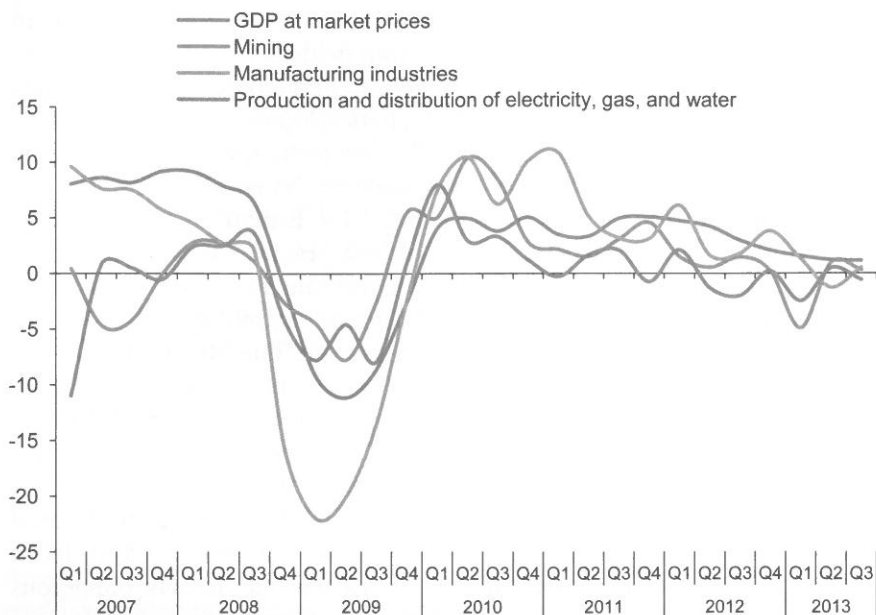


Figure 1.3: Russia: growth in GDP and industrial value added (as a proportion of the corresponding quarter of the previous year)
Source: Rosstat.

late 2013, rather questionable. The ministry’s estimate of growth in its ‘conservative’ scenario – in fact, a ‘muddling through’ scenario – is just 1.7 per cent.¹⁵ The Russian government is strongly concerned by such visible decline.

Russian industry is obviously entering recession. Industrial production is in decline: this is already visible in the statistics. Starting from 2013, there have been signs of stagnation in industrial output – to zero in the first quarter of 2013 (Figure 1.4). The growth of capital investment in industrial assets fell from 14–16 per cent in 2012 to below zero in summer 2013. Producers started to close plants – which could mean increasing unemployment and social tensions – saying that the current situation is even worse than that in 2008. Furthermore, the lack of significant institutional reforms aimed at solving key problems – ranging from reducing the numerous pressures on businesses from the authorities and barriers to business, to reducing the scope of involvement of governmental and quasi-governmental companies, and developing competition – gives no grounds to hope for a fast self-sustained recovery.

¹⁵ Minekonomrazvitiia snizilo prognoz po rostu VVP na 2013 god do 1,8%. 26 August 2013, www.rbc.ru/rbcfreeneews/20130826160715.shtml; Kuvshinnikova O. Rossiia gotovitsia k desiati toshchim godam, 7 November 2013. www.vedomosti.ru/finance/news/18435801/rossiya-gotovitsya-k-desyati-toshchim-godam?full#cut.

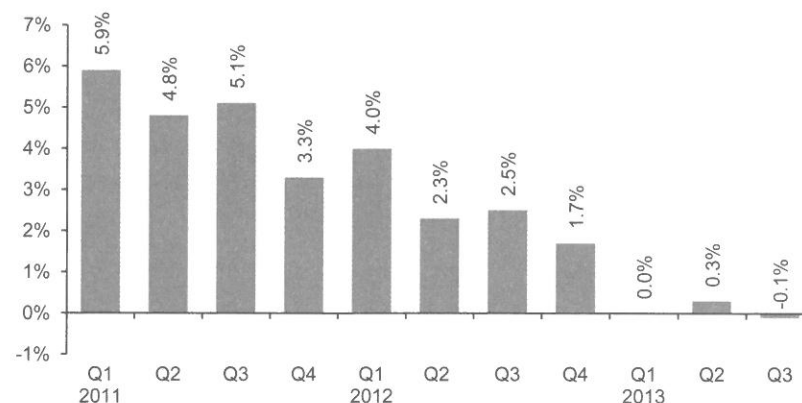


Figure 1.4: Russia: industrial production growth (compared to the same quarter of the previous year)
Source: Rosstat.

Weakness in domestic demand is reflected in subdued investments. The value of fixed-capital investments rose by just 0.1 per cent in the first quarter of 2013, compared to 15.5 per cent growth in the same period of 2012. Russian business confidence also looks weak as research by the World Bank, among others, has shown.¹⁶

Moreover, Russia continues to be far from the most attractive market for foreign investment (Figure 1.5). Survey data suggests that Russia is still perceived as being prone to serious problems relating to corruption and bureaucratic interference, which contribute to the costs and risks of doing business (see Table 1.2). Doubts persist about the respect for contracts and private sector property rights – factors which discourage investment.

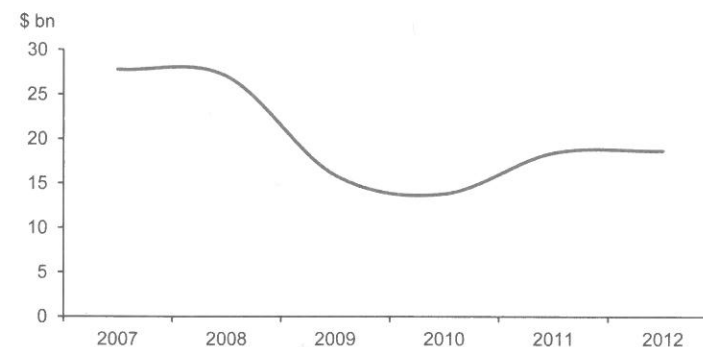


Figure 1.5: Direct foreign investment in Russia, \$ billion/year
Source: Rosstat.

¹⁶ Russia Economic Report.

Table 1.2: Russia in international rankings

Date, index	Organization	Russia's ranking	Total countries rated	Details
2013 Index of Economic Freedom	Heritage Foundation	139	161	Russia is in the Mostly Unfree group. The Repressed group starts from the 145th ranking.
2013 Ranking of Countries for Mining Investment: 'Where Not to Invest'	Behre Dolbear	25	25	
2012 Corruption Perception Index	Transparency International	133	174	Russia shares its rating position with Iran, among others.
2013 Doing Business Report (overall rank)	World Bank	112	185	In 2012 President Putin instructed the government to take measures to raise Russia's ranking to the 50th position in 2015 and to the 20th position in 2018. However the 'Doing Business' rating may be biased and dependent on insignificant factors. In this connection a group of independent experts set up by the World Bank, including Sergei Guriev, former head of the New Economics School, recommended discontinuing it. Russia took the 60th position in 2007. Since then it has been declining.
2013 Doing Business Report: Protecting Investors	World Bank	117	185	
Report, 28 June 2013	Standard & Poors	BBB (Lower medium grade)	-	The BBB rating has been confirmed since December 2008. Russia seeks to boost its credit rating by no less than two steps to A- by 2016 and another level to A by 2020, according to a government plan approved in March.
Report, 11 June 2013	Fitch	BBB (Lower medium grade)	-	The BBB rating has been confirmed since February 2009.
Report, 27 March 2013	Moody's	Baa1 (equivalent to BBB+)	-	The BBB rating has been confirmed since July 2008.

Sources: Heritage Foundation, Behre Dolbear, Transparency International Index, World Bank, Standard & Poors, Fitch, Moody's.

The role of gas in the Russian economy

The role of gas in Russia's economy differs significantly from that of oil. Oil accounts for the largest share of budget revenues – 36 per cent in 2012 – because of high export duties and a high tax on production. Gas's share is far less important – only 5 per cent – as both export duties and production tax are considerably lower than those on oil (see Figure 1.6).

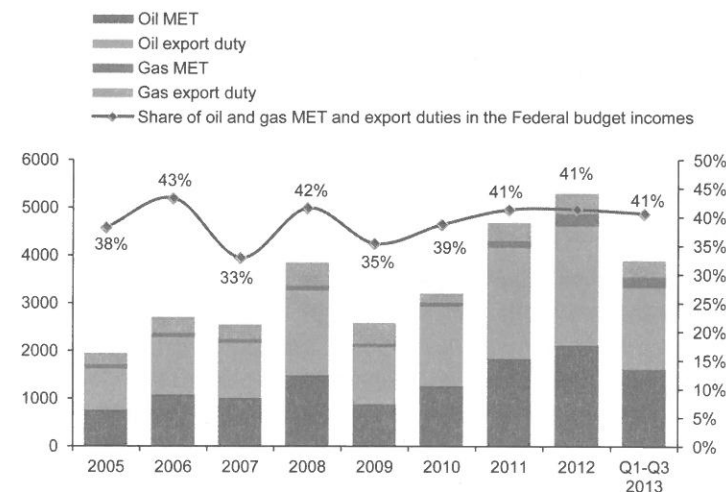


Figure 1.6: The share of oil and gas MET and export duties in Federal budget income

Source: www.roskazna.ru/federalnogo-byudzheta-rf/yi/.

On the other hand, gas is distinguished from oil by its growth potential. Oil exports are predicted to fall (this is seen even in official documents, for example, the *Economic Strategy of the Russian Federation for the Period up to 2030* and the *Master Plan for the Oil Industry for the Period up to 2030*) due to the stabilization (at best) or even decline of production, against a background of growing domestic demand for refined products. But the gas industry faces no such limitations. If the international market situation is favourable and gas exports are competitive, Russia is potentially capable of increasing gas production by almost 70 per cent (see the *Master Plan for Development of the Gas Industry for the Period to 2030*). This creates substantial expectations for the gas industry, which it may not be able to live up to.

There are, however, more fundamental reasons for the fact that gas – despite its notably smaller contribution to the national budget – is so important for Russia's economy. These are: its predominant place in Russia's own energy sector, its role as a domestic political tool, and its use as an instrument of foreign policy.

The role of gas in the energy balance

To start with, *gas is the basis of Russia's energy sector*: it accounts for more than 54 per cent of primary energy consumption. This is one of the highest figures in the world, even among the main gas producing countries (see Figure 1.7).

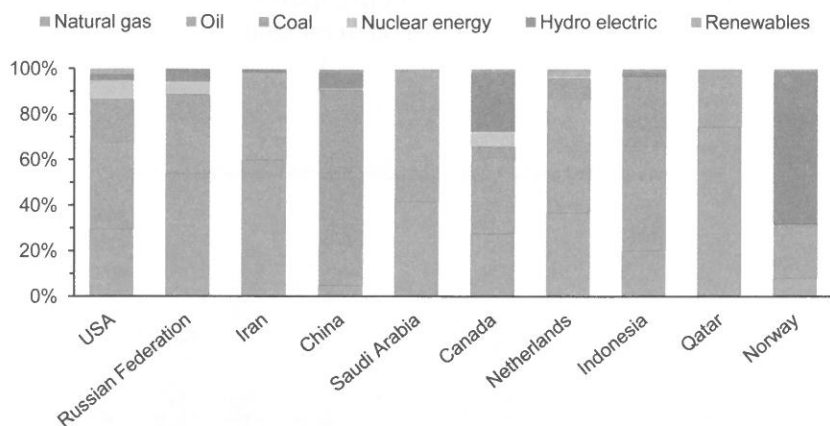


Figure 1.7: Structure of the primary energy mix of leading gas-producing countries
Source: BP Statistical Review of World Energy 2013, London: BP.

Gas is the main fuel for electric power generation in Russia. Gas-fired plants account for 44 per cent of installed capacity in electricity generation (Figure 1.8) and provide for 70 per cent of the output from thermal plants.

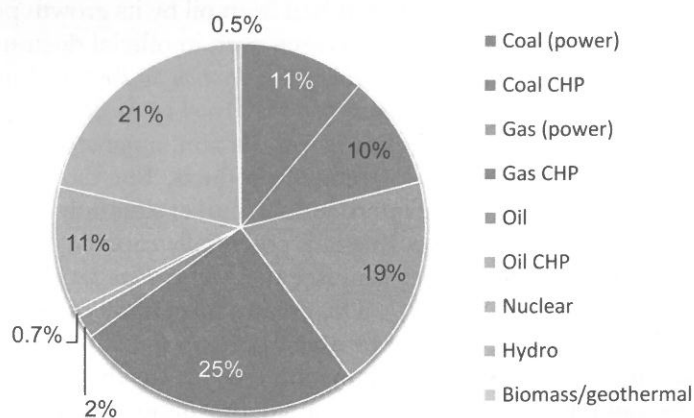


Figure 1.8: Installed electricity and CHP capacity in Russia
Source: IEA World Energy Outlook 2011.

During the last two decades the share of gas in Russia's primary energy consumption has increased continuously, from 43 per cent in 1991 to 54 per cent in 2009. Russia's domestic gas consumption, measured by volume, rebounded almost to the levels of the early 1990s, while domestic oil and coal demand remain at just over half of those levels. This gas demand growth was encouraged by domestic pricing policies that kept gas prices low, in large part to manage the social and industrial impact of the post-Soviet recession, while those for coal and oil were liberalized. As a result, gas squeezed coal out of thermal power plants. Gas has the advantage of being the fuel which is in place across large parts of European Russia, where most Russian industrial and residential demand is concentrated. Where price differences are marginal, gas remains the preferred fuel for new equipment in industry and power generation because of its flexibility and environmental performance.

In order to limit the rise in gas consumption, promote inter-fuel competition (first of all with coal), and support the necessary supply-side investments in new gas production, from 2000 the government started to develop gas price growth policies. But even substantial gas price increases in 2007–13 could not limit the increasing role of gas in the energy balance. The main coal producing assets are located in Eastern Siberia, and transporting coal pushes up the delivered cost substantially. In fact coal prices were almost increasing in line with gas prices (Figure 1.9). With incremental transportation costs by rail of at least \$30/tonne, the price of steam coal to industry or power plants in the heart of European Russia rises to \$80–90/tonne.

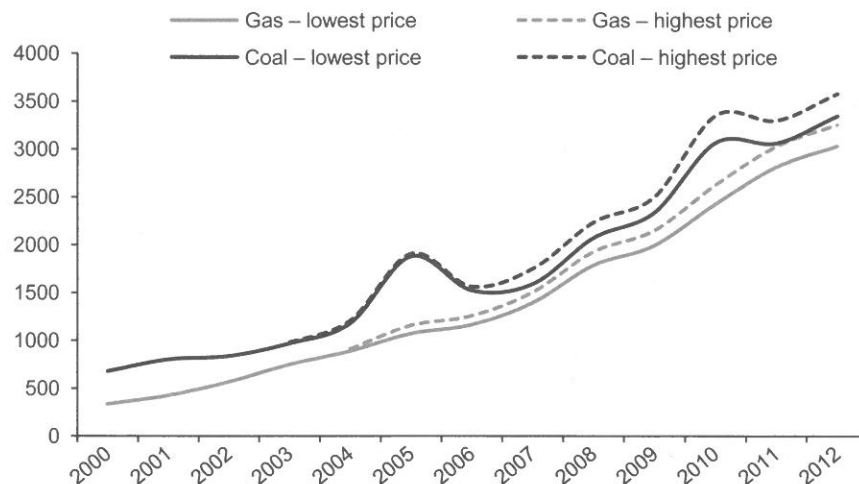


Figure 1.9: Gas and coal prices in Moscow region, rubles/tonne of coal equivalent
Source: Rosstat, ERI RAS.

At these price levels, the benefits of choosing coal over natural gas are not evident, particularly in the power sector, where coal-fired power generation achieves a lower conversion efficiency than natural gas. According to estimates by the International Energy Agency (IEA): at a price of \$85/tonne for steam coal in European Russia, gas prices would have to rise to \$7.5/MmBtu before coal-fired power would be competitive.¹⁷ (See also Chapter 6 on the sources of gas demand in Russia.)

As a result of this price imbalance, gas plays an excessively large role in energy supplies in central and southern Russia. Gas's share of boiler and furnace fuel consumption exceeds 95 per cent in some regions (Belgorod, Briansk and Orel, Mordovia, Penza, and almost all of the North Caucasus Federal District). In order to reach domestic consumers, gas is supplied through three major corridors and is transported 2000 km (on average) to consumers. This is the main reason why the government is so concerned about high dependence on this fuel and why, for more than a decade, it sought to reduce gas's share in the primary energy mix.

Reducing the role of gas in the domestic economy is a major strategic issue, highlighted in the government's *Energy Strategy to 2030*, which states that promoting a 'rational energy balance' means achieving a:

... reduction in the share of gas in the structure of domestic energy consumption and [an] increase in the share of non-fuel energy in the structure of the fuel and energy balance.¹⁸

The target set in 2009, and published in the *Energy Strategy*, is to reduce the share of gas in the fuel mix from 54 per cent to between 46 per cent and 47 per cent in 2030. It is supposed to be achieved in three stages:

First stage (2011–15):

- Development and introduction of the economic mechanism of effective inter-fuel competition for replaceable energy carriers (gas/coal); bringing the ratio of gas to coal prices in the domestic market to 1.8–2.2.
- Reduction in the share of gas in the fuel and energy balance to 51–52 per cent.
- State support for thermal coal-fired power generation development (tax stimulus, preferential lending, and other regulatory support); state support and direct funding for nuclear power generation development.

¹⁷ World Energy Outlook 2011, IEA, Paris, 2011.

¹⁸ 'Energy Strategy of Russia for the Period Up to 2030', Ministry of Energy of the Russian Federation, Moscow, 2010, p. 158.

- Renewable energy development: creation of an institutional base, tax stimulus, and introduction of guaranteed access to electric grids for the power plants operating on renewable energy.
- An increase in non-fuel energy's share of the energy balance to 11–12 per cent.

Second stage (2015–20):

- Effective inter-fuel competition based on advanced monitoring of gas and coal prices, and reduction of gas's share of the energy balance to 48–49 per cent.
- State support for nuclear and coal-fired power generation development.

Third stage (by 2030):

- Development of renewable and non-hydrocarbon energy based on the introduction of advanced technologies and use of public–private partnership mechanisms.
- Bringing the ratio of gas to coal prices in the domestic market to 2.5:2.8.
- Reduction in the share of gas in the energy balance to 46–47 per cent, and an increase in the share of non-fuel energy to 13–14 per cent.¹⁹

This plan demonstrates quite clearly that gas is the key factor in Russian energy sector development.

Gas as a domestic political tool

In addition to its vital role in energy supply and in ensuring energy security, gas has an important social function – not just in economically and socially disadvantaged regions, but in the country as a whole. In fact, *Russian gas is an important domestic political tool*, used in a number of ways:

- *Keeping energy costs as a share of household budgets low, by cross subsidization at the expense of industrial consumers.* Since the Soviet period, guaranteed power and water supplies have been seen as an inalienable and basic right for all citizens. More than 20 years of development of the market economy have not been able to break down this perception among the population and it is a major potential cause of social unrest. In order to avoid such unrest, both the federal and local Russian authorities prefer to subsidize domestic consumers at the expense of large-scale industry – whose gas price is several times higher than that facing the country's household consumers. While increasing gas prices for industrial

¹⁹ World Energy Outlook 2011, p. 265.

consumers have, in the last decade, raised gas's share of their costs above that of their foreign competitors, the situation with the Russian population is quite different: the share of household spending on gas, as a proportion of total spending, is still lower than that of their foreign counterparts, and in recent years has stabilized (Figure 1.10).

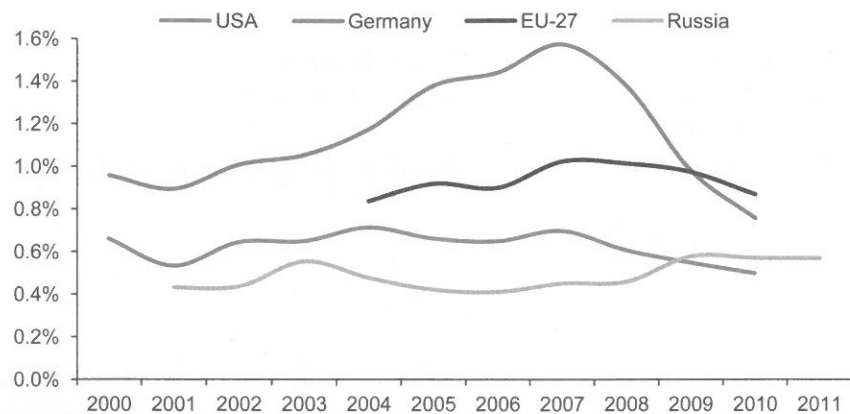


Figure 1.10: The share of gas purchases in household spending
Sources: IEA, Rosstat, Eurostat, EIA US DOE, US BEA.

- *Acting as a social stabilizer and providing improved living standards in remote areas, by means of regional gasification.* From the standpoint of economic efficiency, these projects look very doubtful: laying pipes to remote villages is often considerably more expensive than the delivery of liquefied petroleum gas (LPG) or the development of forms of decentralized energy supply. However, the key argument is that 'the central government takes care of rural residents', and low-cost, easy-to-use gas is the main element of this 'care'. Interestingly, while that entire workload has previously been carried exclusively by Gazprom, with the involvement of other companies (Novatek, Rosneft) in regional gas trading, the responsibility for gasification has increasingly shifted towards them (although there has been no legal consummation of this deal between the companies and the government).
- *Subsidization of individual depressed regions.* Gas tariffs are set in such a way that consumers in regions near production sites pay a significantly higher specific tariff for transportation than those in remote regions – for example, the unstable republics of North Caucasus or the strategic Kaliningrad exclave. Considering the high level of non-payments in the Caucasian republics, it is hard to view supply to these regions as anything other than a form of 'loyalty payment' from the centre.

- *Gas's new role in the Russian fiscal system as, apparently, the only realistic source of additional incomes for the state.* Oil taxes cannot be increased without undermining production volumes (which would not be in the state's interest), while other branches of industry are in decline and can hardly provide additional support for the budget. However, election promises have to be fulfilled and budget spending tends to grow, so gas is becoming the 'cash source of last resort'. There has already been a long and painful discussion on MET growth, in which the gas industry is regarded as a 'milch cow' – even though the government realizes that the industry would have difficulty in being able to provide the hoped-for income from new, extremely expensive projects; these, therefore, apply for tax breaks and 'special exemptions'.
- *Gazprom's use as a government 'treasury'.* It is quite common for Gazprom (and perhaps Novatek and Rosneft in the future) to finance 'projects of state importance'. The most recent examples are the construction of Sochi Olympics facilities funded and supervised by Gazprom, and the extremely expensive Sakhalin–Khabarovsk–Vladivostok gas pipeline built by Gazprom in preparation for the Asia–Pacific Economic Cooperation Summit in Vladivostok in September 2012 – to say nothing of alleged financial support for election campaigns.
- *The gas industry's generation of a strong multiplicative effect for producing regions.* This effect makes some projects, which are questionable from an economic point of view, very attractive for local governors. Shtokman is a well known example: local government continues to advocate project development – due to the prospect of gas supply to Murmansk region, which could underpin gas-fired power generation and heat supply development – even though the markets are extremely unfavourable for it. Another example is the vigorous promotion of the Yamal LNG project, due to the synergy expected for shipbuilding yards and Northern Sea Route development. Similar interest in developing gas projects was shown by the governments of Yakutia, Sakhalin, and other regions.
- *The gas industry's influence on other industrial sectors is very strong.* The gas sector is traditionally a prime source of demand for steel works and pipe manufacturers. Recently, cooperation with car manufacturers has been developing actively, aimed at the promotion of natural gas vehicles.
- *Relations between the gas industry and the environmental agenda, which are nearly absent in Russia.* There is no doubt that greater gas use would be the most realistic and affordable option for Russia to reduce carbon dioxide emissions, if the country joined the post-Kyoto process. However, Russia

does not participate in the second commitment period of the Kyoto Protocol, and the development of a post-Kyoto agreement remains at an initial stage. Thus, the prospects of 'green' energy development in Russia remain unclear.

- And last but not least – *the use of gas to subsidize vested interests of loyal groups close to the country's leadership*. While historically this was a single group, associated with the Gazprom management and subcontracting companies, in recent years it has been joined by the group of Gennadii Timchenko (Novatek) and the Rotenberg brothers, whose companies receive contracts to build the largest pipelines.²⁰

This extensive list of the gas industry's domestic functions provides a good explanation of the particular attention that the Russian political leadership pays to it. But in addition, gas is the most important (already almost the only) and effective instrument of foreign policy.

Gas as an instrument of Russian foreign policy

Gas is one of the main tools of Russia's integration into global trade, and especially of Russia's economic relationship with the EU. Gas provides 12 per cent of all Russian export revenues (see Figure 1.1). The development of various joint ventures and direct investments, and of major foreign projects, helps to implant Russian business more deeply into global economic relations, gradually making Russia a fully-fledged participant in the global economic system. In fact, gas is one sector of the global economy in which Russia possesses vast expertise and competitive advantages.

These economic considerations and the available assets shape geopolitical consequences in many ways. Gas supplies, or implementation of gas projects, serve as a tool to preserve Russia's geopolitical impact in certain regions (for example, the CIS, Eastern Europe, and the Balkans). In the post-Soviet area gas is perhaps the main instrument of integration, allowing Russia to exercise its influence over CIS countries (albeit by means of cost-ineffective measures such as expensive gas imports from Central Asia and Azerbaijan or gas supplies to Belarus at reduced prices). Another

²⁰ 'Koroli goszakaza: kto osvoit \$20 mlrd', 19 March 2013, *Forbes*, <http://m.forbes.ru/article.php?id=235724>; Zagorodskii, A. 'Neudivitel'no, chto pobezhdaui imenno te, kto naibolee blizok k sisteme raspredeleniia', *Kommersant*, 2 March 2012, www.kommersant.ru/doc/1884562; Serov, M., Mordiusenko, O., Solodovnikova, A. 'Gennadii Timchenko saditsia na trubu', *Kommersant*, 21 August 2013, www.kommersant.ru/doc/2260037; Gennadiy Timchenko, 'U menya net planov v Rossii', *Kommersant*, 16 April 2013. www.kommersant.ru/doc/2172126; Melnikov K. and Mordiusenko O. 'U nas tolko odin biznes-plan – byt' gotovym v luboi situatsii', *Kommersant*, 18 September 2012, www.kommersant.ru/doc/2024432.

striking example is that of the negotiations on the construction of the South Stream pipeline. For each country whose territory it will traverse there will be new investments, employment, and additional tax revenues, not to mention the transit payments. During an economic downturn, these arrangements look very attractive, and allow Russia gradually to incorporate the Balkans into its sphere of economic (and geopolitical) influence.

It is possible to consider Russia's desire to diversify its supply routes from this perspective. The goal of reducing dependence on the European market, and increasing gas sales to Asian customers, announced in the early 2000s, has become increasingly prominent in recent years (though not currently embodied in specific agreements). This is partly in line with economically justified aims of monetizing gas reserves in Eastern Siberia and the Far East, expanding economic ties and enhancing integration with the Asia-Pacific region, and partly with a view to expanding relations, and maybe even building strategic alliances, with Asian countries (mainly China) in opposition to the USA and Europe.

These uses of gas by the Russian government – particularly, for example, in the Ukrainian transit crises or in inflated prices for the Baltic States – often lead to it being described as a geopolitical 'weapon'. Rather than 'weapon' (a means of destruction or punishment) a more appropriate term would be that gas is an instrument of pressure, of attempts to keep other countries in the Russian sphere of influence. Gas was, and still is, the most important element in negotiations not only with Ukraine and Belarus, but with practically all countries bordering Russia. Moreover, Russia usually links gas agreements with other aspects of cooperation (membership in regional integration organizations promoted by Russia, the Customs Union, the Black Sea Fleet, arms supplies, etc.)

Sometimes Russia proposes purely geopolitical projects that, while lacking any economic sense, showcase its ambitions and capabilities, primarily to the USA (for example, the supply of gas via a pipeline across North Korea to South Korea, or participation in construction of a Turkmenistan–Afghanistan–Pakistan–India pipeline). In practice, however, these initiatives are limited to declarations, without reaching the stage of practical preparation and investment. However, it is important for the Russian government to possess such an instrument for international negotiations and for strengthening its authority.

Institutions and corporate entities in the gas sector

State regulation

Given the importance of the Russian energy sector to the economy, most key decisions about energy policy and regulation are taken at the highest

levels of government. This is particularly true for the oil and gas sector: control over oil and gas revenues is of colossal importance for the authorities. Moreover, analyses of the decision-making process in the gas industry in particular show that key decisions are usually made directly by President Putin, who regards this sphere as strategically critical and follows its operation in detail. Below this level, multiple ministries and other executive offices work on the development of energy sector policy proposals and aspects of policy making. The energy sector's regulatory functions are distributed among the following authorities:

- The *Energy Ministry*, which has primary responsibility for the energy sector. It develops investment programmes, authorizes energy projects, and takes the lead on day-to-day regulation and supervision of the energy sector, while also overseeing energy policy and having responsibility for developing strategy for the whole energy sector and for particular energy industries, including gas. From September 2012 the Ministry approves all export contracts signed by Gazprom (including any contract renegotiations).
- The *Ministry of Economic Development*, which has influence over the regulation of tariffs and energy sector reforms and deals with general energy regulation issues in the framework of economic planning and development. It also coordinates energy and energy efficiency policies with the overall economic development priorities.
- The *Federal Tariff Service (FTS)*, is a federal executive body responsible for tariff regulation that reports directly to the government. The FTS regulates tariffs of natural monopolies, in particular in the electricity, oil, and gas sectors. It sets transportation, transmission, and other regulated tariffs, including wholesale tariffs for natural gas destined for industrial and power sector use, and tariffs to residential and municipal customers. The FTS was established in its current form in 2004, replacing the former Federal Energy Commission.
- The *Federal Anti-Monopoly Service (FAS)* is a federal-level executive governmental body, responsible for competition policy, which controls the execution of competition laws and related laws.²¹
- The *Ministry of Natural Resources*, which issues field licences, regulates upstream activities, monitors compliance with licence agreements, and levies fines for violations of environmental regulations.

²¹ The FAS was established by the Decree of the President of Russia No. 314 on 9 March 2004; 'Russia Country Profile', EBRD. 2008, www.ebrd.com/downloads/legal/irc/countries/russia.pdf.

- The *Finance Ministry*, which is responsible for tax policy for the energy sector, and oversees fiscal policy, a critical component of the investment climate.
- There are two additional competing bodies which deal with the implementation of state policy in the energy sector: the *Presidential Commission on the strategy of the fuel and energy complex development and environmental security*, founded in June 2012, is chaired by the President, with Igor Sechin as an executive secretary; and the *Governmental Commission of the Russian Federation on the fuel and energy complex*, established under the auspices of the Prime Minister in February 2013, which deals with operational issues and problems in the energy sector.

Energy policy framework

The *Energy Strategy to 2030* is the main document that provides a detailed overarching framework of long-term policy priorities for the energy sector. In addition to the promotion of a 'rational energy balance', discussed above, the main targets of the gas sector with regard to exports are:

- to maintain its position in Europe while diversifying energy supplies and reducing dependence on European customers and to diversify export markets, primarily to the Asian market. The target is to increase the 'Asian markets' share to 26–27 per cent of total energy exports (and up to 20 per cent of gas exports) by 2030; and
- diversification of the product structure of exports (with the share of LNG in gas exports reaching 15 per cent by 2030).

The *Energy Strategy* is supplemented and, in some cases, modified by so-called *General Schemes (Master Plans)* for the oil, gas, and coal sectors, and a similar document for the power sector, adopted in 2008 and then amended in 2010. There are also several specific *Conceptions* and *Programmes*, such as the Eastern Gas Programme (see Figure 1.11).

Other strategic documents correspond to the *Energy Strategy*; their priorities are efficiency, security, and reliability. For example, Russia's pledge to the Copenhagen Accord is a 15–25 per cent reduction in emissions by 2020 compared to a 1990 baseline. Another aim, to reduce Russia's energy intensity by 40 per cent by 2020 compared to 2007, is much more ambitious. This target was announced by (the then President) Dmitrii Medvedev in 2008 and its achievement would have substantial implications for energy use. Another target adopted by the Russian authorities for 2020 is to increase the share of renewable energy resources in the electricity mix to 4.5 per cent. Many of the environmental policies come from the *Climate Doctrine Action Plan* adopted by the

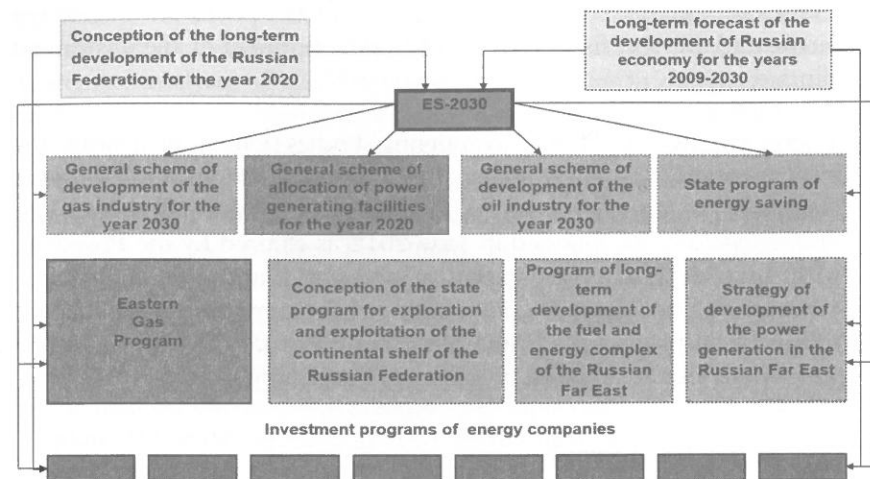


Figure 1.11: Framework of strategic documents in the Russian energy sector

Source: Institute of the Energy Strategy.

Government of Russia in April 2011. This plan sets out a range of measures for different sectors of the Russian economy and includes economic instruments for limiting greenhouse gas emissions in industry and power generation.

Access to subsoil

The legal framework with respect to the use of subsoil resources in Russia is established by the Federal Law 'On Subsoil Resources' of 21 February 1992. According to the Subsoil Law, geological surveys and exploration and extraction of minerals (including oil and gas) can be performed under a licence for subsoil use. This licence certifies the subsoil user's right to perform certain activities on a certain part of subsoil within a limited period of time, subject to compliance with the licensing conditions (usually established by a 'licence agreement', an integral part of the licence). As a general rule, a licence for subsoil use is granted based on the results of an auction or tender. The Subsoil Law provides for significant limitations in relation to the granting of licences for subsoil use with respect to areas of subsoil considered to be of 'federal significance', including areas of subsoil:

- containing extractable oil reserves of 70 million tonnes or more;
- containing natural gas reserves of 50 Bcm or more;
- located in internal waters, territorial seas, or on the continental shelf of the Russian Federation.²²

²² Tax and Legal Guide to the Russian Oil & Gas Sector. Deloitte, 2012.

For areas of subsoil considered to be of 'federal significance', a licence may be granted only to a Russian legal entity. Upon holding an auction/tender for the right to use such an area of subsoil, the government may also place restrictions on the participation of Russian legal entities which are owned by foreign investors in whole or in part. For areas of subsoil located entirely or partly on the continental shelf, a licence may be granted only to a Russian legal entity having experience of no less than five years in working on the continental shelf, and in which the Russian Federation directly or indirectly holds more than 50 per cent of shares. In practice, this means that these licences are granted only to state-owned oil and gas companies (such as Gazprom and Rosneft) or, in some cases, to joint ventures with these companies (provided that the Russian Federation retains more than 50 per cent of shares in the venture).²³

Not only upstream investments, but all foreign capital investments in the gas sector (in exploration, production, transmission, wholesale supply and export) are included in the list of business activities 'which have strategic value for the defence of the state and national security support'.²⁴ This regulation de facto requires the president's personal permission for any deal involving foreign partners. It effectively restricts international cooperation in this sphere to mega-projects with state-controlled companies.

Russian legislation also provides for Production Sharing Agreements (PSAs) between the Russian Federation and investors (including foreign legal entities). Under a PSA, the state grants an investor exclusive rights to explore and extract subsoil resources in a specified subsoil area; production is shared between the investor and the state. The investor performs work related to exploration and extraction of subsoil resources at its own expense and risk, either itself or through a third-party contractor (operator of the PSA). The PSA regime does not release the investor and operator from general Russian licensing and regulatory requirements. The right of the investor to work on a certain area of subsoil under a PSA should be confirmed by the licence for subsoil use.

PSAs were of the utmost interest in Russia in the 1990s, but since 2000 no new PSAs have been signed in the oil and gas sector. There are only three active PSAs (Sakhalin-1, Sakhalin-2 and the Khar'iyaga project), which were concluded before the current Federal Law 'On PSAs' entered into force in 1996, and as such are 'grandfathered'. Government officials have made several public announcements, stating that the Russian Federation would not enter into new PSAs.²⁵

²³ Ibid.

²⁴ Federal Law of 29 April 2008 N 57-FZ on 'On the Procedure of Foreign Investments into Economic Organizations of Strategic Importance for the Defense of the State and National Security Support'; 'Russia Country Profile'.

²⁵ Tax and Legal Guide to the Russian Oil & Gas Sector.

Pricing policy

During the 1990s and up to 2006, Russia had very low regulated domestic gas prices which were far below prices on international markets. These low prices stimulated very rapid gas demand growth but did not provide for an adequate cash flow for producers, resulting in underinvestment. At the same time, the depletion of the Soviet inheritance of low-cost gas was reaching the point at which it was impossible to postpone major new investments. Higher gas prices became necessary to support the higher costs of gas production and transportation involved in developing the next generation of gas fields.²⁶

In 2006, a new policy was adopted on gas price increases,²⁷ aimed at bringing domestic prices to 'parity' with export prices (less transportation and excise duty) by 2011. Annual price increases of 15–25 per cent were implemented, and as a result average final industrial wholesale gas prices increased by more than 4.5 times in the last decade. But the initial target date to reach netback parity, 2011, was postponed to 2014–15, and most recently to 2018 or even later. Indeed, it is questionable whether the target of netback parity, conceived in an era of lower oil prices, will remain the formal objective of gas pricing policy. (This issue is discussed in detail in Chapter 5 ('Domestic gas prices and market reform', page 117).

Gas taxation in the Russian Federation

For many years the state's tax take from gas was much lower than that from oil, with export tax being no higher than 30 per cent and the MET being about one-tenth of that for oil on an energy equivalent basis. This was one side of the 1990s deal between state and industry; the other side was the extremely low regulated domestic gas prices. However, along with the recent gas price increases the situation is changing: facing a budget deficit and potential decline in oil revenues, in 2011 the government announced significant increases in MET for gas starting in 2012, indicating that the government is aiming to take most of the benefit of price growth through taxes.

Companies conducting their business in the Russian gas sector must pay any and all standard taxes imposed on Russian companies, together with a number of specific sectoral taxes (including MET, subsurface use tax, and export duties) as listed here:²⁸

Standard taxes. The main ones are: value added tax (VAT) and corporate income tax. In Russia VAT is rated at 18 per cent; this rate is charged on any and all goods, works, and services. Exclusions relevant to the gas sector

²⁶ Pirani, S. (ed.), *Russian and CIS Gas Markets and their Impact on Europe* (Oxford: OIES/OUP, 2009).

²⁷ Governmental Decree No.333, May 2007.

²⁸ 'Obzor nalogovogo rezhima v neftegazovoi otrasli Rossii', Ernst&Young, 2009.

include: services in connection with gas transportation outside Russia, gas transit services, and services in connection with the transportation of gas imported to Russia for processing.²⁹ Under a law passed in 2013, all operations in connection with the disposal of goods abroad in the course of raw hydrocarbons extraction at offshore fields are also exempt from VAT.³⁰ The corporate income tax standard rate in Russia is 20 per cent.

MET. The MET rate has been the subject of fierce discussion in government for some time, and various fundamentally different proposals have been made. As of November 2013, it has been decided to levy MET at gradually rising levels, with the difference between the rates for Gazprom and for independent producers narrowing (see Table 1.3).

Table 1.3: MET rate for gas, rubles/mcm (up to 1 July 2015)

	1 July 2013 to 31 December 2013	1 January 2014 to 31 December 2014	From 1 January 2015
Gazprom	622	700	788
Independent producers	402	471	552

Source: Tax Code of the Russian Federation, Part 2, Section 8, Clause 26.

Furthermore certain categories of recovered gas are MET zero rated. They are:

- associated gas;
- gas pumped into the reservoir in the course of condensate recovery;
- gas fields in subsurface areas of the Yamal peninsula used solely for producing LNG, up to 250 Bcm recovered, provided the term of reserves development do not last for more than 12 years;

On 30 September 2013 a new act was passed (Federal Act 263),³¹ under which, from 1 July 2014, a new MET formula shall apply:

$$S = (S_i * Erf * K_c) + Tr$$

where

S_i = the initial rate fixed at the amount of 35 rubles/mcm;

Erf = the basic value for a reference fuel unit;

²⁹ Tax Code of the Russian Federation, Clause 164.

³⁰ Federal Act 268 dd. 30 September 2013.

³¹ Federal Act 263 dd. 30 September 2013; 'Gosduma smeshala nef't's gazom', *Kommersant*, 23 September 2013.

Kc = a coefficient characterizing the degree of complexity of natural gas and (or) gas condensate from the hydrocarbon deposits;

Tr = gas transportation costs.

The aforementioned coefficients in their turn depend on more than a dozen parameters – the oil price; oil export duty rate; currency exchange rates; gas price for the domestic (with reference to netback parity) and export markets; transportation costs; the amount of gas supplied on the domestic market and abroad; geographic position; level of gas reservoir depth and depletion; and other parameters. So far it is not clear how companies will calculate all this data or how the tax authorities will double check it. Moreover, it should be noted that hardly a month had passed after the adoption of the new MET schedule before the government started discussing possible amendments to the formula. (This issue is further discussed in Chapter 5 ('Domestic gas prices and market reform', page 117.)

Subsurface Use Tax. This includes:³²

- single payments for subsurface use in certain circumstances specified in the licence;
- regular payments for subsurface use;
- dues for taking part in a tender (public sale).

The payment amounts are fixed in accordance with the provisions of the licence. The regular payments for subsurface use are fixed and depend on economic and geographical environment, subsurface area dimensions, type of mineral deposits, duration of work, state of the territory, geological exploration, and risk level.

Export Duty of 30 per cent, on natural gas exports outside the Customs Union (Russia, Belarus, Kazakhstan), paid on the realized export price.³³ Exemptions are currently in place for: gas exported via the Blue Stream pipeline across the Black Sea to Turkey;³⁴ some gas exports to neighbouring countries; and, thus far, for all LNG export projects. (LNG exports are not charged any export duty, and according to the rules of the WTO, which Russia joined recently, this can not be changed, as the tariffs should be frozen.)

Taxation of PSAs. Under PSAs special tax treatment is applied. In the course of the agreement being implemented, the investor makes single payments for subsurface use in relation to circumstances arising which are specified therein and in the licence (bonuses); annual payments for

³² Federal Law 'On Subsurface Resources', Clause 39.

³³ Decree No. 754 adopted by the Government of the Russian Federation on 30 August 2013.

³⁴ World Energy Outlook 2011.

agreements on marine body area and sea bed areas; regular payments for subsurface use (rentals); reimbursement of the state's expenses in connection with exploration; and compensation for damage caused by works implementation.³⁵

Changes in corporate structure

Russia's gas sector has some structural and institutional specifics that stem from the Soviet-era command economy. Its institutional structure seemed to have been frozen for a long period, which started in early 1990 when the Soviet-era gas ministry was turned into Gazprom, a corporation. In 1999 Gazprom was deemed the owner and operator of the Unified Gas Supply System (UGSS) under the law 'On Gas Supply in the Russian Federation',³⁶ which at that time facilitated continuity in gas supply. Gazprom was required by law to supply pre-negotiated volumes of gas to customers at regulated prices, regardless of profitability. Additional gas could be purchased from Gazprom or independent producers at higher prices. During the 1990s, the gas sector was practically exempted from restructuring. The whole sector was politically defined as a 'natural monopoly', even though the law stipulated that gas transmission and distribution network owners were obliged to provide non-discriminatory third-party access to free capacity, according to procedures determined by the government.³⁷

During the early 2000s, some independent gas producers emerged, but compared to Gazprom their role was negligible. Some of the vertically integrated oil companies attempted to commercialize their gas production, but as Gazprom controlled the access to the transportation system, they did not succeed. Some, such as Lukoil, ended up selling gas to Gazprom at the wellhead, while others, such as TNK-BP and Surgutneftegaz, utilized most of their associated gas for their own needs. Gazprom's dominance was unquestionable.

In 2002–6 a major campaign for gas market liberalization was initiated by the Ministry of Economic Development. Various governmental bodies prepared nearly a dozen competing 'market concepts'. But in 2006 a very clear signal came from the president that these discussions should be stopped, as Gazprom's strategic and geopolitical role had to take precedence

³⁵ Clause 13 of Federal Act N 89-FZ 'About Production Sharing Agreements' as amended 19 May 2010.

³⁶ The Federal Law of the Russian Federation No. 69-FZ, 31 March 1999, 'On gas supply in the Russian Federation'.

³⁷ Regulation 'On the Provisions for Access of Independent Enterprises to the Gas Transportation System of JSC Gazprom' approved by Resolution No. 858 of the RF Government, 14 July 1997.

over all commercial arguments. Since 2006 new legislative initiatives have included the encoding in law of the gas export monopoly, and the consolidation of state majority ownership of Gazprom.³⁸

Discussions on market liberalization have recently started again, much more modestly. In fact the government is not developing any regulatory framework to unbundle Gazprom, which means that that question is not on the agenda at least for the next few years, bearing in mind the long period of time that would be needed to implement such a regulation. The government is frightened by the prospect of a transitional period when something might go wrong – and these fears are understandable, taking into account the huge economic and political role of gas.

However, Gazprom's performance in the second half of the 2000s was becoming more and more disappointing, even though it was enjoying high sales volumes and high prices until the 2008 crisis. Falling export volumes and revenues in 2009 were the last straw for the government, which realized that Gazprom needed incentives in order to improve its efficiency. There was already, in Novatek, a candidate to play the role of a competitor. With the acquisition of a shareholding by Gennadii Timchenko (the founder of the oil trader Gunvor and a friend of President Putin) Novatek gained a strong administrative resource and lobbying power. It then started its crusade for market share. In 2012–13 another new player, Rosneft, came to the market. After leaving his position as vice-president responsible for the energy sector in the government in May 2012, Igor Sechin returned to Rosneft, and immediately started developing its gas business, recruiting senior managers from Gazprom and launching ambitious projects. So, after a decade of steady increases in the non-Gazprom producers' role, in the post-crisis period, a real breakthrough occurred.

In 2006 Gazprom achieved what it had aimed at: higher regulated prices. But ironically, particularly because of the economic crisis, there were unintended consequences: those higher prices enabled the non-Gazprom producers to compete for customers. (See Chapter 13 for a detailed account.)

In 2009, Gazprom had to absorb the bulk of domestic demand reduction, while the independents used the opportunity to enhance their position. In 2013, with the Russian gas market still oversupplied, Rosneft and Novatek are competing more and more aggressively with Gazprom, proposing discounts to the regulated price. They were successful in 'cherry-picking' Gazprom's best industrial customers. It seems, nevertheless, that a mechanism of 'market division' and government control was applied – that is, the largest power generating companies and

³⁸ Belyi A. 'Trends of Russia's Gas Sector Regulation', Fourth Annual Conference on Competition and Regulation in Network Industries, Brussels, 25 November 2011.

metallurgical plants could not simply change their suppliers without consulting government.

The gas market structure is now more reminiscent of the oil industry, with its regional monopolies or oligopolies. Non-Gazprom production is increasing, while market consolidation and concentration is taking place. After Rosneft's acquisition of TNK-BP and Itera in 2013, there are just three large non-Gazprom producers left on the market: Novatek, Rosneft, and Lukoil. Rosneft, which has contracts to supply more gas than it is able to produce, apparently aims to become a 'consolidator' of oil companies' gas output. There is now an oligopoly (and regional monopolies), instead of the former monopoly. The government prefers this, and is applying the good old 'system of blocks and checks', and 'division of markets' between groups of interest.

In the next few years, competition on the domestic market will increase. A large number of power sector and industrial consumers renewed their five-year contracts in 2012–13, and the majority of industrial customers now have contracts. So further changes in market shares are likely to happen through sales to residential and smaller business customers, which is much more complicated and considerably less profitable. Rosneft and Novatek are already moving to the regions: in Cheliabinsk, Sverdlovsk, and Kostroma they are the dominant suppliers, not Gazprom. But the regulatory framework is still designed only for Gazprom, and there is a huge legal 'grey zone'. The gas distribution business is in a regulatory vacuum; there are complicated schemes of ownership and operation, many vested interests, and gas supply chains are configured in numerous ways. Here the independents will have to deal more and more with non-payments and the consequences of the communal sector reform. How regional monopolies are to be regulated is still unclear, but there are already signals from government that dominant regional suppliers will be made responsible for regional gasification programmes and gas distribution infrastructure development. (These issues are further discussed in Chapters 5, 6, 12 and 13.)

Access to export

Before 2006, Gazprom enjoyed a de facto monopoly over gas exports, but not a legal one. From the mid-1990s, this monopoly was challenged, first, by independent companies such as Itera that began to export gas to CIS countries; and then, in the 2000s, by Eural Trans Gas, which started exports to Europe. Partly in response to these developments, and also as a consequence of the January 2006 Ukrainian gas transit crisis, the 2006 law 'On Gas Exports' gave Gazprom a legal monopoly. According to the concept of a 'single export channel', even LNG production from Yamal should be sold by Gazprom Export under an agency agreement.

As growth potential and profitability on the domestic market are limited, both Novatek and Rosneft are keen to get access to export markets. Obviously, the pipeline export monopoly is a 'sacred cow' that the government is not ready to remove in any case, so the independents have focused their appetites on LNG projects, principally Yamal LNG (Novatek) and Sakhalin-1 (Rosneft and Exxon Mobil).

In November 2012 Novatek for the first time proposed that LNG supplies be excluded from Gazprom's export monopoly, on the grounds that this would help to develop LNG projects and secure a strong position for Russia in world LNG trade. The main government bodies responsible indicated their approval, and in October 2013 the government approved amendments to the law on gas export drafted by the energy ministry. Though this law is far from a real LNG export liberalization, as it imposes strict requirements for the companies and projects able to export, it is nevertheless an important step towards more liberal market conditions.

Competing political and commercial agendas

In the history of the Russian gas industry's development, 1991–2009 could be described as the period of a 'traditional contract', that worked as follows:

- subsidization of the economy through low gas prices (cost containment to ensure the social stability and competitiveness of Russian industry), and in exchange;
- low taxes on gas production;
- the carrying of social and other unforeseen financial burdens by Gazprom;
- the protection by the state of Gazprom's interests in Russia and abroad, including its exclusive export rights and ownership of the UGSS, while export revenues offset losses in the domestic market; and
- a monopolistic market structure with one dominant player, Gazprom, and a number of much weaker independent gas producers, enjoying higher prices but with no access to export markets.

However, in recent years a 'new deal' has started to emerge, whose shape is still not entirely clear, but the pillars of which will include:

- prices which have already reached a level that ensures profitability on the domestic market, and the concept of a phased transition to equal profitability with European netback offers higher prices in the distant future;
- taxes which should be increased to remove the bulk of rents received by gas companies due to the increase of gas prices;

- the gradual redistribution of exclusive export rights among several major players (Gazprom, Rosneft, Novatek), but in return the non-Gazprom producers will be forced to take on certain social obligations; and
- a gradual reduction in the dominance of Gazprom in the domestic market, although market concentration remains high due to the consolidation of assets in Novatek and Rosneft.

However, this is only a very general outline of the 'new deal'. The Russian gas industry has become hostage to a large number of government interests that are non-industrial and often even non-economic. The main groups of conflicting interests are shown in the Table 1.4. The most important question is: which of these conflicting interests will be the most potent?

Depending on the outcome of the interaction of these contradicting interests, a number of strategic choices will need to be made for the gas sector. They include:

- How much gas should be produced (and transported)? All the official strategic documents (for example, the *Energy Strategy* or *General Scheme of Gas Industry Development*) assume intense growth of production volumes, reaching 1 trillion cubic metres/year by 2030 in some scenarios – which is definitely a challenge in the low-demand growth environment. The investment plans of both Gazprom and the independents imply production levels significantly higher than all projected domestic demand and potential exports. Such a volume-oriented strategy could work only for low-cost projects – but none of the greenfield projects or new pipelines are low-cost. But lower production volumes would mean rejecting some 'political' projects, which might not be acceptable for the government.
- On export policy: should Russia focus on the pricing principle, protecting the ideology and renegotiating long-term pipeline contracts under the energy ministry's control, or should Gazprom get more freedom and flexibility and finally change its attitude towards spot indexation?
- Should Russia go for the new remote and expensive giant fields, or stimulate development of the satellite and smaller fields in traditional areas with existing infrastructure ('scale vs efficiency')? If gas projects are still regarded as tools to improve regional performance or solve social problems, then the abandonment of Shtokman, the Power of Siberia pipeline, or the Vladivostok LNG project would be impossible. But focusing on smaller fields and projects necessarily demands reform of the market structure.

Table 1.4: Competing interests in the gas industry

<i>The government's political interests</i>	<i>Companies' commercial interests</i>
<p>Geopolitical and geostrategic considerations of Russian government underlie a potential confrontation with the EU over gas exports; the mega-projects bypassing Ukraine; projects in eastern Russia that are not commercially viable; costly and risky LNG projects, economically dubious projects of cooperation in the CIS (including gas imports from Central Asia and Azerbaijan) in order to retain and strengthen Russia's political influence.</p> <p>Promotion of the 'social responsibility policy for the gas companies on the domestic market (including financing of different federal and regional projects, gasification, etc.) in order to prevent social tensions.</p>	<p>There is a purely commercial goal – to improve oil and gas companies' performance, thus boosting economic growth – that often contradicts the geopolitical objectives of the state. Nearly all the projects supported by the state are value-killers for gas companies. A key question is: will the state go ahead if these projects destroy value? Can this situation persist, or will market forces oblige the Russian government to change its attitude towards the gas sector?</p>
<p>Government's fiscal policy targets. Taking into account growing social expenditures, the government seeks additional budget incomes. It requires greater export revenues and MET payments. Gas price growth is regarded as a potential source of additional tax base.</p>	<p>Additional taxation will constrain gas production growth and undermine the commercial rationale of nearly all new projects. Export duty is increasingly undermining the competitiveness of Russian pipeline gas abroad.</p>
<p>The goal of increasing Russia's energy efficiency supports the trend towards high gas prices. There is huge bureaucratic activity in energy efficiency promotion, and a special law was adopted, but energy intensity continued to grow in the last few years (despite aggressive price growth).</p> <p>The goal of maintaining internal social stability through price subsidies for the population and the implementation of large-scale (though not always economically viable) gasification.</p> <p>The goal of supporting domestic industrial output and economic growth by curbing the growth of gas prices (and thus of electricity prices).</p>	<p>Growing production and transportation costs for all gas producers require higher prices on the domestic market and contradict the paternalistic state policy of cross-subsidization.</p>

- Gas pricing: should it be regulated at the rate of inflation, or according to the netback principle, or some other system? If equal profitability is the choice, then exactly which netback should be applied – from Gazprom's border prices or from the European spot markets? The Union of Energy Consumers and other organizations of industrialists are now arguing that energy prices should be frozen. The explanation is very simple: their sales are dropping (for external reasons) and their margins are shrinking due to electricity and gas price growth. They have very strong incentives to put up a fight, and they have direct access to President Putin and the government to argue their position. Stagnating industrial output will most probably become their strongest argument.
- The pricing issue is linked to the question of transportation tariffs. At the end of the day, will there be price regulation, or just transportation tariff regulation? The principles of inclusion of capital costs in the tariff, and the non-transparency of operating costs, lead to unnecessary increases in transportation tariffs, which are undermining non-Gazprom producers' supply economics. As of late 2013, they can not reach customers to the west of Moscow. With the further development of the UGSS – if, for example, the Eastern Programme investments are included in transportation tariffs – these tariffs might become prohibitive. So if the government prefers to focus on the pipeline construction projects, it would mean that the independents will not be competitive, or that domestic prices would have to be raised substantially in order to pay for this inefficient construction.
- Growing taxation is another dimension of the prices issue. If the government pressures the producers too strongly, it will undermine their investment programmes, while going for numerous tax breaks means that the Government will not be able to collect all the necessary budget revenues. Usually in such a situation, choices are made in favour of short-term benefits, rather than taking into account longer-term consequences.

The importance of the gas industry for Russia economically and politically, now and in the future, can not be overestimated. Gas is not only the backbone of the Russian energy sector, but is also one of the most powerful tools of domestic and foreign policy. The Russian gas industry is undergoing some very fundamental, albeit slow, changes, with increasing competition both domestically and abroad. External forces are starting to create imbalances in the sector, which means that the status quo may not be able to continue.

The gas industry is indeed at a crossroads. Choices should be made in the near future between geopolitical goals and economic efficiency; between long-term export volume maximization and obtaining the highest possible prices; between additional tax incomes and sustainable production volumes; between market relationships and price regulation and subsidization. At the end of the day, the choice is between market-oriented industry development with a purely economic rationale, or the maintenance of 'strategic' considerations as the main priority, achieved through state guidance.

The future path of the Russian energy sector's development, and even the evolution of its whole economy, depends on how these issues are resolved. It should be stressed that the decision will mainly be made by the Russian political leadership.