

EU partners over a permanent German seat on the Security Council, forces should focus on producing a common EU position before important decisions are made and – based on its experience of constructive cooperation – a common EU seat should be secured before long.

Chapter 3

Energy Superpower Russia

On New Year's Eve 1999, when champagne corks were popping to celebrate the arrival of the new millennium and television screens were showing pictures of fireworks in all the capitals of the world, one report in the international news column attracted little interest. Russian President Boris Yeltsin had unexpectedly resigned and had handed his official duties over to his Prime Minister Vladimir Putin who, until then, had not been very well known either at home or abroad. On the morning of New Year's Day 2000, the big computer crash had failed to happen, the Earth was still turning, but for Russia, a new era had begun. In addition, as became evident later, Putin's rise led to a turning point in worldwide energy policy.

Russia's comeback

Russia plays a key role in the future energy supply for Europe and Asia. Therefore, it is important to understand where Russia is heading and who the men in control in the Kremlin are, how they think and what they want. Developments in Russia's domestic policy also influence its conduct towards its neighbours and the rest of the world. As was the case during the Soviet era, autocratic domestic policy and imperial foreign policy always go hand in hand. This time, the new great power politics of Russia focuses on the power of Gazprom, not on the weapons of the Red Army. The EU must decide how it intends to deal with this uncanny colossus. Will Russia become a strategic partner, as is always stated in the pleasant-sounding declarations of European summits, or is there a competitor and adversary growing in the East, against whom Europe must prepare itself economically and politically?

Russia's economy is booming. When the Russian rouble collapsed in the late 1990s, solvency of the government could only be saved by international loans. At present, however, Moscow is paying back its foreign debt faster than planned. However, the growth of the economy the past two years is almost exclusively based on the export of natural resources, above all, oil and gas. Otherwise, economic modernization has stagnated. The exploitation of new production fields for these strategically important resources is driven by the closely coordinated interaction between the state and major companies. At the same time, the Russian leadership uses the country's key role in supplying energy to Europe and

East Asia to gain back the influence in global politics that it lost when the Soviet Union collapsed.

Seemingly limitless resources

Russia has the largest coal, uranium and gas reserves as well as the seventh largest oil reserves in the world. In terms of hard coal units (HCU), a widely used unit for measuring energy content, the country has the second highest percentage of fossil fuel overall after the US and far ahead of India, China or Saudi Arabia. Due to the chaotic privatization policy pursued during the time of Yeltsin, when formerly state-owned companies frequently fell into the hands of private financial speculators who neglected production and were only interested in quick resale, and due to the collapse of the consumer markets, production of oil and gas went down dramatically following the end of the Soviet Union at the beginning of the 1990s. Today, it is rising again just as quickly. However, the upward growth potential for Russia's booming energy sector is not without limits.

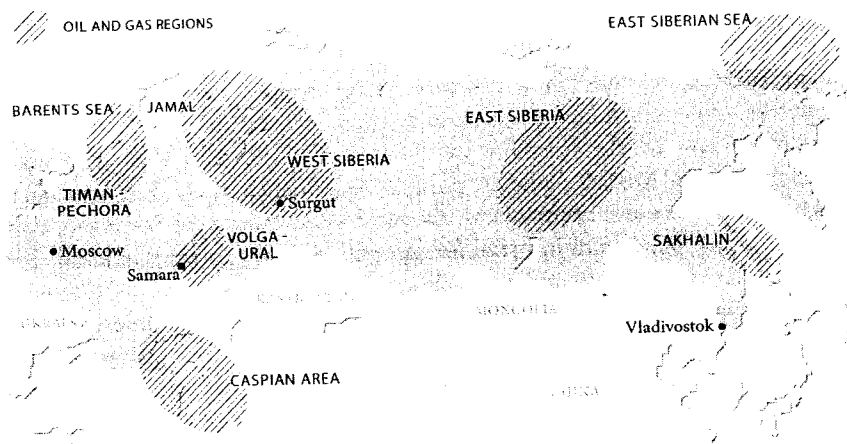


Figure 3.1 Oil and gas fields in Russia

Russian oil production began at the end of the 19th century in the Caspian Sea in what is today Azerbaijan. Now the major production rigs are found in the west of Siberia. For the future, Russia relies on new oilfields in the east of Siberia, in the Barents Sea and on Sakhalin. Oil experts make a distinction between

'reserves' that are immediately accessible today on the one hand and 'resources' that will only be available in the future. In terms of the reserves of petroleum that can currently be produced in an economical and technically feasible manner, Russia ranks seventh in the world. As far as the resources are concerned, Russia, with 16 per cent, ranks second worldwide. Even though Russia has significantly less crude oil reserves than the number one, Saudi Arabia, its current production volume is almost the same. In 2005, for the first time, Russian oil production exceeded that of the Saudis. However, Russia consumed so much oil at home that its export quantities still lagged behind significantly. Currently, Russia produces almost 5 per cent of its reserves every year. Even if new deposits are discovered, Russia's oil production has already peaked. In future, exports can only increase if Russia itself manages its energy more economically and reduces consumption at home. For this reason, Russia must urgently invest not only in modern production systems and new pipelines, but also in the energy efficiency of its industry and households.

Natural gas production in the west of Siberia, where Europe currently obtains its supplies, is continuously declining. The gigantic new offshore gas field in the Arctic, or on the Peninsula of Yamal, can only be exploited if Western investors contribute to the enormous cost. Oil production in the Caspian Sea and in Central Asia, on the other hand, continues to rise. Russia is therefore interested in directing the export from Central Asia via its pipeline network towards the West, to earn a share in this business. Besides, Russia intends to export liquefied natural gas by tanker to the US and East Asia in the future. Nevertheless, Russia's oil and gas reserves are not limitless, as Russian politicians and Western media sometimes wish us to believe. Furthermore, Russia's oil will run out sooner than her natural gas.

Model Gazprom

Russia's former President Putin, as well as his successor Dimitry Medvedev, does not want to revert to the Soviet era. Putin's idols are not Stalin or Brezhnev. Over his desk in the Kremlin, there hung a picture of Peter the Great, the tsar who undertook the modernization of his country; so far, Medvedev has not replaced it. As Tsar Peter once did, Putin and Medvedev wish to lead Russia to new greatness by adopting Western methods and technologies without transforming it into a Western country. The new Russia has adapted the concept of a major company that is competitive on the global market to the Russian situation. The objective of these new companies is not only to make money, but also to serve the Russian state and its imperial foreign policy. For such purposes, key industries that were privatized during the time of Yeltsin are to be returned to state control.

In the 1990s, Russia belonged to the oligarchs. After they had become rich thanks to wild privatization, private oil companies Yukos, Lukoil and Sibneft entered the global market. State-owned Gazprom, managed by Yeltsin's former Prime Minister Victor Chernomyrdin, looked like a fossil from a different era. The facilities and pipelines were not modernized and noticeably dilapidated; investment was neglected, postponed or simply did not happen. The national price for gas sold to Russian companies and households was highly subsidized. The money from lucrative foreign business disappeared into dubious hands.

Today, the Kremlin wishes to turn Russia's energy companies into competitive players on the global market. However, these companies need more money for their aggressive acquisition strategy. Even if oil and gas prices go up, their own funds are insufficient for global expansion. The only way to get the money is from the international capital market. So far Russia has allowed foreign investors only minority shares in strategically important industries, such as the energy sector. As a matter of principle, the majority of the shares and thus the political control over the course of the company remain with the Russian state. If Russia adheres to this strategy, its major companies will not have sufficient capital for the challenges they face. If the Russian economy opens up completely to the global capital market, the companies will also have to change. Non-transparent state-owned companies that must now serve the political interests of the Kremlin and not their investors would become multinational companies governed by economic considerations and shareholder value. At the same time, however, the Kremlin would relinquish the most important instrument of its current foreign policy. For some time already, politics in Russia has been balancing this tension between benefiting from economic globalization on the one hand and the wish to maintain the Kremlin's influence over strategically significant industrial sectors on the other. As long as the oil price stays at a high level and everybody wants to do business with Russia's companies, the Kremlin succeeds in combining the two objectives cleverly and attracts international investors while maintaining legal and political privileges for its state-owned companies.

Gazprom, which was created from the former Soviet ministry of oil and natural gas, is not only the fifth largest commercial company in the world, but also a state within the state. What has been said about car manufacturer General Motors in the past could be rephrased for the Russian context: what is good for Gazprom is good for Russia. In any case, if we wish to understand Russian politics, we must learn to understand the central role of Gazprom.

Today, Gazprom has become a major global company that is managed using the instruments of capitalism for the benefit of the Russian state. With a 20 per cent share and rising in the global market, Gazprom is the biggest gas company on the planet. The company contributes 8 per cent to Russian economic output, pays one quarter of the entire tax income and supplies half the industry in the country with energy.

The Russian state holds 51 per cent of Gazprom; the remaining shares are held by private owners, some of which are not known. The group has 250,000 employees and maintains a network of 175 subsidiaries as well as a number of holdings at home and abroad that are used to channel billions into economic investment and private pockets. Gas trade with Ukraine and other Eastern European states, for example, is done via a number of intermediaries of whom we know little. RosUkrEnergo, an intermediary trade company that exports natural gas from Russia and Central Asia to Ukraine and other Eastern European countries, is registered in Switzerland. Fifty per cent of the company shares are held by ARosgas Holding AG, a Gazprom company that is also registered in Switzerland. The remaining 50 per cent are held by a company with the name Centragas Holding. It is not known who the owners of Centragas are. However, rumours are circulating repeatedly that known Russian politicians and the Ukrainian mafia are behind it. Recently, the Ukrainian government under Prime Minister Yulia Timoshenko decided to limit RosUkrEnergo's role as an intermediary between Gazprom and Ukraine's state gas company.

Gazprom holds the largest gas reserves in the world and owns 116 billion barrels of oil. It became an oil company by systematically buying out a few smaller oil companies. Its most important unexploited gas reserves are in the Shtokman gas field in the Arctic. The licence to explore for and produce gas and condensate on the Shtokman field is owned by Russian company Sevmoreftegaz, a wholly owned subsidiary of Gazprom. US companies Chevron and ConocoPhillips, Norwegian NorskHydro and StatoilHydro, and French Total applied for the rights to participate in gas production in the north of Russia. In late 2006, it decided to start exploiting the Shtokman field using its own funds and without foreign investors for the time being – an indication of how well filled Gazprom's war chest is. However, the announcement was just a new move in the game to ensure better conditions from Western business partners. Now, the newly incorporated Shtokman Development Corporation has been registered in the Swiss canton Zug, a tax haven that also hosts RosUkrEnergo and numerous other international energy and trading firms. Gazprom owns 51 per cent of its shares, while Total holds 25 per cent and Statoil Hydro 24 per cent. Chevron finally gave up its bid after the Russian government had signalled that US capital was not wished for in this strategically important project.

In the negotiations over valuable Russian oil and gas production licences, the Kremlin always aims to achieve the highest price and political concessions. Access to the Shtokman gas field is therefore part of the negotiations over Russia's joining the WTO.

Other joint ventures of Gazprom with international partners are on the Pacific Island of Sakhalin and in Juschno Russkoje in Siberia. German companies E.ON and BASF-subsiary Wintershall are also involved in these. However,

the majority of the shares in each of these companies remains with Gazprom and thus under the control of the Russian state.

Gazprom ceased being merely an energy company long ago. A state monopolist without any competition at home, the company was in a position to invest its profits massively in other industries. In the period 2000–2005, Gazprom spent US\$32 billion investing in the tourism, agriculture and media industries. The company owns important Russian daily and weekly newspapers, such as the renowned *Izvestia*, as well as TV stations. As the Russian state is the majority shareholder of Gazprom, the Kremlin also exercises control over the Russian media landscape in this manner. Recently, Gazprom has begun building its own ski resort in Krasnaja Poljana. The goal is to support the Olympic Winter Games in 2014, thus earning further glory for the Russian state.

The downside of this major shopping trip is that Gazprom has fewer funds to invest in the exploitation of new gas fields and the upgrade of its infrastructure. The Carnegie Center in Moscow, one of the most important independent think tanks in the country, for instance, estimates that the exploitation of the gas fields on the Peninsula of Yamal in the Arctic alone will require investment amounting to US\$100 billion. If development of these new gas fields were delayed, Russian production would decrease rapidly in the next few years. Here, the company increasingly depends on the support of foreign investors.

For market economy oriented reformers in Russia, Gazprom is the decisive test that will reveal whether this reform to a modern market economy is successful. The price system of the company still stems from Soviet times. Two parallel price systems are in place for international gas exports: the Russians charge the global market price for gas exports to Western Europe; exports to political allies, such as Belarus or Armenia, are invoiced at a reduced price. In some cases, this political price is kept low by adding cheaper natural gas from Turkmenistan. The Turkmen have no choice but to participate in this game: they need the Russian pipeline network for their exports to the global market. For the national market, different gas price subsidies are in place, applicable to both private households and industry. Russia's social system and thus the domestic situation have only remained stable during the past few years because low salaries and pensions were supplemented by a number of state grants. Gas and electricity are almost free for private consumers. As a result, people still open and close the windows to control the temperature in their apartments. Investment in modern systems and control technology are not financially feasible under these conditions. Besides, energy price subsidies for Russian industry were one of the major obstacles to the country's joining the WTO. Even though the other WTO members are willing to accept the reduced prices for private consumers as social grants, they reject any state subsidies to companies they have to compete with on the global market. The EU and the US have, in the meantime, agreed to Russia becoming a member of the WTO. Access to Russia's resources and the Russian market is too

important to them. Interestingly enough, only the two former Soviet republics of Moldova and Georgia still need to agree to Russia's application for membership. They, in turn, use their approval as a negotiation factor for low gas prices and further economic concessions.

As Gazprom actually only earns money on the global market and makes losses at home, the income of the company remains below its potential, the victims being not only investment in its own infrastructure and exploitation of new fields, but also the possibility of buying into energy distribution systems abroad. For the future, Gazprom aims to have direct access to its Western customers. For example, the company intended to buy shares in British gas supply company Centrica, which the British government successfully averted. One reason for this is that Gazprom's reputation as a reliable business partner has been in tatters since the head of the company, Miller, closed the gas tap supplying Ukraine in early 2006 with cameras running.

Gazprom is therefore interested in improving its image, at least in Germany, and has, in the meantime, become the sponsor of the highly indebted German Bundesliga (premier league) football club Schalke 04. As early as the beginning of the 1990s, E.ON and Wintershall founded the company Wingas for the distribution of Russian natural gas in Germany. On the other hand, Western European companies wish to invest in the booming Russian energy sector. So far, any involvement is only allowed up to a maximum of 49 per cent. German companies E.ON and Wintershall, for instance, hold 24.5 per cent in the consortium for the construction of the controversial Baltic Sea Pipeline, while Gazprom continues holding the strings with its remaining 51 per cent.

Rosneft, Lukoil and partners

Most Russian energy companies that made the transition from wild privatization at the time of Yeltsin to the state-monopolist capitalism of the Putin era work according to the Gazprom model. The majority shares in Siberian oil company Sibneft, which was once owned by billionaire Roman Abramovic, has, in the meantime, been bought by Gazprom and has thus been virtually renationalized. Abramovic had become rich through Sibneft and invested his money abroad. Among others, he owns the English Chelsea Football Club in London. However, the former oil oligarch remains the governor of the province of Chukotka in the Arctic and, as local representative of Moscow's interests, makes himself popular with the men in the Kremlin. Michail Chodorkovski, the founder and main shareholder of the oil company Yukos, on the other hand, had higher political ambitions, allegedly even to become President Putin's successor. Yukos has, in the meantime, been pushed into bankruptcy by the Russian state authorities. Chodorkovski has been sentenced to several years in prison.

In 2005, 70 per cent of Russian oil production was still held nominally by private owners. Foreign companies held 10 per cent of the shares. Access to the 'sanctum' of the Russian economy, as President Putin puts it, is strictly regulated. Therefore, the Kremlin is always present at the table whenever sales negotiations are held. Besides, the state's indirect control of the oil sector through authorization of production licences for the state-owned oilfields, the tax regulations and the pipeline monopoly goes even further than its direct control by the – compared to the gas sector – relatively low share in the Russian oil industry. In the Yukos case, Russia's Byzantine tax regulations were applied until the once largest oil company of the country had to file for bankruptcy. The selective application of environmental regulations for disciplining insubordinate business partners has also proved successful. The Yukos company had been accused of endangering the catchment area of Lake Baikal with its planned pipeline to China. Shell's production authorization for the largest foreign investment in Russia, the oilfield Sakhalin 2, was withdrawn after an inspector from the Russian environment agency noticed two dead fish floating in the river next to the construction site. The real background was that Gazprom wished to buy shares in the profitable project against the wish of majority shareowner Shell. Russian and international non-governmental organizations (INGOs) had already pointed out the real environmental problems at Lake Baikal and at Sakhalin and were consistently ignored by the environmental authorities of the state.

This is also the reason why the Russian state is not interested in renationalizing the energy sector completely. Instead, a symbiosis has developed in that important officials of the Kremlin simultaneously hold high positions in private business. It is thus guaranteed that Russia's private enterprises also orient their business conduct towards the political interests of the government. The problems of Yukos and its owner Michail Chodorkovski began when the latter tried to free himself from the grip of the state and to sell parts of the company to American oil companies. Yukos' headquarters were to be moved completely to London. Chodorkovski wanted to turn Yukos into a multinational group with an international owner structure. At the same time, Yukos intended to buy its own private oil pipeline to China, thus breaking the export monopoly of state-owned Transneft.

By breaking up Yukos, the Kremlin succeeded in keeping this centrepiece of the Russian oil industry under the control of the state. The television images that showed Michail Chodorkovski, once the richest man in Russia, sitting in a cage in the courtroom, made the other oligarchs in the country shiver. In the near future, none of them will try to flee the spell of the Kremlin or get involved in politics. Chodorkovski's foundation 'Open Russia', where part of the private money of the fallen oligarch was safely invested before Yukos went bankrupt, is still active today. Open Russia supports democratic and human rights organizations as well as its own think tank, the EU-Russia Centre with headquarters in London. As is the case with the Open Society Foundation of former financial

speculator George Soros or American foundations, Open Russia can only operate with difficulty within the country itself. However, private foundations that promote the development of a democratic civil society hold the key for a gradual democratization of Russian economy and politics.

Today, however, Rosneft not Yukos is the model for the Russian oil sector. Even by the standards of the industry, state-owned Russian oil company Rosneft is growing at breathtaking speed. Rosneft was also established from the former Soviet ministry of oil and gas in the mid-1990s. Over the past few years, the company has systematically purchased small private oil companies, plants, production licences and a share in Gazprom. Its major achievement was in 2004 when Rosneft, following a number of non-transparent financial moves, secured for itself the oil company Yuganskneftegas, the most important part of the Yukos group. Following a transaction that British business magazine *The Economist* described as 'surreal even by Russian standards', the centrepiece of Yukos was first transferred to a letterbox company called Baikal Financial Group and then, with the help of Chinese loans, to Rosneft itself.

The successful initial public listing took place simultaneously in London and Moscow in summer 2006 and earned Rosneft fresh capital of almost €10 billion. This money is to be used, among other funds, for repaying loans that Yugansk obtained from Western and Chinese moneylenders. Three international oil companies, British BP, Malaysian Petronas and China's state-owned petroleum group CNPC, bought shares in Rosneft. Their decision was probably based on future access to drilling licences from the state and new exploitation areas, and less on current profit expectations. The Kremlin has made it clear in the past few months that promising foreign investment in Russia's energy industry must be done via state-owned companies Gazprom and Rosneft. Rosneft's Achilles heel is the neglected infrastructure. In future, more investment in new pipelines and production equipment will be necessary. This will also require investment from abroad. Buying individual pieces to build an empire – favoured by political patronage – will no longer be sufficient. The empire will also have to be looked after and maintained.

George Soros, who had become a billionaire through currency speculation, warned investors against investing in a company that had become rich through what is actually the renationalization of the Yukos group. Many Western investors lost a lot of money at that time. Between the lines, however, Rosneft advertises the fact that it is owned by the Russian state and enjoys its patronage. Consequently, Rosneft cannot be expropriated. Rosneft can expect a tolerant basic attitude from authorities when purchasing new production licences, for example, in Eastern Siberia, or for authorizations of new pipelines and plants, and above all when dealing with the fiscal authorities.

A privately owned company, Lukoil is still the largest oil company in Russia, even though Rosneft owns larger proven reserves after it purchased Yugansk.

Over the long term, it appears that Rosneft and Lukoil will divide the work. While Rosneft is going to channel the access for foreign investors to the Russian market, Lukoil will increasingly become engaged in international business. For example, Lukoil bought American oil company Getty and thus a network of 2000 petrol stations in the US capital Washington and elsewhere. In the meantime, Lukoil is not only operating in almost all countries in Central Asia, but also in Egypt, Colombia, Iran and Venezuela. Jointly with US company ConocoPhillips, Lukoil is planning the exploitation of the gigantic oilfield in West Qurna, Iraq. ConocoPhillips has, in the meantime, bought a minority share in Lukoil. The Russians also cooperate with China's CNPC. The Kremlin controls politically yet indirectly the privately owned oil company. The warning example of Yukos seems to be rather effective. Lukoil continues to coordinate strategic investment abroad with the Russian government.

In the early 1990s, when the Russian state was almost insolvent and urgently needed foreign funds to exploit its natural resources for export, it gave its permission for several oil and gas production consortia under foreign management, and these consortia were explicitly exempted from a new law that permits foreign companies only to hold minority shares in Russian energy projects. In spite of this, the three major oil production projects on the Pacific Island of Sakhalin (Sakhalin 1 and 2) and in Charjaga in Western Siberia are a thorn in the side of the Russian state, and Russia's energy industry is trying to regain control of these international consortia by reshuffling their shares.

In the case of consortium Sakhalin 1, managed by American Exxon jointly with Japanese and Indian companies, Russian state-owned company Rosneft currently holds only 20 per cent of the shares. The Russians are trying to increase this percentage. Instead of paying cash to foreign partners, the latter are to receive smaller shares in other Rosneft projects in exchange. As a result, Rosneft will hold the majority in every project. To exert mild pressure, the authorizing department is currently denying any extension and expansion of production licences.

In the case of Sakhalin 2, the largest oil production project on the Pacific island to date, the international consortium Sakhalin Energy Investment Company is managed by Dutch-English company Royal Dutch Shell with the involvement of two Japanese companies. For a long time now state-owned natural gas monopolist Gazprom has been trying to obtain shares in this consortium for Sakhalin 2. In return, Shell is to receive Gazprom shares in a gas production field in Western Siberia. In August 2006, the state authority of the environment informed Sakhalin Energy that some environmental restrictions had not been complied with. The consortium's licence was therefore withdrawn.

European and Asian companies that already have operated in Russia for a long time are powerless before this stealthy acquisition strategy. After all, Russia did not ratify the European Energy Charter, which would have protected investors against hostile takeovers. Therefore, ratification of the Energy Charter by the Russian

Duma is top of the agenda at all European–Russian summits and one of the most important European demands on their Russian negotiation partners.

Putin's network

Not only companies, but also people tell the story of the new state-monopolist capitalism that is in the making in Russia. Since he assumed office on New Year's Day 2000, former President Putin has succeeded in establishing a powerful network of personal friends and alliance partners in economic and political key positions. Even with the official transfer of the Russian presidency to his successor Dimitry Medvedev, Putin's shadow still looms large. President Medvedev will probably build on Putin's established network, especially on the powerful clique of businessmen and KGB agents from their home town of St Petersburg. Medvedev though is no KGB alumnus and might therefore bring in a new set of people more closely connected with the energy sector where he last worked. Medvedev worked together with Gazprom chairman Alexei Miller for the City Council of St Petersburg. Before being elected president, he became chairman of the board of Gazprom and Deputy Prime Minister.

In any case, the dominant force in Russia's economy is no longer the oligarchs of the Yeltsin era, who had come to power through privatization profits and criminal dealings, but rather a group of office holders that grew up together with former President Putin in the foreign secret service KGB – today operating under its new name FSB. Even though some of the oligarchs are still in business, they got the message after Yukos founder Chodorkovski was sent to prison that they have to stay out of politics – and any related areas, such as the media.

Whenever high-ranking visitors, politicians or business delegations go to Moscow, a meeting with Gazprom boss Alexei Miller is a fixed date in their diary. In a typical week in April 2006, Miller met the Ambassador of the EU, the CEO of the largest state-owned oil and gas company of India, and American Ambassador William Burns. With the latter, he discussed the involvement of American companies in the exploitation of vast gas fields in the Barents Sea in the Arctic. From there, liquefied natural gas is to be transported by tanker to America.

Gazprom also bought political connections overseas. The consortium for the construction of the new Baltic Sea pipeline is headed by former German Chancellor Gerhard Schröder. His assistant on the board of directors is former Stasi officer Matthias Warnig. Putin, who supported Warnig's nomination to this post, is a former KGB liaison officer in Eastern Germany who knows how to utilize these old connections. Former GDR official for gas pipeline construction Hans-Joachim Gornig manages Gazprom's European sales office in Berlin.

Another colleague of former President Putin from St Petersburg is Igor Sechin. Sechin is the chairman of state-owned oil company Rosneft and at the same time deputy chief of staff in the Presidential Executive Office. Industry Minister Viktor Christenko sidelines as chairman of state-owned oil pipeline monopoly Transneft. Transneft intends to merge with Transnefteprodukt in the near future, Russia's largest company for the transport of refined oil products. Current chairman of Transnefteprodukt is Vladislav Surkov. As Igor Sechin, he also holds the position of a deputy chief of staff in the Presidential Executive Office. Christenko's ministry is currently also working on the establishment of a national aeronautics consortium, which should become a competitor for Boeing and Airbus in the future.

This close connection of economics and politics is typical of companies everywhere in the world. Former politicians are hired by American oil companies as lobbyists to use the old networks to the benefit of their new employer. In today's Russia, the top achievement of a successful political career is to be awarded an executive position in one of the state-owned companies. In the case of Gazprom, the special problem consists of the fact that political contacts of former Stasi and KGB officers had always been secret and difficult to see through for outsiders. It is therefore difficult for the public and the media to understand who has an influence on whom.

However, the choice of Gerhard Schröder is easy to understand from a Russian perspective. Even if it cannot be proved that Schröder had already known about the job offer from the Russians at the time when in office he agreed to the construction of the Baltic Sea pipeline, the former chancellor was the one who made decisive moves in German Russia and in energy policy for years. The story therefore leaves a bad taste in the mouth. Not least because of the Schröder issue, the implementation of a code of conduct is being discussed in Germany that will define rules to govern professional career of former parliamentarians and government ministers. According to these, it will be prohibited for former politicians to join those companies whose direct economic interests they decided while in office.

Politics with pipelines

Apart from Gazprom's monopoly on the Russian gas pipeline network, the Russian state also holds the monopoly on the country's oil pipelines. Today, this monopoly is even statutory. The 100 per cent state-owned Transneft controls 45,000 kilometres of pipelines from Eastern Europe to Asia.

Until the beginning of the new millennium, the majority of Russian oil exports to the West were handled via the Baltic region. Until then, most Russian oil exports went via the port of Ventspils in Latvia. Since a gigantic oil export

harbour was built in the city of Primorsk to the north of St Petersburg, Russian pipeline monopolist Transneft is trying to push the Baltic States out of the oil export market. Deliveries to Ventspils were stopped in 2002. Since then, the Baltic States have specialized in the processing of crude oil products, which they obtain from other sources. Deliveries to Lithuania's largest refinery in Mazeikiu were also interrupted. Allegedly extensive repair work is necessary following an accident in the Druschba ('friendship') pipeline.

Gazprom's double monopoly on the national pipeline system and gas export is important, even indispensable for the Russian state for a number of reasons. Through state control, under which even transactions with foreign states and companies fall, the Kremlin maintains its influence on gas export prices, the most important revenue for Russia's national budget. Besides, the construction of pipelines is used systematically for the foreign policy agenda – in this context to secure the sale of and dependence on Russian gas supplies, even later when alternative supplies from Central Asia, North Africa or (as liquefied natural gas) even more remote production areas will be available.

For many years, Russian companies have entered the energy sector of neighbouring countries. Gazprom & Co. thus wish to provide for a time when their own natural resources run dry. The number one target region is the former republics of the Soviet Union and the states of the former Eastern bloc. Russian businessmen and companies still maintain good connections with these. Since Vladimir Putin became the top man in the Kremlin, numerous former members of the foreign secret service have also gained a foothold in the world of business. They bring along their old political contacts on the periphery of the former Soviet empire. What is even more important than personal connections is the common infrastructure shared by former Soviet bloc members. In the Soviet Union, energy supply was planned centrally. Some of the now independent states therefore still depend on energy imports from Russia. The three Baltic states, for instance, purchase 100 per cent of their natural gas from Russia. In addition, the pipeline and railway network, on which coal, oil and gas are transported, connects the former satellite states with Russia. An alternative traffic and energy infrastructure that could link the Baltic states and other Eastern European countries to the EU and thus disconnect them from Russia's influence zone is being created only little by little. The creation of three trans-European networks remains a strategic objective of European foreign policy.

Russia uses the construction of pipelines to make politics with its western and eastern neighbours. Up to now, most Russian natural gas has been transported westwards via Ukraine and Belarus. Other pipelines go via Hungary to the Adriatic Sea and along the edge of the Black Sea into Turkey. Over the long term, the Gazprom group wishes to take over the transit pipelines that go through Belarus and Ukraine in a westerly direction and their respective under-

ground gas reservoirs. Even today, the transit pipelines through Ukraine are managed by a Russian-Ukrainian-German gas transport consortium. Gazprom would like to take over Belarusian Beltransgas, but has so far met resistance from dictator Lukashenko in Minsk. The fees from the gas transit are one of the most important revenues for the state budget with its high deficit. Gazprom will therefore continue turning the price screw until Belarus gives in.

With the planned Baltic Sea Pipeline from Wyborg in Russia to Greifswald in Germany, Russia wishes to secure direct supply for Western markets and reduce its dependence on transit countries Ukraine and Belarus. Later on, the Baltic Sea Pipeline is to be extended into the Netherlands and the UK. The Baltic states and Poland, which were not involved in above-mentioned Russian-Ukrainian-German gas transport consortium, will again be left out of this project. Small countries in Central Europe are not only annoyed because they have no share in the lucrative gas transit business, but they also fear for their own supply security and that they might be isolated and marginalized politically between Germany and Russia.

Russian oil is to be transported to the European market by tanker to the port of Bourgas in Bulgaria and from there via a new pipeline to the Greek port of Alexandroupoulos on the Mediterranean. One purpose of this project is to compete with the Baku-Tbilisi-Ceyhan pipeline that Western oil companies use for their imports from the Caspian region, bypassing Russia.

Russia's latest project to compete with the EU's trans-European energy networks (TEN) is the so-called South Stream pipeline that will, if completed, link Bulgaria via Serbia and Hungary with one of Europe's major gas hubs in Austria. Russia has already signed bilateral agreements with Serbia, a traditional ally, and the EU member state Hungary. South Stream will directly compete with the EU-sponsored Nabucco pipeline project. Two trans-Balkan gas pipelines will not be economically feasible. Therefore the geopolitical tug of war between Russia and the EU has started.

Russia is also extending its economic-political influence in the Southern Caucasus, while at the same time trying to prevent any rapprochement of this import transit region with the EU and the US, but also with regional powers Iran and Turkey. Early in 2006, for example, Gazprom took over the Armenian section of a new gas pipeline into Iran as well as the largest thermal power plant of Armenia. Gazprom's share in the common energy supplier ArmRosGazprom thus increased from 45 to 75 per cent. In return, the Russians will continue to invoice cheaper gas prices for the Armenians. In neighbouring Georgia as well, the Russians own part of the energy supply, but not the transit network.

Russia has signed a long-term supply contract over 25 years with Turkmenistan. As part of it, Gazprom buys natural gas from Turkmen state-owned Turkmenneftgas at a fixed price of US\$44 per 1000 cubic metres. The price on the global market where Russia can resell the gas is five times the

amount in some cases. Turkmenistan is completely dependent on the Russian pipeline network. Besides, protection from Russia is the guarantee for survival for the dictatorial regime of Turkmenistan. This guarantee has its price. The cheap gas from Turkmenistan helps to maintain the subsidized gas prices for Russia's heavy industry and private households at a low level. Producers from Central Asia cannot enter the Western market as competitors. By adding Turkmen gas, it is possible to increase the gas price for neighbouring countries, such as Ukraine, only gradually to world market level. Any sudden increase in the subsidized prices for former Soviet republics would damage Russia's reputation as a reliable energy supplier. Russian companies and Russian capital are also active in Uzbekistan and Kazakhstan. The export networks to the West belong to Russian monopolists in any case.

In Eastern Siberia, several pipelines are planned for the export to China, Japan and Korea. As early as summer 2001, Transneft presented a proposed petroleum pipeline project for the Asian-Pacific region. Since then, discussions have been held on the route and the destination of the pipeline. During these discussions, Russia has cleverly and successfully played off the energy-hungry consumer markets in Eastern Asia against each other. According to the current planning status, the pipeline is to go to the Russian harbour of Nakhodka in the Pacific. From there, the oil is to be transported on by ship to the consumer states.

Russian energy giants have even begun poaching on foreign territories. In June 2006, for instance, Gazprom announced that it would invest up to two billion dollars in the natural gas industry of Bolivia in the Andes Mountains, which had only recently been nationalized by force. Negotiations over compensation with the former investors from Spain and neighbouring Brazil had not even been finalized. Gazprom wishes to become active in Algeria and Libya as well, traditionally the region of influence of French, Italian and German companies.

Even wealthy Western Europe and North America are becoming increasingly important for Russian energy exports. Over the medium term, the US especially is interested in benefiting from Russian energy wealth and reducing their energy dependence on the states of the Middle East. There is already talk that Russia instead of Saudi Arabia is to provide the reserve capacity on the global market and would consequently be in a position to control price fluctuations. As soon as the construction of Russia's first liquefied gas plants has been completed in the oil harbours of Western Siberia and on Sakhalin, natural gas exports to the US can start. Until now, lucrative exports to the US have been prevented by the restricted range of the gas pipeline network. However, the start of liquefied gas production would generate a global market for gas for the first time, with Russia as the dominant player.

Gas OPEC

The building of major companies that are competitive on the global market is not the Kremlin's only interest. Russian energy groups aim not only to increase their own wealth and that of their shareholders, but also to serve Russian industrial and foreign policies. Over the long term, the Kremlin is working to create a 'Gas OPEC'. The Organization of Petroleum Exporting Countries (OPEC) was founded in Baghdad in 1960 as the representation of interests of the petroleum exporting countries. OPEC's member states produce 40 per cent of crude oil worldwide. Their export quota is even higher because numerous other major oil producers, such as the US, consume the petroleum that they produce almost exclusively in their own country. The objective of the organization is to keep production quotas and prices at a constant level. In the 1970s and 1980s, OPEC succeeded in controlling the worldwide market for crude oil. Some of the OPEC members, for instance the Arab oil states, utilized their market power systematically to get political support as well as modern weapon systems from the West. After oil was discovered in the North Sea and Russia entered the global oil market, OPEC's power to influence the worldwide oil price development decreased. Neither Russia nor the North Sea states have joined the organization.

To date, there has not been a worldwide organization of gas exporting countries. At present, discussions are underway in the Kremlin to forge such an alliance from Russia, with its partners in Central Asia and other major exporters. Together with the gas-producing countries in Central Asia and Iran, this group would own a critical quantity of worldwide gas reserves and could dictate prices – as OPEC did in the 1970s. Some strategists in the Kremlin are even speculating about an alliance between petroleum OPEC and a new alliance of gas exporters. The market power of such a worldwide alliance of energy producers would indeed be substantial. Until this bold vision has been realized, many conflicting interests must be overcome so that oil and gas customers do not have to worry.

Russia and Iran alone own 42 per cent of known worldwide gas reserves. The Russian monopoly on the pipeline network on Eurasian territory would guarantee the leading role of the Kremlin within gas OPEC. Even though Iran, Kazakhstan and Turkmenistan might warm to the idea of a price-determining bloc of major gas exporters, they do not like the prospect of falling under the hegemonic influence of Moscow economically and eventually also politically. Therefore, they wish for alternative export routes that bypass Russia. The most important bridging countries in this context are Turkey and the states of the Southern Caucasus. The US is behind the Baku-Tbilisi-Ceyhan pipeline that connects the oilfields in Central Asia with the Turkish port of Ceyhan on the Mediterranean Sea. Gas exports should also go via this route in future. An Austrian consortium by the name of 'Nabucco' – named after Verdi's opera about

the Babylonian ruler Nebuchadnezzar – is planning to build a 3400km gas pipeline via Turkey and Bulgaria to Western Europe. China is in the process of connecting its west by a gas pipeline – going parallel to an already existing oil pipeline – to the east of Kazakhstan. The gas export monopoly that Russia now exerts on Central Asia is consequently not going to last. Over the long term, the Russians therefore cannot rely solely on their monopoly but must also maintain close political coordination and price agreements with other regional producers.

What is particularly explosive about the gas OPEC project from a political perspective is the fact that it would create an alliance between Russia and Iran. In its policy regarding Iran, Russia must decide whether it will try, jointly with the West, to prevent Iran's military nuclear programme, or whether it wishes to push back Western and above all American influence in Central Asia together with Iran. Until now, Moscow pursues a see-saw policy as far as Iran is concerned and tries to get as many political concessions as possible from both sides.

On 15 June 2006, Putin announced at a conference in Shanghai that he would support the construction of a new gas pipeline from Iran via Pakistan to China. Iran could then supply less gas to Europe and would no longer be a competitor to Russian gas exports. Using the common pipeline network, Gazprom would also exploit the high-growth Indian subcontinent for itself. From a Russian perspective, Iran is a cooperation partner and competitor at the same time. Just like Russia, Iran is forging ahead on the international oil and gas market. However, because of economic isolation over many years and the US trade embargo imposed on it, Iran is also in urgent need of capital and modern technology. The proposed pipeline project is beneficial for Russia in two ways. Gazprom and the Kremlin believe that the merger of the Iranian and the Russian pipeline network would ensure control over the gas market of Central and Southern Asia for the two countries together. The US will hardly like that. The latter's objective is the economic and political isolation of Iran.

Iran is a key country in the great chess game over political dominance on the Asian continent. Both Russia and China wish to build privileged economic and political relations with the regime in Tehran. Both are trying to bring Iran closer to the Shanghai Cooperation Organisation (SCO). The military nuclear programme is a major obstacle to such cooperation. However, both the Chinese and the Russians are interested in finding a solution that would bind Iran closer to their zone of influence. Both are happy to accept further isolation of this regional power from the US.

The new gas alliance would be similar to the real OPEC in yet another aspect. A new alliance of authoritarian regimes with significant economic power and a menacingly large influence on the Eurasian double continent would be created. Russia, China and the dictatorships in Central Asia support each other whenever criticism from the West and opposition groups in their own countries must be averted. The EU must do everything it can to prevent the formation of

such a bloc opposed to its values and interests. One strategic objective of the Kremlin is to stop the advance of Western democracies in Central Asia. To achieve this, Moscow is even willing to support the Islamic regime in Iran that it actually dislikes. However, Russian tolerance would reach its limits if Iran wished to implement its own nuclear weapon programme. In this matter, former super-power Russia is anxious to maintain its privileges.

Atomprom

Following the Gazprom model, Russian nuclear industry is to be united as one effective power under the management of the national nuclear agency Rosatom. In addition to Rosatom, it includes the national power plant company Rosenergoatom, export companies Tenex and Atomstromexport, as well as the uranium trading company TVEL. The new major nuclear company is to be called 'Atomprom' and embodies this new agenda. Atomprom is to benefit from the political renaissance of nuclear energy and should in future be competition on the global market for other international power plant constructors, such as German Siemens AG and Japanese Toshiba group. Russian nuclear power station constructors mainly focus on the Asian market. Apart from the construction of complete nuclear power stations, the Russians can also offer other parts of the nuclear fuel cycle, such as the production of fuel rods and nuclear waste disposal sites. On the one hand, the Russian nuclear industry thus wishes to stand out from competitors on the market that come from other countries with strict environmental and anti-proliferation standards. On the other hand, customers should be tied to the Russian nuclear complex over the long term. This also applies to Iran. Thus, Russia has offered to take over important parts of the nuclear fuel cycle for the Iranian nuclear programme. This is not only to avert the danger of Iran's producing nuclear weapons, but also to ensure a new dependence of their southern neighbour on Russian technology and Russian experts. Some years ago, the Russian government made the same proposition to the Ukraine, which the latter declined with thanks.

Russia also wishes to cooperate with the Chinese in the nuclear area. China intends to construct at least 30 additional nuclear power stations over the next 15 years. For this, they aim to use Russian technology, which Western countries consider outdated and unsafe. The future Atomprom will challenge international competitors, such as American company Westinghouse, on the nuclear market. The most important arguments in favour of Russian suppliers are their low prices and less strict export controls for nuclear technology.

As for the Russian nuclear programme, Europe must choose between two evils. When Ukraine wished to replace the destroyed reactor at Chernobyl in the mid-1990s, it had two alternatives. The EU made Ukraine the proposal to

replace the lost capacity of Chernobyl with modern gas power plants. However, Ukraine insisted on replacing the reactor blocks of Chernobyl with new nuclear power stations. Eventually, Kiev threatened that it would continue running Chernobyl and then replace it with reactors of Russian design. After that, the EU declared that it was willing to help with the construction of new nuclear power stations according to Western standards. As far as China and India are concerned, the EU is presently facing the same dilemma. Should it try to get a piece of the cake in East Asia, or should it leave the field to Russian industry?

The West also depends on Russia's cooperation in the fight against nuclear proliferation. In Bushehr in Iran, south-west of Isfahan, Russia is building a 1000 megawatt nuclear power station at an estimated cost of US\$850 million. Bushehr will not be the only one. In accordance with an agreement signed in Moscow in 2002, Russia will assist Iran in the construction of at least six nuclear power stations. Iranian engineers and scientists are trained at the Kurchatov Institute for Nuclear Energy in Moscow, and work as trainees in Russian nuclear power stations where they are trained for the operation of the future nuclear park in Iran. After Western cooperation partners, such as Siemens AG from Germany, had withdrawn from Iran, the Iranian nuclear programme was no longer viable without Russian support. Several thousand Russian scientists and engineers are involved in it. The International Atomic Energy Agency (IAEA) and also the EU and the Americans suspect that Iran plans to build an atomic bomb via its civil nuclear programme. Therefore, the UN Security Council was approached – on which Russia has a veto. In addition, the proposal to enrich uranium for Iranian nuclear reactors outside Russia would strengthen Moscow's key role.

Of course, the cooperation of the Russians has its price. At the G8 Summit in Moscow in July 2006, US President Bush offered his colleague Putin a comprehensive nuclear cooperation agreement. Its three main components are: Russian cooperation in the efforts against Iran's nuclear weapon programme, an extensive transfer of US nuclear technology to Russian companies, and the long-term plan to erect an international nuclear waste disposal site somewhere in the vast countryside of Russia.

Countries such as Germany, who decided to phase out nuclear power in their own country, are in a dilemma. If they renounce the export of nuclear technology, other states with often dubious safety standards and a more relaxed attitude as far as the risks of proliferation are concerned, will take over the market. A three-component strategy will be consistent and successful over the long term: the phase-out of nuclear power at home must be continued to prove internationally that a modern industrialized country can function without nuclear power stations; modern and sustainable energy technologies, be they CO₂-neutral coal power plants or renewable energies, must become attractive alternatives to fossil and nuclear energy use on the global market; and those countries that wish to continue using nuclear energy, such as Russia, must be

persuaded to adhere strictly to the safety standards of the IAEA. This also applies to the new giant on the nuclear global market, state-owned Russian Atomprom.

On the way to becoming the great energy power

Russia wants to use its seemingly limitless energy resources to become a great power once again. After the collapse of the Soviet Union and many years of economic decline and political humiliation, the strategists in the Kremlin hope to reconstruct the old empire at least economically through its dominion over the largest oil and gas reserves and to regain the world's respect. Former Soviet republics, such as Ukraine, should be made economically dependent on the central power and thus brought to heel politically as well. As long as energy prices rise, there is the feeling that Russia is in a strong negotiation position vis-a-vis the Europeans and Chinese.

As early as at the start of the 1990s, when the Baltic states were striving to gain independence, Russia tried to put pressure on them through an energy blockade. In late 2005, Gazprom suddenly increased the gas prices for the Ukraine, thus creating an emergency for the newly elected Yushchenko government, which the Kremlin disliked. In autumn 2006, Russia's dispute with the Caucasus Republic of Georgia escalated. Here again, Russia threatened to use energy as a weapon. At the beginning of the same year, oil and gas exports had already been interrupted for several months following a pipeline explosion, the circumstances of which have never been clarified. The Baku-Tbilisi-Ceyhan oil pipeline as well as a critical rail connection were both damaged during the Russian-Georgian war that broke out over Southern Ossetia in Summer 2008. Russia has continually tried to destabilize its southern neighbours in the Caucasus to exert leverage over this critical energy transit region. Today, Russia has hardly any neighbour that it has not threatened with energy deprivation as a weapon in the event of any political insubordination.

The nature of being determines the nature of awareness, and with its new economic strength, Russia's view on the world has also changed. The policy of rapprochement with the West, which took precedence under Gorbachev and his successor Yeltsin, is now over. Russia's major companies are to be placed in a position to become competitive on the global market. Nevertheless, opening up to the global economy is not to be accompanied by liberalization at home – in other words, westernization. On this point, the Kremlin has learned from the teachers in Beijing.

The two schools of thought among Russian strategists, the 'Europeans' on the one hand and the 'Eurasians' on the other, are already fighting about which direction the country should take over the long term. The 'Europeans' focus on the country's political and economic integration into the West. Even though Russia should not become a normal member of the EU and NATO, it should

have close ties with both organizations and should thus have a say in all decisions of a fundamental nature. Joining the European Energy Charter would be possible and desirable for this group of foreign policy strategists. The best conditions possible for Russia would have to be negotiated.

The 'Eurasians', on the other hand, see Russia's future on the Asian market. Their arguments are: Europe is doomed demographically, economically and politically; the world's future is in Asia; Russia could act as a bridge between the old and the young part of the double continent. Jointly with the other former Soviet republics, it should establish some kind of 'EU East' to comprise the authoritarian states of Central Asia and controlled democracies, such as Russia itself. The alliance with China could be useful for freeing Russia from its unilateral economic dependence on the West.

Unlike China, however, Russia has so far not engaged in a major social modernization strategy. Russia's current economic growth rates, its state budget and thus also its foreign policy weight are based mainly on the export of oil and gas and are thus not diversified. Today, the contribution of energy exports to the gross national product is 21 per cent. The annual inflow of foreign exchange of US\$150 billion (2005) fuels the national economy, leads to inflation and a rising exchange rate for the Russian rouble. Investments in other industries and services are therefore no longer profitable; no major modernization of the economy is being undertaken. Driving through Russia today, the harsh difference between the few rich and the many poor, between the wealth island of Moscow and the lack of economic perspectives in the provinces is noticeable. The 'Europeans' will therefore be right eventually: there is no alternative to Russia's rapprochement to the West.

Europe's policy on Russia

For the EU as well, Russia is the most important neighbour. Russia's contribution is indispensable on the way to achieving the goal of creating a zone of security, stability and democracy in Europe as a whole. The major danger that threatens the EU's foreign policy is the formation of an alliance of authoritarian and semi-democratic states in the East. It must confront this danger with all its power. The EU needs a democratic Ukraine and a democratic Belarus beyond its borders. Therefore, relations with the smaller states of Eastern Europe may not come second to the EU-Russian relations and the wishes of Moscow. Only then is there a chance that the European social model can be exported to Russia over the long term. There may not be a separate set of rules for Russia. The democrats in the country expect EU politicians to measure their country by European standards, meaning compliance with democracy and human rights.

Democracy for the neighbours in the East is not only a goal for idealists, a pious wish for the political friendship book. The EU can only tackle the gigan-

tic tasks that lie before it with democratic partners, with partner countries where the principles of a constitutional state govern. One of the major tasks that it faces is a sustainable energy future on the European continent. Here again, Russia is indispensable.

For the near future, the countries of the EU will depend on reliable energy imports from Russia. Even a consistent policy of energy-saving and the substitution of fossil by renewable energies can only completely replace oil and gas over the long term. In the same way, however, Russia also depends on Europe. Without the money from the West, and thus above all from Europe, Russia cannot maintain its energy production, increase its national energy efficiency, or modernize its economy as a whole and prepare for a time when it will no longer be able to live on its natural resource exports alone.

European investments in a sustainable and environmentally friendly energy policy for Russia promise to be beneficial in three ways: for investors from the EU with their substantial know-how, the modernization of Russia's economy, the building of a sustainable energy supply in the cities of the country, and the utilization of the immense potential for renewable energy technologies would be the opportunity of the century, which could also create wealth and jobs in all of Western Europe; and if Russia succeeds in managing its wealth of resources more efficiently, more will be left for export. In all scenarios for a future based on renewable energy, the increasing percentage of natural gas, at least as interim energy, plays a key role in replacing coal and nuclear power. The combustion of natural gas is cleaner and releases less carbon dioxide per energy unit than its fossil competitors coal and oil. For the export of natural gas, Russia could extend its national reserves and could show more concern for the fragile ecology of the new exploitation regions in the Arctic and offshore of Sakhalin. Lastly, the global climate problem cannot be solved without the contribution of Russia.

Now Russia has better cards to play than the Europeans do. However, this is not only because of the high energy prices and because of Europe's increasing dependence on Russian oil and gas, but also because of the lack of an agreement among the Europeans. Europe therefore needs a common energy policy rather than each member going its own way. Clear ideas in energy policy must be one of the pillars of the future Russian strategy of the EU. This includes a comprehensive understanding of energy security.

Chapter 4

The Rise of Asia

China and India joining the global economy has led to a dramatic increase in demand on worldwide energy markets. For these two 'emerging powers' of the 21st century, energy and foreign policy are closely connected. The region and its dynamic economic growth highly depend on energy imports. Apart from oil from the Middle East, energy imports from Russia, Central Asia and Africa play an increasing role. Over the past few years, a close network of energy-political cooperation and trade flows have developed among the states of Central and East Asia.

However, despite this economic cooperation, the emerging powers of Asia compete against each other over access to energy resources. Political tensions have risen in particular between China and its neighbours over the past few years. As most states in East and South Asia have only limited own fossil fuel resources, their focus is on extending nuclear energy. However, in the shadow of civil utilization of nuclear energy, there is a dangerous nuclear armament race. The promotion of renewable energies as an environmentally friendly alternative is slowly gaining momentum. Japan, one of the foremost technological nations in the use of photovoltaic and other modern, environmentally friendly technologies, could lead the way in this regard. Furthermore, any tentative beginnings of regional cooperation have so far been overshadowed by historic rivalries. But closer regional cooperation following the example of the EU would actually be the best alternative to growing political and economic tensions for East and South Asia.

China and India are still trying to establish their role at a global level. Over the medium term, both countries wish to act on a par with the US, Europe and Russia in a multipolar world order. China's state-owned petroleum companies are entering the global market without regard for the environment or human rights. It would be in the interest of Europe if the emerging powers of Asia were to be integrated into an international system of institutions and rules to ensure that their development takes place peacefully.

Asia's new energy hunger

China's economy is booming. According to the government in Beijing, its energy requirement will double in the period 2005–2015 alone. Estimates of the