Prospects of a triangular relationship? Energy relations between the EU, Russia and Turkey

Linke, Kristin (Ed.); Viëtor, Marcel (Ed.)

FRIEDRICH EBERT STIFTUNG

Prospects of a Triangular Relationship?

Energy Relations between the EU, Russia and Turkey

KRISTIN LINKE AND MARCEL VIËTOR (EDS.)

April 2010

- The energy sector is the driving force in relations between the EU, Russia and Turkey. The EU is a major consumer, Russia a major supplier and Turkey is both an important consumer and a transit country, mainly for natural gas but also for crude oil. Since the three players share an interest in a secure and smooth energy supply and face common external challenges, this constellation suggests that they should explore the potential for a cooperative energy triangle between the EU, Russia and Turkey.

- So far, however, three loose and partly inconsistent bilateral relationships prevail. Russia has started to rethink its Energy Strategy and to turn its attention away from the European Union towards new partners, such as China in the East and Turkey in the West. Turkey's foreign energy policy, too, has ceased to focus on the EU and has instead begun to concentrate on its role as an energy hub for resources from Russia, the Middle East and the Caspian region.

- Since energy relations between the EU and Russia, as well as between the EU and Turkey are in need of improvement, while relations between Russia and Turkey are flourishing, the EU in particular should pursue the development of a triangular energy architecture. This is even more important as natural gas is likely to play a crucial role in the necessary transformation process towards a supply based on low carbon energy sources. Success, however, is possible only if all three players understand trilateral energy cooperation as a win–win situation, rather than as a bargaining tool to be used against one another.

DGAP

Content

Introduction

Kristin Linke, Marcel Viëtor

In discussions of the European Union's security of energy supply, politicians and experts have started to regard Turkey as the key country on a new supply route for conventional energy sources. New pipelines crossing Turkish territory have been proposed to bring natural gas – and, to a lesser extent, also crude oil – from the Caspian, Central Asian and Gulf regions to Europe. The debate on these projects has mainly concerned tapping non-Russian energy sources, sometimes in addition to, but often as an alternative to gas and oil from Russia.

In recent years, however, relations between Russia and Turkey have intensified considerably, especially in the energy sector. Turkey has become an important market for energy from Russia, and it is likely soon to become an important transit country for Russian gas and oil as well. Thus, the European Union, which has been used to purely bilateral relations with both countries for decades, is now facing a changing situation and needs to reconsider relations between itself, Russia and Turkey.

The Friedrich-Ebert-Stiftung (FES) and the German Council on Foreign Relations (DGAP) organised an international experts' meeting on this topic in Berlin in December 2009. Participants with political, business and academic backgrounds were invited, from EU institutions and member states, as well as from Russia and Turkey. The aim of the meeting was to explore the potential for a cooperative energy triangle between the EU, Russia and Turkey, instead of three loose and partly inconsistent bilateral relationships. We are delighted to be able to share part of the discussion and further considerations with a broader public through this collection of four papers.

Friedemann Müller starts by asserting that the prospects of a common EU energy policy have improved under the Lisbon Treaty, and goes on to elaborate three major challenges that the EU will face in the future: oil and mobility, renewable energy and climate change, and natural gas and supply infrastructure. One of his conclusions is that natural gas will play an important role in the necessary transformation process towards a supply based on low carbon energy sources. In addition, he states that, as the supply structure becomes more complex, Russia, Turkey and the European Union could be seen as the possible core of a new triangular market architecture, an option worth developing more thoroughly.

Yurdakul Yiğitgüden presents Turkey's foreign energy policy, which has, in the EU's perception, shifted from the European periphery to being a new central element of energy policy, an energy hub. He also describes the major infrastructure projects involving Turkey and Russia, and Turkey and the European Union. To him, the intensified energy cooperation between Russia and Turkey has two main consequences for the EU: it will help to increase the volume of gas flowing to EU countries, but it will also harm the European Union's efforts to diversify its gas imports away from Russia. He suggests, consequently, that the European Union deepen its energy cooperation with Turkey, and also that Turkey and the EU speed up accession negotiations.

Tatiana Mitrova points out that Russia's new Energy Strategy until 2030 is aimed at developing new export markets in East Asia, besides traditional European markets. Other strategic priorities of Russia's foreign energy policy include a focus on liquefied natural gas (LNG) and the diversification of export routes through new pipeline projects. She highlights that this shift is mainly motivated by an emotional politicisation of energy relations between Russia and its main customers in the EU. Energy relations between Russia and Turkey are, on the contrary, based on purely pragmatic economic incentives and developing substantially. As a result of becoming a major transport corridor for Russian gas and oil exports to the EU, Turkey will gain considerable leverage in negotiations with both Russia and the EU.

Stefan Meister states that the mainly energy driven economic cooperation, which has led to the Russian–Turkish rapprochement, also entails a security dimension and can pose the key to settling several conflicts in the South Caucasus. If Turkey and Russia eventually manage to solve the Nagorno-Karabakh conflict, and if Turkey normalises its relations with Armenia, this could also enable the establishment of a new and secure transport corridor for gas and oil from the Caspian and Central Asian regions. There, the EU, Russia and Turkey face the same main competitor – China – and would therefore be well advised to develop comprehensive trilateral energy cooperation. He concludes, however, that this is unlikely to happen until all three players understand trilateral energy cooperation as a win–win situation, rather than as a bargaining tool to be used against one another.

It is obvious that a cooperative energy triangle between the EU, Russia and Turkey is far from a reality or even a priority of its political leaders, since bilateral thinking prevails. But the potential benefits of triangular cooperation are also evident as the three players share an interest in a secure and smooth energy supply and face common external challenges. Since energy relations between the EU and Russia, as well as between the EU and Turkey are in need of improvement, while relations between Russia and Turkey are flourishing, the EU in particular should pursue a triangular architecture as an especially fruitful approach.

We would like to express our sincere gratitude to the four authors and all other speakers and participants in the meeting for sharing their thoughts with us. We would like to continue this discussion and hope that this collection of papers will interest the reader and develop the debate about the European Union's security of energy supply.

A European Energy Policy – Challenges and Perspectives

Friedemann Müller

1. Introduction

While few doubt the necessity of a common European energy policy, the struggle over national and corporate interests has long undermined the substance of such a policy. As a result, it is good news that the goals of a unified EU energy policy have largely been clarified and competences for implementing this policy unambiguously assigned as a result of the entry into force of the Lisbon Treaty. As described in Article 176A of the Treaty, »Union policy on energy shall aim, in a spirit of solidarity between Member States, to:

(a) ensure the functioning of the energy market;
(b) ensure security of energy supply in the Union;
(c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and
(d) promote the interconnection of energy networks.«

Although the Treaty will not put an end to conflicting interests within the European Union, it will contribute to solving some of the most important challenges facing a common European energy policy and pave the way for an unprecedented restructuring of energy supply in Europe.

Among the challenges is the question of how to deal with nuclear energy and coal, given that both types of energy are likely to lose market share, according to all serious estimates. Despite this expected decline, it remains to be seen whether carbon capture and storage (CCS) will maintain the relevance of coal in electricity production over the next four to five decades and whether nuclear power can be used to buy some badly needed time during the transition to widespread use of renewable energy, a particularly controversial question. It is clear that the share of oil in the European energy mix will fall in the same manner as coal and nuclear power. Natural gas is likely to obtain a larger share during the coming decades as a substitute for oil, which is more emissions-intensive and has less abundant reserves, and also for coal, a particularly emissions-intensive type of fuel if CCS technology cannot be sufficiently developed.

Three issues in particular are likely to constitute the major challenges for the European Union in this restructuring process: *oil and mobility, renewable energy and climate change,* and *natural gas and supply infrastructure*. They shall therefore be closely examined in this chapter, which will first describe the challenges and then offer policy recommendations. A particular focus will be the issue of natural gas and supply infrastructure.

■ *Oil and mobility.* How can distribution conflicts be prevented and oil-based mobility secured? Global oil production is expected to peak, while global oil demand is expected to skyrocket as emerging economies (including Asian countries, which alone account for three times as many inhabitants as all industrialised countries combined) increasingly motorise, following the model set by industrialised countries during the second half of the twentieth century.

■ *Renewable energy and climate change.* What are the most effective and economical instruments for organising a transition from the Fossil Fuel Age to the Age of Renewable Energy? It is clear that a new energy supply structure based on renewable energy sources must be established within a short time if the goal of fighting climate change according to the Climate Convention (1992) and the Bali Accord should be reached. The change from a still high growth of global greenhouse gas emissions to a decline has to happen before 2020.[1] However, it is equally evident that the challenge of bringing about a full transition to renewable energy will occupy European policy-makers for many decades to come.

■ *Natural gas and supply infrastructure.* How can Europe, as the world's largest importer of natural gas, organise its supply infrastructure in a way that ensures supply, meets the needs of the domestic market and promotes competition?

2. What Are the Major Challenges?

2.1 Oil and Mobility

Oil production has peaked in many regions of the world, including North America and Europe, but also in countries such as OPEC founding member Indonesia. Other regions, such as the Caspian Sea, can still increase their production. However, evidence is mounting that global oil production can be expected to peak within a relatively short timeframe. The International Energy Agency (IEA)

1. IPCC, Climate Change 2007: Mitigation of Climate Change: Summary for Policymakers, p. 15. Available at: http://www.ipcc-wg3.de/publications/assessment-reports/ar4/.files-ar4/SPM.pdf (accessed on 8 March 2010).

projects that this peak will occur around 2020, while others, such as the Association for the Study of Peak Oil and Gas, expect the peak even earlier. The question on the supply side of whether global oil production will level off or whether it will be possible to continue to increase production by a small amount (perhaps 1 per cent) is eclipsed by the gravity of the situation on the demand side. Automobile stock in China is anticipated to grow more than tenfold by 2030, compared to 2005, with similar growth to be expected in India.[2] The transportation sector, of which 92 per cent depends on oil as a fuel, is the fastest growing consumer of oil worldwide, according to the IEA World Energy Outlook 2009. The growing imbalance between demand and supply, which was only temporarily suspended by the recent economic crisis, will lead to distribution conflicts, as we have seen in Africa (Sudan and Nigeria) and thus directly impact European security interests, unless it massively accelerates the development of alternative fuels for the transportation sector in countries with advanced technological capacities.

2.2 Renewable Energy and Climate Change

At the European Council meeting in Brussels on 8–9 March 2007, the European Union committed itself to an integrated climate and energy policy. This commitment was the logical result of a recognition that the nature of energy production in Europe, as in the rest of the world, must be transformed. This transformation has become necessary as a result of the fact that fossil fuels, like oil, are an exhaustible resource but more importantly because the absorptive capacity of the atmosphere with regard to carbon dioxide is limited. Almost 80 per cent of energy needs in the European Union are met through fossil fuels, namely oil, coal and natural gas. This situation is not sustainable and is incompatible with EU commitments to reduce greenhouse gas emissions (mainly carbon dioxide) by at least 20 per cent, compared to 1990, by 2020 and by 85 per cent by 2050.

2.3 Natural Gas and Supply Infrastructure

More than other energy sources, supply of natural gas has become an issue of security policy concern as a result of the fact that shortfalls in the supply of natural gas can be balanced through spot markets only to a limited degree, unlike shortfalls in the supply of oil. The establishment of strategic reserves to bridge temporary gaps in supply is also more complicated and expensive than in the case of oil, and no EU-wide mutual assistance regime is currently in place to ensure continuity of supply in case one member state should face a supply crisis. The concentration of supply to Europe in the hands of a few natural gas producers, cemented by the limited diversification in transport infrastructure, especially in Central and Eastern Europe, is a further cause for concern. For example, Germany, as the largest consumer of natural gas in the European Union, can obtain imports only from the North Sea and Russia (and not from other sources, such as Algeria, Nigeria and Qatar) due to the absence of necessary infrastructure to permit greater diversity of supply. Major pipelines connecting Russia with Western and Southern Europe also lack reverse flow capability. As a result, in January 2009 the interruption in the westward flow of natural gas from Russia, brought about by a dispute with Ukraine, left southeast Europe in a serious supply crisis that could not be addressed by channelling back natural gas available downstream.

These obvious deficiencies in the natural gas supply infrastructure are partly related to the very nature of natural gas but are also due to the lack of general awareness with regard to security of supply as a public good which cannot be adequately provided by the private sector alone. Transporting natural gas by tanker is not as straightforward as in the case of oil. Specialised infrastructure is required to produce liquid natural gas (LNG) through liquefaction and to recover natural gas through regasification at the ports of departure and arrival, respectively. The costs of infrastructure are such that it is usually cheaper to transport natural gas by pipeline over distances less than 4,000 kilometres, while in some cases geographical factors make the use of LNG uneconomical, even over greater distances. Given the geographical situation of Europe, with 80 per cent of the world's known reserves within 5,000 kilometres of its borders, the use of pipelines is far cheaper than the alternative. However, what pipeline infrastructure lacks is flexibility: its endpoints are largely fixed, as is its transport capacity. Due to the nature of this infrastructure, importers and exporters generally conclude long-term supply contracts, limiting competition. In Russia, the world's largest exporter of natural gas, Gazprom, enjoys a monopoly on sales of natural gas, further limiting competition. Major import

2. IEA, World Energy Outlook 2008, p. 100 figure 3.7.

companies are in turn bound to Gazprom through long-term supply contracts and capital exchange, thus making them adversaries of the emergence of a competitive import market. For example, E.ON-Ruhrgas, the owner for decades of the only potential LNG site in Germany, has still not developed this site, thus preventing Germany from obtaining LNG.

Discussions on major pipeline projects have often dealt only in a cursory manner with the issue of establishing an optimal European supply infrastructure, which would imply taking into account security of supply and market efficiency. The discussion on the Nord-Stream Pipeline from Vyborg in Russia through the Baltic Sea to the German port of Greifswald has focused almost exclusively on the question of whether it would be fair to exclude the Baltic Sea littoral states from the pipeline route rather than dealing with its implications for competition and import diversification. Although fierce and often bitter, the debate on the Nabucco pipeline project has also remained rather superficial. This pipeline is intended to run from Eastern Turkey through Bulgaria, Romania and Hungary to Baumgarten near Vienna in Austria and be supplied with natural gas from fields in Azerbaijan, Turkmenistan and possibly Kazakhstan, Iraq, Iran and even Egypt. The supporters of this project argue that it would make Europe less dependent on Russian natural gas and link Europe as the world's largest natural gas importer to a region even richer in natural gas than Russia. The opponents of the project point out that it is unclear whether states other than Azerbaijan could actually feed sufficient quantities of natural gas into the pipeline and that the pipeline would cover only 5 per cent of demand in Europe, while offending Russia as the EU's most important supplier. As a result, they claim, the benefits of the project would be outweighed by its costs. This debate does not address a number of important questions, however:

■ Can Europe afford not to be linked to the region of the world richest in natural gas, spanning from the Southern Caspian to the Persian Gulf, at a time when Russia has declared its intention to direct its additional export capacity towards the Asian emerging economies?

■ Can Europe depend on Russia to maintain its gas deliveries, even if resources become scarce, transit problems arise or political disputes emerge between Russia and Europe? The pressure applied by Russia on Europe during its WTO accession process does not give cause for optimism in this respect.

■ Should Europe pass up the opportunity to exploit its comparative advantage of being geographically positioned close to more than 70 per cent of world natural gas reserves? With the necessary infrastructure in place, this advantage would allow the establishment of a truly competitive market, the world's largest, together with a spot market extensive enough to set a price for natural gas independent of the price of oil.

These issues cannot be resolved solely by the Nabucco pipeline project, but do draw attention to the fact that Europe must not only diversify its natural gas imports but also step up its diplomatic efforts to resolve problems burdening the European Union's relations with Iran, Turkmenistan (including the legal problem of a pipeline crossing the Caspian Sea), Iraq with its neglected natural gas production, and even Qatar, which could transport natural gas to Europe far more cheaply by pipeline than by tanker via a route around Cape Horn.

3. What Is to Be Done?

With its green paper »Towards a European Strategy for the Security of Energy Supply«, published in 2000, the European Commission launched a campaign to draw attention to the emerging issue of energy scarcity and to deficiencies in the approach taken to deal with climate change. This green paper was widely disparaged by critics, who attacked the Commission for claiming competences they felt should remain with member state governments and the private sector. Nonetheless, the Commission has been vindicated insofar as the issues highlighted in its green paper have become matters of public concern in the aftermath of the terrorist attacks of 11 September 2001, the war in Iraq in 2003 and the subsequent dramatic rise in oil prices, and the natural gas conflict between Russia and the Ukraine in 2006, not to mention the fact that it has become apparent that greenhouse gas emissions would grow despite the entry into force of the Kyoto Protocol.

A new green paper, entitled »A European Strategy for Sustainable, Competitive and Secure Energy«, was issued by the European Commission on 8 March 2006. This green paper took up many of the same ideas that had

been raised in the earlier green paper but was received far more positively by decision-makers in Europe. Ultimately, the paper induced the European Council to request a more strategic document from the Commission, to be delivered at the beginning of 2007. The resulting paper, »An Energy Policy for Europe«, was issued on 10 January 2007 and led to a number of decisions by the European Council during the German Presidency in the first half of 2007, including the adoption of the »Energy Action Plan« in March 2007. This Action Plan outlines a number of goals with regard to improving competition in the internal market, promoting the establishment of infrastructure linking Europe to outside suppliers, improving energy saving and reducing greenhouse gas emissions. It also set specific targets, including a 20 per cent improvement in energy efficiency, a 20 per cent share of renewables in European energy production and a 20 per cent reduction in greenhouse gas emissions (as a unilateral measure) or a 30 per cent reduction in greenhouse gas emissions (if other states took corresponding measures), all to be achieved by 2020. The collection of measures proposed to reach these goals and targets did not lead to a comprehensive strategy, however. Many problems, such as a phasing-out of oil as Europe's major energy source, were not addressed.

The Lisbon Treaty, which entered into force on 1 December 2009, provides for and indeed requires the establishment of a common European strategy, combining in a comprehensive programme the most critical aspects of a transformation of energy use in Europe, namely: (1) an end to the Oil Age; (2) an energy demand structure that is compatible with climate policy imperatives; and (3) a common European policy for ensuring the security of energy supply in the field of natural gas distribution through a storage and solidarity system comparable to the existing one for oil and the construction of transport infrastructure (LNG ports and a pipeline network internally and between relevant suppliers and EU territory).

3.1 Oil: An Exit Strategy

Given that almost half of all explorable conventional oil has already been consumed and that three billion people in the Asian emerging economies alone are moving towards adopting an industrialised lifestyle, with mobility comparable to that of the advanced industrialised countries, the need to establish an exit strategy from the Oil Age has become urgent, particularly in the latter. The emerging economies, due to their lower level of economic and technological development, will need more time to organise this transformation process.

Such a transformation cannot imply an end to, or even a significant reduction, of mobility in industrialised countries. Rather it will require a substitution of oil by other, non-fossil fuel energy sources. Currently, 52 per cent of oil consumption in the European Union is accounted for by the transport sector, a figure that is likely to rise, according to the IEA World Energy Outlook 2009. In other sectors (heating and industry), oil can easily be substituted by natural gas. In the transport sector, the most feasible alternatives are electricity, biomass (which poses concerns with respect to food security) and hydrogen, although hydrogen, depending on the technology applied, might also require electricity for its production. Covering the additional electricity requirements of the transport sector using renewable energy will be a major challenge for the European Union.

To create incentives for a technological revolution in the transport sector, the European Union should promote R&D in this area and set up a regulatory regime in line with a strategy to progressively reduce reliance on oil, such as a ban on cars using oil as their primary fuel from 2030. These measures should drive competition within the car industry to develop the automobiles of the future. Nonetheless, even if these actions are taken, I assume that it will be at least three decades before the transportation sector no longer relies on oil, with the aviation sector potentially requiring an even longer transition period.

3.2 Renewable Energy: Climate Policy Imperatives

If the EU's goal of reducing its greenhouse gas emissions (GHG) by at least 20 per cent compared to 1990 by 2020 and by 85 per cent by 2050 are to be reached, dramatic measures will have to be taken to improve energy efficiency, promote energy saving and shift the energy mix away from fossil fuels towards renewable energy. The experience of the past twenty years shows that energy efficiency (energy consumption per GDP unit) cannot be improved in highly developed countries or regions such as the European Union by more than 2 per cent per year. In fact, during the past ten years, energy efficiency has improved at a rate of less than 1 per cent per year. Gov-

ernment programmes have only had limited impact on energy saving habits, at least in the short term. Considering that economic growth is expected (and desirable), the impact of efficiency improvements and energy savings on total energy consumption will mostly be negated by economic growth. Major efforts must therefore be made to increase the share of renewables in the energy mix. Not only are new technologies needed to this end, but so are major investments to substitute above all coal in electricity production and oil in the transport sector with renewables (wind power, solar power and biomass). In future, electricity should be expected to increase its share in energy consumption with respect to the direct use of primary energy sources in the transport sector but also in household use and industry.

The European Union has committed itself to reducing GHG emissions unilaterally by 20 per cent with respect to 1990 levels by 2020 and by 30 per cent, if other countries similarly commit themselves to emissions reductions. The failure of the Copenhagen Summit in December 2009, at least in terms of its original goal of establishing binding emission reduction targets, has created uncertainty about EU obligations. Some member states are likely to argue that the European Union should not expose itself to further a competitive disadvantage if other countries, such as the United States or China, refuse to accept restrictions of their own. However, the European Union would be well advised to take a more progressive stance, keeping in mind that the cost of not taking action to mitigate climate change will be far greater than the cost of reducing GHG emissions, as Nicholas Stern, former Chief Economist at the World Bank, made clear in his famous 2006 report. Market mechanisms will be essential to ensuring that the least-cost approach is taken to reducing GHG emissions. This implies that fossil fuels are priced at a level that would internalise the costs of carbon emissions resulting from their use, correcting distorted market signals and ensuring that the »polluter pays« principle is applied. The European Union launched an effort in 2005 to establish such a price through the Emissions Trading System (ETS). Under the ETS, emission certificates will be auctioned and no longer distributed for free from 2013 onwards. However, a full internalisation of the costs of emissions requires a steady reduction in the number of emission permits available on the market, thus permitting the European Union to respect the obligations it has assumed in terms of burden sharing. Such an approach would be far more constructive than the one that ultimately led to the failure of negotiations in Copenhagen.

Pressure is building to reach a new global climate agreement soon, and the European Union will certainly have to keep its commitment to reduce emissions by 30 per cent on the table in order to move other countries to join a burden-sharing regime. Reducing emissions by 30 per cent by 2020 is an extremely ambitious undertaking, however. To reach this target, significant steps will be required to improve energy efficiency and transform the electrical power and automobile industries, in particular. Carbon capture and storage should be supported as a stopgap, but a much more rapid increase in the use of renewables for power generation will be indispensable for the long term. If a fair price is attributed to fossil fuels by making the purchase of emission certificates mandatory, demand for renewable energy sources will develop naturally.

Local wind and photovoltaic power production will certainly not be able to cover demand by themselves. Larger projects, such as solar power production in North Africa, will have to be considered. Industry is obviously ready to invest in such projects, as the huge Desertec solar power project demonstrates. However, concerns such as providing legal security for investors, protecting production sites and transport lines against terrorist attacks, and combating corruption must be taken seriously and dealt with at an appropriate political level. To this end, a high-level dialogue should be established with governments in North Africa in particular.

At the same time as the use of renewables is increased in power production, a transformation of the transport sector, most of all the automobile industry, must be effected, so that the use of fossil fuels in this sector is ultimately eliminated entirely. This process should be coordinated not only within the European Union but also at the OECD or G8 level in order to avoid a massive distortion of competition.

3.3 Natural Gas: A Common Policy for Security of Supply

Two tasks will be essential to ensuring the security of Europe's natural gas supply. First, the European Union must establish the internal transport infrastructure to deliver

natural gas from its point of arrival – pipeline terminals or LNG ports – to where it is needed, develop storage capacities and organise a solidarity-based distribution system to be activated in case of a supply emergency. Second, the European Union must do more to establish an external transport infrastructure that would allow any potential supplier to deliver natural gas to Europe. The European Union must accept that Russia will remain its major natural gas supplier for decades to come. At the same time, Russia must come to understand that it cannot treat natural gas as a product different from oil and other raw materials, with its supply subject to a different set of rules and principles. Furthermore, exclusive long-term contracts must not continue to dominate supply relationships. The share of natural gas in the European energy mix having grown constantly over recent decades, it is too important as an energy source for it not to be fully exploited to improve the EU's security of supply position.

Although the European Union has made much progress with regard to a common policy for security of supply in the natural gas sector, the results have been far from sufficient. In 2008, the European Union had a storage capacity of 80 billion cubic metres, the equivalent of roughly 15 per cent of annual consumption (533 billion cubic metres) and 25 per cent of annual imports from outside the European Union (319 billion cubic metres). The differences in storage capacity between EU member states are considerable. In Italy and France, storage capacity represents 15 per cent of annual consumption, in Germany 26 per cent, in Austria and Slovakia above 40 per cent and in Latvia over 100 per cent. By contrast, many smaller countries have much lower storage capacities; nine EU member states have next to no storage capacity at all. The projected expansion of storage facilities would lead to an overall increase in capacity of 67 per cent,[3] resulting in capacity equivalent to 25 per cent, or 90 days, of annual consumption. If this capacity is fully utilised, it will provide a reserve similar in extent to the oil reserves required by the International Energy Agency of its member states, a group of countries nearly identical in membership to the OECD.

3. Wochenbericht des DIW No. 48/2009, Hella Engerer, Manfred Horn, Anne Neumann, Bei erneutem Gasstreit zwischen Ukraine und Russland: Wäre Europa jetzt gewappnet? Berlin 2009, pp. 837–43. Available at: http://www.diw.de/documents/publikationen/73/diw_01.c.343853.de/09-48-3.pdf (accessed on 8 March 2010).

The expansion of natural gas reserves will do little to resolve the problem posed by insufficient transport infrastructure. In the absence of a comprehensive initiative to address this problem, those countries in Central, Eastern and South-Eastern Europe with the highest dependence on Russian natural gas will remain vulnerable to supply crises, even if overall storage capacity is increased. Although the LNG import capacity of ports in the European Union, currently at 108 billion cubic metres, is expected to increase during the next five years, this expansion will also not benefit the countries with the greatest vulnerability to an interruption in the flow of Russian natural gas.

As a result, providing the possibility of »reverse flow« is urgently necessary, although resisted by the owners of the pipelines, since this might attract competition. In this context, it is understandable that the European Commission is pushing for an unbundling of the ownership of production and transportation capacities. It remains to be seen whether the European Union is also able and willing to engage itself in and possibly pay for the provision of supply security as a public good. To this end, the European Commission could either take regulatory measures to force pipeline owners to install reverse flow equipment or cover the cost of installation with taxpayers' money.

Outside EU territory, measures will have to be taken to diversify transport infrastructure for importing natural gas into the European Union and to establish a legal framework that would give investors and importers security with regard to their contracts with suppliers. The Energy Charter Treaty (ECT) provides for such a regime, but neither the most important supplier, Russia, nor current and potential suppliers in Africa (Algeria, Libya and Nigeria) and in the Middle East (Iran and Iraq) are parties to the Treaty. Thus, the European Union would be well advised to heed the proposal made by President Dmitry Medvedev of Russia in April 2009 for a revised ECT, even if Medvedev's proposal as such is not acceptable.

Policy aimed at the diversification of natural gas supplies should not be restricted to support for additional pipelines, such as the Nabucco pipeline, which has been designated by the European Commission as one of four priority projects in the energy sector (the other three being linked to electricity infrastructure). It should also aim at the establishment of a political framework that would make possible economic deals and investments of a meaningful order of magnitude. Approaches to addressing different

concerns associated with negotiating supply projects with countries such as Iran, Iraq, Turkmenistan and Libya need to be given more attention if deals for importing natural gas are to be concluded.

Russia, however, will remain the major supplier for Europe, while Turkey could become the main transit country which ships natural gas from the Middle East, the Caspian region and Russia to Europe. It is high time that this changed market constellation was recognised and common strategies developed to optimise the supply structure.

4. Conclusions

Two events that took place in December 2009 – the entry into force of the Lisbon Treaty and the failure of the Copenhagen climate summit – should impel the European Union to lay out a long-term energy strategy that is nothing less than a strategy to bring about an end to the Oil Age and the dawn of the Age of Renewable Energy. The Lisbon Treaty provides the European Union with a mandate to establish a common energy policy based on solidarity, sustainability, security of supply and economic efficiency. The failure of the Copenhagen negotiations should be seen as a signal that the European Union will have to take an even greater leadership role in a process in which it has held a leading position over the past two decades, during which time China and the United States as the major powers and emitters have been unable to lead for domestic reasons.

Coal, linked to carbon capture and storage technology, may still have a role to play for a while. What is clear is that there is not enough oil on the world market to satisfy the growing demand from the global transport sector if 90 per cent of the sector continues to be fuelled by oil. Demand for oil is further kept high by a price that does not fully take into account its environmental costs, the costs of securing its supply and the costs of conflicts linked to its distribution.

As a result, regulatory measures will have to be put in place to bring about: (1) the internalising of the costs of GHG emissions through a trading system that makes emissions-free energy sources competitive, and (2) an end to the use of oil as a fuel, particularly in the transport sector. The sooner the European Union can bring about such a transformation, the more competitive the European economy will be in the future. The European Union should not only be a pioneer in this transformation process for its own sake but also to provide a model for other developed and emerging economies. The EU Emission Trading System is a good start in this direction. However, the European Union must develop it further by expanding it to include all energy-consuming sectors, by fully integrating the »polluter pays« principle and by providing incentives to implement a global emission trading system, which would finally internalise the costs of greenhouse gas emissions at an international level.

Natural gas, however, will certainly play an important role in the transition away from more carbon-intensive sources of energy over at least the next four decades. The cleanest of the fossil fuels and with comparably abundant reserves must be utilised in a modernised market structure, including an extended supply infrastructure.[4] The increased number of transit countries, the diversification of Russian exports and the emergence of new options on the supply side make a more complex supply structure necessary. This should be seen as an opportunity by suppliers, transit countries and consumers alike. In this regard, a potential triangle of Russia (as a supplier), Turkey (as a transit country and consumer) and the European Union (as a consumer) could be seen as the possible core of a new market architecture, an option which is well worth developing more thoroughly.

4. The majority of new power stations is still based on fossil fuels. If we exclude the CCS option with its unclear potential for realisation, we have to support natural gas power stations instead of coal power stations. This is because of the lower emissions and lower investment costs of natural gas power stations. However, due to their expected lifetime of about four decades, it will take such a long time until these power stations might be substituted by electricity from renewable energy.

Turkey – Turning the European Periphery into an Energy Hub?

Yurdakul Yiğitgüden

1. The Turkish Energy Sector

During the period 1990–2008 primary energy demand in Turkey grew at a rate of 4.3 per cent. Under the influence of the global crisis, however, Turkish energy demand has fallen, from 107.6 million tonnes of oil equivalent (mtoe) in 2007 to 106.3 mtoe in 2008.[1] It is expected that primary energy demand will grow, on average, by 4 per cent annually until 2020. The share of imported energy has increased over the past ten years from 64 per cent to 73 per cent and, according to different scenarios, will increase to 75 per cent or 78 per cent by 2020. In the 1970s, oil was the main energy resource in Turkey, with a share of about 55 per cent. Turkey started to import natural gas in 1987, and by 2008 it had become the leading energy source, with a share of 32 per cent, followed by oil at 30 per cent and coal at 28 per cent. The share of renewable energy in the primary energy mix is about 4 per cent.

In 2008, indigenous crude oil production in Turkey was 2.2 million tonnes. In the same year, 21.7 million tonnes of crude oil were imported from the main producer countries in the Middle East, including Iran (35 per cent), Saudi Arabia (14 per cent) and Iraq (9 per cent), as well as from Russia (33 per cent) and Kazakhstan (3 per cent). Russia had the highest share of petroleum products (totally 8.9 million tonnes), at 43 per cent. Between 1987 and 1994, natural gas was imported only from the USSR. By 2008, however, indigenous natural gas production had reached 1 billion cubic metres (bcm). On top of that, a total of 37.8 bcm of natural gas was imported from Russia (62 per cent), Azerbaijan (12.3 per cent), Algeria (11.1 per cent), Iran (11.0 per cent), Nigeria (2.7 per cent) and other countries (0.9 per cent).

2. Turkey's External Energy Policy

Turkey's increasing dependence on energy imports is a major challenge for its foreign policy. Besides diversifying supply and energy sources, Turkey is strengthening its economic and political ties with supplier countries. In the 1960s, Turkey proposed the development of an oil pipeline from Iran to the Turkish Mediterranean cost, but could not obtain the support of the Shah. The second attempt, this time with Iraq in the 1970s, was successful. The oil pipeline which runs from the Kirkuk oil fields of Northern Iraq to Ceyhan marine terminal on Turkey's Mediterranean coast, with a capacity of 71 million tonnes per year, also supplies Turkish refineries. In the 1980s, then Prime Minister Turgut Özal promoted the development of a natural gas pipeline from Qatar to Turkey and continuing to Europe. There was not much support from European countries for the expensive project, however, and Turkey's natural gas demand forecasts did not justify the huge investment. During the same period, Turkey constructed the natural gas interconnector to the Bulgarian border. Today, the Trans-Balkan natural gas pipeline from Russia – via Ukraine, Moldova, Romania and Bulgaria – to Turkey can deliver 14 billion cubic metres per year (bcma) to the Turkish transmission system.

Turkey's Caspian diplomacy in the late 1990s and early 2000s was crowned by the commissioning of the Baku–Tbilisi–Ceyhan (BTC) crude oil pipeline and the Baku–Tbilisi–Erzurum natural gas pipeline (BTE), both running from the Azerbaijani section of the Caspian Sea to Turkey. The 1,768 km long BTC pipeline – inaugurated in June 2006 – carries 1 million barrels per day (bpd) of crude oil from the Azeri–Chirag–Güneshli (ACG) fields of the Caspian Sea to Turkey's Mediterranean coast. The BTE natural gas pipeline runs parallel to the BTC pipeline. It is planned to extent its initial capacity of 7 bcma to 20 bcma. Turkish policy has often been misinterpreted by foreign policy and energy experts. In their perception, Turkey intended to obtain the lion's share of transport profits from Caspian energy.[2] The other argument raised against Turkey was that the country was promoting unfeasible pipeline projects by applying political pressure. In reality, the Turkish approach towards the Caspian Region and Central Asia was intended to strengthen the independence and prosperity of the new independent states. To achieve this, the Turkish government provided the countries of the Caspian region and Central Asia with technical, educational, financial and military assistance. These measures were not limited to the oil- and gas-rich countries of the region. To diversify and secure its energy supply Turkey cooperated intensively with regional governments to create favourable framework conditions for large energy infrastructure projects and invited international companies to assess their economic feasibility.

1. Data from the Ministry of Energy and Natural Resources.

2. ›Region of the Future: The Caspian Sea‹, Policy Paper of the SPD Bundestag parliamentary group, authored by Gernot Erler in cooperation with Friedemann Müller and Uwe Stehr, June 1998. Available at: http://www.gernot-erler.de/old/ot/ot1e.html (accessed on 8 March 2010).

None of the large cross-border pipeline projects can be realised without the firm support of the relevant governments. Turkey did not receive any support from its European allies for its Caspian Sea policy, and cooperated with the USA, instead. While developing the Caspian energy corridor Turkey did not neglect energy cooperation with other neighbours. The Iran–Turkey natural gas interconnector was built in 1997–2001 and had an initial capacity of 14 bcma. Its capacity can be extended substantially by constructing additional compressor stations. The Blue Stream natural gas pipeline, running from Russia under the Black Sea to Turkey, became operational in 2003 and has a capacity of 16 bcma.

The Turkish government is planning to bring Egyptian natural gas to Turkey. Under discussion is the extension of the Arab pipeline which runs from El-Arish in Egypt to the Syrian city of Homs to the Turkish border and the construction of an offshore pipeline across the Mediterranean. Another important aim of Turkish external energy policy since the 1990s is to develop the gas fields of Iraq and connect them to the Turkish network. A Memorandum of Understanding (MoU) to prepare feasibility studies for a natural gas interconnector between Iraq and Turkey was signed in August 2007 in Ankara. The Samsun–Ceyhan crude oil pipeline, with a capacity of 1.5 million bpd and running from the Black Sea to Turkey's Mediterranean coast, is under development. Other policy initiatives to transit natural gas to the EU will be discussed in the following sections of this chapter.

Turkey supports the efforts of Turkish public and private sector companies in the exploration and production of hydrocarbons abroad. The Turkish Petroleum Corporation (TPAO) has been active in the Caspian countries Azerbaijan, Kazakhstan and Turkmenistan since 1993. The company has a 6.75 per cent share in the consortium producing 1 million bpd from the ACG fields and a 9 per cent share in the consortium producing 7.2 bcma of natural gas from the Shah Deniz fields, both in the Azerbaijani section of the Caspian Sea. In the second phase, Shah Deniz gas will be transported via Turkey to other European countries. In Kazakhstan, TPAO is producing 3,400 bpd in a smaller onshore field. TPAO is participating with international companies in auctions for the Iraqi oil fields and in December 2009 won a contract in Eastern Iraq. Turkish company Genel Enerji A.Ş., part of the Çukurova group, is successfully developing the Taq Taq and Tawke oil fields in Northern Iraq with Addax International in a 55–45 per cent joint-venture and has started to export production to world markets via the Kirkuk–Ceyhan pipeline. TPAO is exploring oil fields in Libya and its subsidiary TPIC is engaged in exploration with the national oil company Ecopetrol in Colombia. Turkey has signed several protocols with Iran to develop the 22nd, 23rd and 24th phases of the South Pars gas fields.

Turkish efforts to gain access to gas production and to explore potential gas fields in Turkmenistan have not been successful. The Trans-Caspian pipeline from Turkmenistan to Turkey could not be realised. Kazakhstan has far more potential with regard to supplying Turkey with energy, but so far Turkish companies have not managed to take advantage of it. Some observers claim that Turkey needs one or two national champions to achieve its external energy policy goals. Some observers have proposed that TPAO should again operate as a vertically integrated oil company, conducting the whole range of activities, from exploration, production, transport and refining to retail. Others want to see the public pipeline company Botaş as a natural gas monopoly, extending its activities to the exploration and production of gas abroad.

3. Turkey as an Energy Hub

The main prerequisite for an energy hub is a good physical infrastructure. The length of the Turkish natural gas transmission network increased from 2,000 km in 2000 to 12,300 km in 2009. Liquefied natural gas (LNG) is contributing more and more to the energy security of European countries. Turkey's first LNG facility in Marmara Ereğlisi, 90 kilometres northwest of Istanbul, has been operational since 1994. The terminal can import 6 bcma of liquefied natural gas. Turkey's second LNG facility was built by Çolakoğlu in a location north of Izmir. The terminal has been in operation since 2006 and has a capacity of 6 bcma. Turkey's energy infrastructure still lacks large-scale storage capacities for natural gas. Underground natural gas storage may contribute to balance seasonal, daily and hourly changes in demand and is essential to maintain the gas flow to the consumer in the event of supply interruptions. The first underground storage facility in Turkey, with a capacity of 1.6 bcm, became operational in April 2007 in Silivri, near Istanbul. A second underground storage facility, in Tuzgölü in Central Turkey and with 1 bcm capacity, is under development.

Further conditions for a well functioning natural gas hub are a good business climate and a transparent transit regime. The Natural Gas Market Act, No. 4646 of May 2001, was an important step towards the liberalisation of the gas market in Turkey. The reduction of Botaş's market share in the Turkish gas trade, carried out by auctioning its gas contracts, is one of the most significant aspects of the Act. Although severely delayed, the transfer of the first 4 bcm from Botaş contracts to private sector companies was an important step for market liberalisation. The start of the gas import and trading activities of the Çolakoğlu LNG terminal will also contribute to market development. The Turkish government should encourage trading by international gas brokers in Turkey and establish a more transparent transit regime.

4. Energy Cooperation between Turkey and Russia

During the Cold War, many industrial facilities in Turkey – including an oil refinery and a power plant – were built with Soviet financial and technical support. In 1984, Turkey and the USSR signed the first natural gas supply agreement (for 6 bcma). Gas flow commenced in 1987, via the Trans-Balkan pipeline, through Romania and Bulgaria. Economic cooperation with the USSR was based on barter agreements and helped to increase Turkish exports – especially of traditional agricultural products – to its northern neighbour. Turkey signed a second natural gas agreement – for the supply of 8 bcma via the Trans-Balkan pipeline – with the Russian Federation in 1996. Within the framework of the Natural Gas Market Act, Botaş transferred 4 bcma of the total 8 bcma of the second agreement to private sector companies, including Bosporus Gas, a Gazprom joint venture in Turkey.

Blue Stream

In 1996, Russia made an offer to Turkey to supply additional natural gas via an offshore pipeline under the Black Sea. In December 1997, the Blue Stream agreement was signed between the two countries. Gas flows from Russia to Turkey via Blue Stream started in 2003. The total length of the pipeline is 1,213 km and the subsea section is 396 km long. The total cost of the Blue Stream pipeline is 3.2 billion US dollars.

Blue Stream II

A second subsea gas pipeline, parallel to Blue Stream, was first mentioned by the Russian side in 2002. In August 2005, then President Vladimir Putin officially proposed the building of the Blue Stream II gas pipeline to the Turkish Prime Minister. The Blue Stream II pipeline was intended to supply gas to Turkey and the Middle Eastern countries, including Israel. However, the main aim of Gazprom was to transit gas to Southeast Europe via Turkey. The Turkish side welcomed the offer, but gave priority to the Nabucco project from Turkey to Austria.

South Stream

In response to the progress of the Nabucco project and Turkey's reluctance to support Blue Stream II, Gazprom signed an MoU with ENI of Italy in June 2007 to implement the South Stream pipeline project. South Stream starts at Russia's Black Sea coast, where the Blue Stream subsea section starts, and continues to Bulgaria as an offshore pipeline. Russia signed intergovernmental agreements with the transit countries Serbia, Bulgaria, Hungary, Greece and Slovenia. During Prime Minister Putin's visit to Ankara on 6 August 2009, Turkey granted Gazprom permission to carry out the necessary geological research within the Turkish Economic Zone of the Black Sea. The capacity of the South Stream project has been increased twice by the project developers, reaching 63 bcma. The total cost of the project is now estimated at 24 billion US dollars. The length of the offshore section of the pipeline will be about 900 km. From Bulgaria, two directions for the pipeline are under investigation: one via the Eastern Balkans to Central Europe and the other via the Western Balkans to Southern Europe.

Samsun–Ceyhan Crude Oil Pipeline

Heavy tanker traffic represents a serious environmental hazard for the Turkish Straits and the metropolitan area of Istanbul. In addition, weather conditions, particularly during the winter, cause long waiting times for crossing the Turkish Straits and therefore increase costs for the oil industry. The Samsun–Ceyhan crude oil pipeline project aims to bypass the congested Turkish Straits and transport Russian and Caspian oil from the Black Sea coast east of Samsun to the Mediterranean port of Ceyhan.

The 550-km pipeline has a nominal design capacity of 1.5 million bpd. ENI of Italy and Çalık Holding of Turkey are developing the project jointly. The ground-breaking ceremony was held on 24 April 2007 in Ceyhan, attended by the Italian Minister for Economic Development and the Turkish Minister for Energy and Natural Resources. The visit of Russian Prime Minister Putin to Ankara in August 2009 increased the expectation that Russian companies may join the ENI/Çalık project. On 18 October 2009, Italy, Russia and Turkey signed an MoU on the Samsun–Ceyhan oil pipeline in Milan. On the same day, ENI/Çalık signed an MoU with JSC Transneft and OAO Rosneft to evaluate the participation of Russian companies in the project.

Other Areas of Energy Cooperation

According to the »Gas protocol« of 6 August 2009, the parties intend to jointly develop underground gas storage capacities in Turkey. The »Petroleum Protocol«, signed the same day, foresees joint exploration and production activities by Russian and Turkish companies in third countries. On 12 December 2009, a consortium made up of Gazprom, South Korea's KoGas, Malaysia's Petronas and Turkey's TPAO was awarded a contract to work in the Badra field – one of the smallest – in Eastern Iraq. Lukoil has established its petrol station chain in Turkey and is evaluating plans for further growth. Russia and Turkey are also cooperating in the field of nuclear energy. A consortium led by Atomstroyexport presented an offer to build and operate the first nuclear power plant in Turkey. The tender was cancelled due a court decision in November 2009.

Strategic Partnership Russia–Turkey

Since the dissolution of the Soviet Union, economic and political relations between Russia and Turkey have intensified. Turkish construction companies, already active in Russia in the 1980s, have won contracts worth 25 billion US dollars in Russia over the past 20 years.[3] In 2008, leaving aside trade with the EU as a whole, Russia became Turkey's number one trading partner. The trade volume between the two countries reached 37.9 billion US dollars in 2008.[4] Turkey is Russia's fifth largest trading partner. Russia has a huge surplus in bilateral trade, however: in 2008, Turkey's imports from Russia increased to 31.4 billion US dollars, the main items being natural gas, crude oil, petroleum products and coal, while Turkish exports – worth 6.5 billion US dollars – to Russia are mainly manufactured goods. According to the Turkish Trade Council in Moscow, direct investments by Turkish companies in Russia now stand at 7 billion US dollars. Close to 3 million Russian tourists visit Turkey every year. Turkey is also interested in cooperation with Russia in the defence sector. The Russian company Rosoboron won the tender to provide the Turkish army with anti-tank missiles, signing the contract in August 2008.[5] The war between Georgia and Russia in August 2008 also put pressure on relations between Russia and Turkey. Turkey has close relations and cooperation with both countries and so found itself in a very difficult position. Ankara only mildly criticised the Russian intervention in Georgia and Moscow's recognition of Abkhazia and Southern Ossetia as independent states.[6] Turkey is promoting a Caucasus Stability Pact for the resolution of conflicts in the region, excluding external countries. The Georgia crisis also showed Turkey the vulnerability of the East–West Energy Corridor via Georgia.[7]

After the end of the Cold War, many Turkish intellectuals and high-ranking military officers were discussing an alliance with Russia or a trilateral alliance between Israel, Russia and Turkey. Russia's immense natural resources, Turkey's rapidly growing economy, with its dynamic industry, and Israel's high-tech know-how were seen as the potential strengths of such an alliance. Turkey's relations with the United States cooled during the eight years of the Bush administration, mainly because of Turkey's lack of support for the invasion of Iraq. The slow progress of EU accession negotiations and the negative attitude of France and Germany in particular towards Turkey's membership dramatically reduced the popularity of the EU in Turkey. A strategic partnership between Russia and Tur-

3. ›General economic outlook of the Russian Federation and its economic-commercial relations with Turkey‹, Trade Council of the Turkish Embassy, Moscow, July 2009 (in Turkish).

4. Data from the Under-Secretariat of Foreign Trade.

5. Under-Secretariat for the Defence Industry.

6. Adam Balcer, The Future of Turkish–Russian Relations: A Strategic Perspective. *Turkish Policy Quarterly,* Vol. 8, No. 1, 2009, pp. 79–90. Available at: http://www.turkishpolicy.com/images/stories/2009-01-tpq/Adam Balcer.pdf (accessed on 8 March 2010).

7. Igor Torbakov, The Georgia Crisis and Russia–Turkey Relations. The Jamestown Foundation, Washington DC, 2008. Available at: http://www.jamestown.org/uploads/media/GeorgiaCrisisTorbakov.pdf (accessed on 8 March 2010).

key was suggested first during the official visit of then Russian Prime Minister Mikhail Kasyanov to Turkey in 2000. The joint declaration signed during the visit to Russia of Turkish President Abdullah Gül in February 2009 was described by the Russian side as a »strategic document«. The official visit of Prime Minister Putin to Turkey in August 2009 elevated energy cooperation between the two countries to a strategic level. According to Sergey Markov – Director of the Institute for Political Studies in Moscow – Russia and Turkey should establish a new economic and political alliance.[8] Russia plays an important role in the framework of Turkey's new foreign policy, which is aimed at ensuring that there are »no problems with neighbours«. On the other hand, Turkey is aware of the imbalance between the two countries. Russia's readiness to use military power to solve regional conflicts certainly does not fit into the picture of peaceful cooperation in the Caucasus and Central Asia. Future Russian interference in the internal affairs of Turkic countries in the Caucasus and Central Asia may cause Turkey to change its policy towards Russia.[9]

5. Energy Cooperation between Turkey and the EU

The EU is Turkey's largest trading partner by far. Roughly half of Turkey's exports go to EU countries. EU (previously EEC) companies have a long track record in Turkey. After the Cold War, Turkey participated in the negotiations on the Energy Charter Treaty and signed it in December 1994. During the following years, Turkey contributed to the negotiations on the Transit Protocol of the Energy Charter Treaty. Preparations for the synchronisation of the Turkish high voltage network with the European power network UCTE are at an advanced stage. In the rest of this section, the focus will be on the development of gas transmission networks from Turkey to the EU.

While developing the East–West energy corridor, Turkish plans included the channelling of natural gas from the Caspian region to other European countries. The Trans-Caspian pipeline from Turkmenistan to Turkey had a design capacity of 30 bcma: 14 bcma of the gas were foreseen for transit to Europe via Turkey. In 1998, Turkey signed an MoU with Bosnia-Herzegovina for future gas supply. In the same year, during the bilateral energy commission meeting with Austria, Turkey proposed to develop an infrastructure to transport Caspian gas to Central Europe. It should be noted that there was deadlock in relations with the EU after the December 1997 Luxembourg summit and no political support came from Brussels or the EU member states for the development of the East–West energy corridor. The EU's attitude towards Turkey started to change in 1999. In addition to the aim of rehabilitating relations with Turkey, the EU had two geopolitical reasons for this change. In 1998–99, Turkey made visible progress in negotiations on the BTC and the Trans-Caspian pipeline. The other important consideration was Russia's reluctance to ratify the Energy Charter Treaty or to accept articles of the Transit Protocol of the Treaty that would allow the transport of Caspian energy resources to the West via the Russian transmission network. In June 1999, the European Commission invited Turkey to become a Full Beneficiary Country of the INOGATE (Interstate Oil Gas Transport to Europe) programme.

South European Gas Ring

In June 2000, after a trilateral meeting in Brussels, the European Commission, Greece and Turkey signed a Concluding Statement to implement the South European Gas Ring from Turkey via Greece to Italy. In the following years, the Greek and Turkish state-owned companies Depa and Botaş worked closely to develop a 296 km long Turkey–Greece gas interconnector. The construction work started in July 2005 and the pipeline was officially inaugurated in November 2007. The initial capacity of the pipeline – 7 bcma – may be extended in future to 11 bcma. For the extension of the network from central Greece under the Adriatic Sea to Italy a company called IGI Poseidon S.A. was established in June 2008. The Trans-Adriatic Pipeline is the other pipeline project between Greece and Italy. The 520 km long pipeline will cross northern Greece and Albania, westwards. The offshore section of the pipeline is routed from the Albanian cost through the Adriatic Sea to Italy.

Nabucco

At the third Austrian–Turkish Joint Energy Commission meeting in November 2001 in Vienna, the parties agreed

8. ›Russian Advisor Calls For Economic Union With Turkey, Post Soviet States‹. Available at: http://www.blacklistednews.com/news-1518-300-9-9--,html (accessed on 8 March 2010).

9. See footnote 6.

to encourage natural gas companies from both countries to study the feasibility of natural gas transport from the Caspian region via Turkey to Austria. The meetings between OMV Erdgas and Botaş were concluded with a cooperation protocol, signed in May 2002. In October 2002, Bulgargaz, Transgaz from Romania and MOL from Hungary joined the project. In June 2004, the Nabucco Company was established. In December 2007, RWE from Germany became the sixth shareholder of the pipeline consortium. In June 2009, an intergovernmental agreement for the realisation of the Nabucco project was signed. The 3,300 km long pipeline will cost 7.9 billion euros and has a design capacity of 31 bcma. The Nabucco Company will make the final investment decision on the project in the last quarter of 2010.

The Future of the Southern Corridor

Both of the abovementioned projects enjoyed the financial support of the EU's Trans-European Energy Networks programme for their economic and technical studies. However, the EU was criticised for the slow pace of the development, the lack of coordination between the projects and the contradictory decisions and policies of member states. All competing pipeline projects supported by an application from a member state to Brussels are on the EU's priority list. There is no ranking of the projects based on their contribution to Europe's energy security. Since 2007, the European Commission has been actively involved in negotiations on the intergovernmental agreement concerning the Nabucco project. In September 2007, the European Commission appointed former Dutch foreign minister Jozias Van Aartsen European coordinator for the Nabucco project (or for Natural Gas Route 3: Caspian Sea countries–Middle East–European Union or Southern Corridor). Van Aartsen visited the region and spoke to all relevant stakeholders, making a number of valuable suggestions.[10] He recommended the further liberalisation of the Turkish natural gas market, transportation of small volumes of gas from the supplier countries to the EU via the existing networks until the new infrastructure is place, the standardisation of the legal framework, the establishment of a Caspian Development Corporation and the extension of the Energy Community Treaty to major transit countries. Some of his other proposals, however, seem to ignore today's economic and geopolitical realities in seeking to by-pass Turkey, including the White Stream offshore pipeline from Georgia to Romania, a new supply route via Cyprus, Crete and Greece and the development of Greece and Romania as natural gas hubs.

There are a number of critical questions related to the European Commission's negotiating position on the Southern corridor with Turkey. The EU emphasises the need for further reforms in the Turkish natural gas market, but has not yet opened the Energy chapter in the accession negotiations. The Turkish demand to channel 15 per cent of the natural gas from transit projects to domestic supply is perceived as unacceptable, but the EU should pay more attention to the energy security of a future member. Between 2004 and 2009, valuable time was lost in securing the necessary volumes for the pipeline projects of the Southern corridor. Turkmenistan signed new supply agreements with Russia and China; Azerbaijan signed an agreement with Russia. The recent activities of the Nabucco partner companies towards securing concessions in the region are a step in the right direction. However, a natural gas purchase agreement with the Shah Deniz consortium in Azerbaijan has not yet been signed, although it is essential for the investment decision with regard to the initial phase of the Southern corridor. There are problems regarding the other potential suppliers eligible for the second phase of the project. Iran, with the second largest gas reserves in the world, is not yet ready to resolve its nuclear dispute with the USA and Europe peacefully. The other potential gas supplier, Turkmenistan, needs new investments to increase gas production. The Arab pipeline carrying Egyptian gas may be extended to Turkey in a short time, but the pipeline capacity and the increasing demand in transit countries Jordan and Syria will limit the volumes available at the Turkish border. Iraq is on the way to becoming an important gas supplier for Turkey and the Southern Corridor. Foreign consortiums participating in the oil field auctions of the Iraqi government are hopeful of supplying at least the second phase of the Nabucco project. As already described, there is a huge gas supply potential in the region, but gas sales agreements are necessary to trigger investment. The development of the Southern Corridor will put the EU's external energy policy to the test. The collapse of the Southern corridor will harm the credibility of the EU in the region and put pressure on EU–Turkey relations.

10. Jozias Van Aartsen, Activity Report September 2007 – February 2009. Brussels, February 2009. Available at: http://ec.europa.eu/energy/infrastructure/tent_e/doc/axis/2009_axis_linking_activity_report_2007_2009.pdf (accessed on 8 March 2010).

6. Turkey and EU Membership

In December 1964, Turkey became an associate member of the EEC, with the prospect of full membership. After 40 years, at the December 2004 summit, the EU declared that Turkey had fulfilled the Copenhagen Political Criteria to a considerable extent and that accession negotiations should be started. During the following years, relations between the EU and Turkey again changed for the worse after repeated statements from Berlin and Paris about a »privileged partnership« instead of full membership and Turkey's reluctance to extend the Association Agreement with the EU to the Greek part of Cyprus until the isolation of the Turkish part of the island is lifted.[11]

Turkey will play a crucial role in future energy supplies to Europe. Turkey has close ties with the countries of the Caspian Region and the Middle East and a well developed energy infrastructure. The EU should encourage Turkey to speed up the accession negotiations and to become a member of the community in the near future. The support of the Turkish public for EU membership has fallen dramatically in recent years. It is not excluded that the next generation in Turkey might not even want to join the EU, even if all the criteria have been fulfilled.[12] Many observers in Europe understand the importance of Turkey's membership for the future of the EU. The EU needs Turkey not only for its energy security, but also for the contribution it would make to the European economy, the European defence system, European neighbourhood policy (Caucasus, Central Asia and the Middle East) and the dialogue with the Islamic world. With a strong political will on both sides and a fixed date for Turkey's membership, Turkey may become a member of the EU within a few years.

7. Conclusions

Turkey has gained in strategic importance for the EU because of its unique geographical location between the gas-rich countries of the Caspian Region and the Middle East and the gas consuming countries of Europe.[13] Thus, the EU is trying to use the opportunity to diversify its energy imports by establishing the Southern Corridor via Turkey. But there are worries among the Europeans that Turkey, losing interest in joining the EU, may shift politically to the East and form alliances with the Middle Eastern countries and the Islamic world. Truly, Turkey has historic relations with most of the Islamic countries and has intensified its economic and political relations to these countries in recent years. However, according to some political analysts, an alliance between Turkey and Russia in the future is much more likely. Russia, with its vast resources, and Turkey's dynamic industry and young population may contribute to one another's prosperity. For Turkey, Russia is also its principal energy supplier, as it is for the EU. Intensified energy cooperation between Russia and Turkey therefore makes considerable sense, but for the EU it may have two main consequences: on the one hand, it may help to increase gas volumes flowing to EU countries, while, on the other hand, it may harm the EU's efforts to diversify its gas imports. As a result, the EU would be well advised to deepen its energy cooperation with Turkey.

11. Bahri Yılmaz, The Relations of Turkey with the European Union: Candidate Forever? Center for European Studies at Harvard University Working Paper Series No. 167 (2008). Available at: http://www.ces.fas.harvard.edu/publications/docs/pdfs/CES_167.pdf (accessed on 8 March 2010).

12. See footnote 11.

13. Sascha Müller-Kraenner, Energy Security. Earthscan, London, 2008.

New Approaches in Russia's Foreign Energy Policy – East and West

Tatiana Mitrova

1. Is Russia Turning East?

The role of Russia in the global energy balance can hardly be overestimated: accounting for only 2 per cent of the world population and GDP, Russia possesses 9 per cent of global oil reserves and 30 per cent of global gas reserves, and produces roughly 11.5 per cent of global primary energy. The country exports two-thirds of all oil, one-third of all coal and one-third of all gas produced, not to mention so-called »hidden energy exports«, in the form of energy-intensive products, such as aluminium and fertilisers. The annual energy exports of the Russian Federation are equal to twice Germany's annual volume of consumption, making Russia an extremely important player on the global energy scene. Therefore, Russia's foreign energy strategy is of key importance for all market participants.

This strategy is formulated most clearly in the new document »Energy Strategy of the Russian Federation until 2030« (ES-2030), adopted by the Russian government in November 2009. This document focuses primarily on the domestic agenda – modernisation in both energy and non-energy sectors – as it is necessary to reduce Russia's dependence on energy exports, the country's energy intensity and the share of gas in the electricity generation sector. Nevertheless, the main priorities of international cooperation in the field of energy are also named in this Strategy.

A first strategic priority is *diversification of the product structure of exports*. In this respect, the share of exported oil products should increase significantly and the share of liquefied natural gas (LNG) in gas exports should reach 14–15 per cent by 2030. For a number of historical and geographical reasons Russia, the leading gas power, entered the LNG market only in 2005, with swap LNG cargoes. Large-scale LNG production started in Russia as late as February 2009, with the Sakhalin-2 project. LNG offers Russia flexibility in its exports, the possibility of reaching any consumer in the Atlantic basin (from the Shtokman project) and the Pacific basin (from Sakhalin). Moreover, LNG offers the potential both for new markets and for improving security of supply to existing markets, a concern which remains an extremely important factor in Russia's external energy strategy, given the severe transit disputes which have occurred.

In 2008–09, Russia has experienced turbulent times, particularly with regard to the drop in gas demand both from the EU and its own domestic customers. However, when the market begins to recover, Russia will be well placed to take advantage of it, and increases in flexibility undertaken now will be of particular importance. Given the considerable uncertainty on export markets, Russia will use a *market-oriented and flexible approach* in gas exports. The crises, falling gas demand on the domestic market and lower demand abroad mean that Russia will be in less of a hurry to implement its mega-projects. In the short to medium term, depending on the market situation, production goals can be revised downwards. However, Russia has sufficient capacity and flexibility to meet higher demand in the course of economic recovery. Russia will therefore adjust the timelines of new investments in hydrocarbon production and transportation, depending on their economic viability.

A second priority is the *diversification of export markets,* primarily to the Asian market. Russia's hydrocarbon industry is currently orientated firmly towards the west. In 2008, only 14 million tonnes of crude oil were exported to the Asia Pacific region, against a total export volume to all destinations of 243 million tonnes. The vast majority (185 million tonnes) went to Europe. The picture is even clearer in gas, with no major exports to Asia until 2009 at all. While Russia does not foresee Europe ceasing to be the main destination for hydrocarbon exports, it does foresee an increase in the role of Asia, which appears fully justifiable in light of China's continued economic growth, even during a period of severe global recession.

Although they have not played a major role in Russia's energy balance until now, the country's eastern regions are expected to take on more importance over the next 20 years, eventually producing around a fifth of all Russia's oil and gas. This is both a geological and an economic issue, as the search for untapped resources leads Russia in the direction of some of its largest potential emerging markets. Russia's ability to supply these markets will be a key indicator of how well Russia's energy strategy allows the country to fulfil its potential. The challenge facing Russia is whether it can be an energy giant on two continents simultaneously: to do so, it will need not only the natural resources, but also the infrastructure and the policy framework to make it happen. ES-2030 predicts a gradual increase in oil exports to Asia of 70–80 million

tonnes by 2030, while gas exports are predicted to rise to 70–75 billion cubic metres (bcm) (reaching approximately 20 per cent of total gas exports). The target in the Energy Strategy is to increase the share of energy exports to Asian markets to 26–27 per cent of total energy exports, while sustaining export volumes to European markets.

Given that hydrocarbon exports to the Far East are setting out from a relatively undeveloped position, one vital question addressed by policy-makers is *the establishment of new export routes in the east of Russia*. To this end, state oil transportation company Transneft has already constructed the first phase of the East Siberia–Pacific Ocean (ESPO) pipeline, reaching the Chinese border, while the Russian government has instituted a zero rate of export tax for three years. The situation with gas pipelines to Asia is more complicated. In 2006, the government announced the two potential directions of gas supply to China. The Western route includes the Altay gas pipeline, with a total length of 2,700 km on Russian territory and a resource base in Western Siberia. The Eastern route would source the gas from a resource base in Eastern Siberia, especially from the Yakutsk Region. This route implies the construction of a pipeline running from Yakutia through Khabarovsk to Vladivostok. There was also an additional option: to construct a gas pipeline from Sakhalin to the Russian mainland and down to Vladivostok. This project is listed among the top priority projects in the East and will take the form of a 1,800 km gas pipeline from Sakhalin through Khabarovsk to Vladivostok. The first starting complex will be put into operation in the third quarter of 2011.

A third component of the Russian energy strategy is the *diversification of export routes* in order to increase security of supply and reduce transit risks. Several huge projects can be mentioned in this regard: the Baltic Pipeline System-2 (BPS-2), Burgas–Alexandroupolis, Samsun–Ceyhan for oil transportation and Nord Stream and South Stream for gas. Russia currently has a range of positions on these pipeline projects. BPS-2 is under construction, while two competing projects to bypass the Bosporus – Burgas–Alexandroupolis and Samsun–Ceyhan – are still in the phase of preliminary negotiations. Nord Stream has made major progress in recent months: Denmark, Sweden and Finland have given their permission; 29 banks have confirmed their readiness to participate in financing; new long-term contracts for gas supplies through this pipeline have been signed; one of Europe's leading energy companies – GDF SUEZ – is now discussing its participation in the project; and 1 April 2010 has been announced as a starting date for the off-shore part of construction. South Stream is at a less advanced stage; nevertheless, some success was achieved in 2008–09: intergovernmental cooperation agreements were signed with Bulgaria, Hungary, Greece and Serbia in order to construct pipeline sections in the respective countries; new long-term contracts for gas supplies were signed; and the participation of Électricité de France (EDF) in the project is under discussion.

2. What's New in the West?

EU–Russian energy relations are complicated and weighed down by emotional and political considerations to such an extent that, in many cases, it defies economic logic. Clearly, there is more interdependence than dependence. The EU needs Russian oil and gas – their large-scale replacement is impossible: dependence could be reduced only partially using other sources of hydrocarbon supply, as well as nuclear and renewable energy. This dependence is balanced, however, by Russia's desire to ensure its own social and economic development. Sales of Russian hydrocarbons to the EU are as necessary for Russia as hydrocarbon imports are for the EU. Neither partner, therefore, has serious alternatives. But despite more than 40 years of mutually beneficial energy relations (which developed dynamically regardless of the Iron Curtain, the Cold War and fundamentally different political and economic systems), today these relations are going through a very difficult patch.

The EU wants Russia to increase investment and to radically increase the participation of Western companies in energy production. Russia is irritated by Europe's backing for »selected projects« (above all, the Nabucco and Trans-Caspian pipelines); the European Commission's unclear position on long-term contracts; the marked opposition in some political circles to export pipelines under construction by Gazprom; the many obstacles placed in the way of Gazprom participation downstream; and, most important, by Europe's efforts to diversify gas supplies, 26 per cent of which currently come from Russia. The European Commission has called for an active search for alternative supplies of gas, as well as increased use of liquefied natural gas, although it is obvious that the alternatives to

Russia – Iran, Central Asia, North Africa, Nigeria and so on – carry high political risks and have unstable economic systems, as do many of the countries through which Europe would have to lay new transit routes.

Russia's symmetrical response – the concept of strategic reserves; restrictions on foreign participation in production and Gazprom's monopoly on transport and export; increased cooperation with other gas producers within the framework of the Forum of Gas Exporting Countries; and efforts to diversify export markets (northeast Asia, LNG) – has in turn generated alarm among European consumers. Even the projects designed to ensure security of supply to Europe, as a solution to painful transit disputes, are in many cases perceived negatively in the EU and, somewhat irrationally, regarded as a threat to EU energy security.

This irrational element in EU–Russian energy relations is not only ruining mutual trust, but also leading to inefficient investments and destroying beneficial cooperation. Russia and the EU complement each other with regard to energy by virtue of geographical proximity, transport infrastructure and traditional ties. Clarification of this rather obvious thesis will probably be the most important priority of Russia's external energy strategy in the medium term.

In contrast, energy relations between Russia and Turkey – involving several of the abovementioned projects – despite many contradictions and different interests, are very clear, being based entirely on pragmatic economic incentives. The countries have cooperated in many spheres for several decades. In 1987, the first supplies of Russian gas to Turkey started (with transit through Romania and Bulgaria), and in 2003 gas exports started though Blue Stream. Until 31 December 2008, a total of about 200 bcm of Russian gas had been exported to Turkey. In 2008 export volumes reached nearly 24 bcm.

Turkey has recently approved South Stream crossing its part of the Black Sea and in August 2009 agreed to launch, with Russia, the pipeline project Samsun–Ceyhan, from Turkey's Black Sea coast to its Mediterranean coast, across Anatolia (which is profitable and attractive for Turkey, which wishes to become a new hydrocarbon hub for Europe). But it has terminated the tender for the first nuclear plant construction (in which Inter RAO was the major participant) and for the same economic reasons is actively promoting the Nabucco pipeline. Nevertheless, all these decisions are driven by clear economic logic and therefore are accepted by Russia (similarly, Turkey has demonstrated tolerance towards Russian decisions). This relationship can be described as absolutely pragmatic on both sides, with a clear understanding of the mutual benefits of energy cooperation.

Turkey's prospective role in Russia's foreign energy policy seems to be increasingly important, as there are several huge projects in all major energy sectors – oil, gas and nuclear. Infrastructure development is advancing, with Turkey likely to become one of the key hubs for Russian energy resources en route to Europe. This will have a number of implications, not only for Russian–Turkish economic ties, but also for EU–Russian relations, as a Turkey able to provide a new large-scale corridor for hydrocarbon transportation will have much greater leverage in negotiations with both sides. There is a very fragile balance between the three players in this Russia–EU–Turkey triangle, but mutual interest in sustaining this energy supply chain will make them follow a cautious policy of compromise.

The EU, Russia and Turkey – Prospects of an Energy Triangle?

Stefan Meister

1. Introduction

Energy is the driving force in relations between Russia, Turkey and the EU. Russia is the world's biggest supplier of gas and the second biggest supplier of oil, with the biggest gas resources, followed by Iran and Qatar. The EU and Turkey increasingly need to import energy: at the moment, the EU obtains around one-third of its oil and 40 per cent of its gas from Russia, while Turkey receives 25 per cent of its oil and 65 per cent of its gas from there. Indeed, 80 per cent of Russia's gas exports go to the EU, around 80 per cent of which are transported through Ukraine. Furthermore, Russia sends 40 per cent of its oil exports through the Bosporus. Because of its dependency on gas transit through Ukraine, Russia is trying to diversify by building the Nord Stream and South Stream pipelines. Within this framework, Germany is the northern hub for Russian gas and Turkey the southern one.

Russia, Turkey and the EU increasingly depend on each other but they have different concepts of energy security. Both Turkey and the EU are trying to diversify their import routes and, thus, reduce their import dependency on Russia, while Moscow is seeking new markets for its energy, especially in East Asia. So far, bilateral approaches have been dominant in relations between Turkey, Russia and the EU; a trilateral approach has not yet been tested. Especially in the energy sector, all three players depend on each other and cooperation in a trilateral format could be beneficial for all. Therefore we must ask whether there is a chance of reaching a common understanding of energy security in the future, as well as a new perspective on trilateral cooperation in this field.

This chapter analyses, first, the changes in Turkish foreign policy and the Russian–Turkish rapprochement in recent years, which is the basis for new developments in the southern neighbourhood of the EU. The second part analyses EU–Russia energy relations and the role of Turkey with regard to this relationship. After, third, looking at geopolitical changes as a result of the Russian–Georgian war in August 2008 in the South Caucasus, the article concludes with a discussion of the prospects for an energy triangle between Russia, Turkey and the EU.

2. Changes in Turkish Foreign Policy

Since the Justice and Development Party or AKP came to power in 2002, Turkey has attempted to become a key regional power by more active diplomacy and playing a constructive role through a good-neighbourhood policy with all of its neighbours. This includes improving relations with Iran, Syria and Iraq; enhancing economic cooperation with Russia; and normalising relations with Armenia. This new approach is related to Turkey's interest in joining the EU and the limited success of its previous foreign policy concept. With the end of the Soviet Union, Turkey unavailingly tried to become a regional player in Central Asia and the South Caucasus. Ankara hoped to play an active role, especially in the state-building processes in Central Asia and tried to export the Turkish model of democracy, secularism and modernity to the region. But Turkey never really managed to penetrate the region economically and politically, even though Russia's position declined throughout the 1990s. The emergence of authoritarian states in Central Asia made it difficult to establish the Turkish policy model. Pan-Turkism has been perceived in Central Asia as a challenge to the sovereignty of the young states. Uzbekistan and Turkmenistan in particular have repeatedly curtailed their cooperation with Turkey, accusing Ankara of supporting political dissidents from their countries. And with regard to the Southern Caucasus, Georgia, Armenia and Azerbaijan were more preoccupied with their domestic policy and relations with Russia than with Ankara, although Turkey has been a major trading partner for all three states.[1]

Turkey is geographically close to the world's most energy-rich regions, which have over 70 per cent of the proven global oil and gas reserves. It is interested in becoming a key energy transit hub for the transportation of natural gas from the Caspian region, the Middle East and the Persian Gulf to European markets. As an energy hub, Turkey would secure transit revenues and taxes, receive part of the gas in order to meet its own rising energy demand and also, Ankara hopes, reduce its dependence on Russian natural gas imports. Furthermore, as a key country for oil and gas transit to the EU, the Turkish government hopes to improve its position in the accession

1. On Turkey's trade relations with Russia and the South Caucasian states, see Gareth Winrow, ›Turkey, Russia and the Caucasus. Common and diverging interests‹, Chatham House Briefing Paper, November 2009, p. 4. Available at: http://www.chathamhouse.org.uk/files/15211_bp1109turkey.pdf (accessed on 8 March 2010).

negotiations. With the construction of the Baku–Tbilisi–Ceyhan (BTC) oil pipeline, Turkey has already become an important transit state for the transport of significant volumes of crude oil, especially from Azerbaijan. Since the Russian–Ukrainian gas conflict in January 2009, interest has increased considerably in the EU with regard to building the Nabucco gas pipeline (with a volume of 31 billion cubic metres) which would deliver non-Russian gas to Europe. Turkey would become the key transit state for this pipeline project. This would enable the EU member states and Turkey to become less dependent on Russian gas imports and on transportation routes through Russia.

3. Russian–Turkish Relations

Since Turkey's position as a NATO outpost in relation to the Soviet Union ended, Russian–Turkish relations have been shaped by a combination of cooperation and rivalry in the past 20 years. At the beginning of the 1990s, Turkey and Russia were seemingly rivals in the newly emerging geopolitics of the Caucasus and Central Asia, while economic cooperation between both countries increased. At the political level, Turkey's limited support for the US invasion of Iraq in 2003 led to a rapprochement between Moscow and Ankara. Russian policy-makers started to perceive Turkey as a foreign policy actor which was becoming more and more independent of the USA. In the context of Russian foreign policy thinking, Turkey is a potential ally against a dominant USA in the South Caucasus. Russian President Vladimir Putin's trip to Turkey in December 2004 was the first high-ranking visit from the Russian side for 32 years, and Putin has already met with Turkish Prime Minister Recep Tayyip Erdoğan ten times in five years.

The economy is the driving force of the new Russian–Turkish rapprochement: Russia replaced Germany as Turkey's main trading partner in 2008, at 38 billion US dollars. Since 2006, Russia has been Turkey's largest source of natural gas imports. In 2002, the two countries completed the 16 billion cubic metre capacity Blue Stream gas pipeline, connecting the Russian and Turkish coasts at the bottom of the Black Sea. Turkey is also the third largest importer of Russian coal, after Ukraine and the UK. Two-thirds of the tankers crossing the Turkish Bosporus and Dardanelles Straits carry Russian oil and gas exports. Turkey primarily exports textiles, machinery and vehicles, chemicals and food to Russia. The Turkish construction sector is very active in Russia and was involved in 29 billion US dollars worth of business in 2008. Nearly 15,700 Turkish workers were sent to Russia in 2008 by the Turkish Employment Service, working primarily in the construction sector.[2] Almost 3 million Russian tourists annually spend their holidays in Turkey, which is of enormous economic significance. Nevertheless, the trade balance is weighted heavily in Russia's favour. In 2008, Turkey exported to Russia goods worth 6.5 billion US dollars, but imported more than 30 billion US dollars worth, primarily gas, oil and coal. In the military sector, Russia sold helicopters to Turkey and provided the NATO country with new air defence systems. In 2008, Russia secured a contract worth 80 million US dollars for the provision of anti-tank missiles.

For Russia, Turkey is not only an important energy transit route but also an alternative customer within the framework of efforts to reduce its dependence as a supplier on the EU market. Turkey is the third largest importer of Russian gas after Ukraine and Germany, accounting for 23.8 billion cubic metres in 2008. Russia is trying to strengthen its position in the Eastern Mediterranean and to reduce the influence of NATO and the USA in the region by means of its rapprochement with Turkey. Turkey's NATO membership has not proved to be an obstacle with regard to energy partnership with Russia. Through closer cooperation with Turkey, Russia hopes to reduce the influence of NATO and the EU in the region and, in return, is willing to cede some influence to Turkey, as can be observed, for example, in Moscow's moderate reaction to the Turkish–Armenian rapprochement. Both Ankara and Moscow appeared to perceive US policies in the South Caucasus under the Bush administration as destabilising. Russia is attentively observing Turkey's difficult accession negotiations with the EU and is offering Ankara deeper economic cooperation. With the visit of Russian Premier Putin to Ankara in August 2009 and the implementation of the contracts related to South Stream and further energy cooperation between the two countries, Russia has successfully integrated Turkey in its policy and is trying to strengthen its position in the Black Sea region. Moscow feels that it will benefit from the disagreements between EU member states with regard to Turkey's EU accession.

2. Cf. Ahmet İçduygu, ›International migration system between Turkey and Russia: the case of project-tied migrant workers in Moscow‹, European University Institute, Florence, Research Report, 18/2009. Available at: http://cadmus.eui.eu/dspace/bitstream/1814/12254/2/CARIM_RR_2009_18.pdf (accessed on 8 March 2010).

On the other hand, Turkey is trying to use its geopolitical location as a bargaining tool between Russia and the EU.

4. EU–Russia Energy Relations and Turkey

Energy relations between the EU and Russia are in crisis at the moment. The Ukrainian–Russian gas conflict of early 2009 has inflicted lasting damage on trust between Russia and the EU. There is no consensus between the EU member states on how to develop cooperation with Russia in the future and on whether more economic interdependence is really the right approach for security in Europe.[3] Russian Premier Putin cancelled Russia's signature of the Energy Charter Treaty (ECT) in 2009, which is of the highest priority for the EU. On the other hand, the Russian proposal for a new energy framework agreement has so far met with little interest within the EU. The European Commission has been pushing its unbundling and liberalisation policy, especially in the gas market. This includes ownership unbundling of energy companies and their electricity and gas transmission networks. In contrast, the aim of Gazprom is to be able to provide the entire value chain also on the European market in the future. The Russian government wants to secure long-term agreements with customers, guarantees for investments and access to the attractive European-end customer market through a new legal agreement on energy cooperation.

In the context of EU–Russian energy relations, Turkey is looked at in two ways: on the one hand, for Russia and some European countries, Turkey is a relatively secure and independent transit route, in contrast to Ukraine (South Stream). On the other hand, other member states perceive Turkey as an alternative route for importing non-Russian energy (Nabucco). The EU and Turkey have been engaged in developing the so-called »Southern Energy Corridor« to carry Caspian and Middle Eastern oil and gas to Europe, in addition to the existing routes bringing resources from Russia, Norway and Algeria.[4] With its good bilateral relations with Russia and the EU, Turkey has achieved a balance between both and has increased its geopolitical importance in the region. For Turkey, the main challenge in the next few years will be to preserve this balance, especially in the context of EU accession. The latest Turkish energy legislation, adopted in April 2001, was inspired by EU energy legislation, while Ankara ratified the Energy Charter Treaty in the same year.

There has been some rivalry between Turkey and Russia in the past over pipeline policy. Moscow criticised the Turkish participation in the Nabucco project and in the construction of the Baku–Tbilisi–Ceyhan pipeline, which has become the first major oil pipeline in the region to bypass Russia. The signing of treaties between the states participating in the Nabucco pipeline project in Ankara in July 2009 was an important step towards its implementation. But it is still uncertain where the gas is supposed to come from to fill the pipeline. Ankara is interested in leaving the door open to all options for cooperation in the region and Nabucco would provide an opportunity to become less dependent on Russia. There are also plans to connect Turkey with Italy by means of the 12 billion cubic metre Interconnector Turkey–Greece–Italy (ITGI) and a possible 20 billion cubic metre Trans-Adriatic pipeline. The first part of the ITGI has brought small volumes of Azeri gas to Greece since November 2009.

Russia is pushing its alternative project, South Stream, which includes the construction of a 24 billion euro gas pipeline with a final capacity of 63 billion cubic metres, running across the Black Sea to Bulgaria, before separating into two lines which would extend to Italy and Austria. South Stream would pass through Turkish territorial waters. Ankara was afraid that gas scheduled for Turkey would instead go through South Stream to the EU. To address Turkish concerns and finally obtain permission to build South Stream through Turkish territorial waters, Russian Premier Putin made some concessions to Ankara. The Russian oil pipeline operator Transneft and oil company Rusneft agreed to form a consortium with Italian ENI and the Turkish company Çalık Energy to build a new oil pipeline from the Turkish Black Sea port of Samsun to the Ceyhan oil terminal on the Mediterranean coast.[5] An important goal of this deal is to relieve the narrow oil corridor at the Bosporus. Further development of the ports

3. Cf. Stefan Meister, ›Crisis in Russia–EU energy relationship‹, in: DGAP-aktuell, June 2009. Available at: http://www.dgap.org/midcom-serveattachmentguid-1de5434f928abf6543411de852ed7fabd3334ff34ff/2009-04_dgapaktuell_rus-eu_www.pdf (accessed on 8 March 2010).

4. Jose Manuel Barroso, ›New Silk Route‹, The Southern Corridor Summit, Prague, 8 May 2009. Available at: http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/228&format=HTML&aged=0&language=EN&guiLanguage=en (accessed on 8 March 2010).

5. Saban Kardas, ›Russia joins the Samsun-Ceyhan Pipeline‹, in: Eurasia Daily Monitor, Vol. 6, Issue 195. Available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=35649&tx_ttnews[backPid]=7&cHash=f1793bc6f4 (accessed on 8 March 2010).

in Samsun and Ceyhan will strengthen Turkey's position as an energy hub. The Blue Stream pipeline also ends in Samsun which, in cooperation with ENI, brings Russian gas into the Turkish national pipeline network. Russia has also agreed to cooperate in building an additional pipeline – Blue Stream 2 – to Samsun, which would supply with gas not only Turkey but also Israel, Lebanon, Syria and Cyprus. Ceyhan is the final destination of the BTC oil pipeline. Other deals have raised the prospect of Gazprom's involvement in building gas storage deposits in Turkey and a liquefaction plant for natural gas in Ceyhan. The third element – a plan to build a nuclear power station by a Russian–Turkish consortium in the Southern Akkuyu region – was cancelled by the Turkish side in November 2009. However, plans to build nuclear power stations in Turkey with Russian Atomstroiexport still exist.[6] These agreements not only strengthen established Turkish–Russian–Italian energy relations, but also political and economic interdependence between Ankara and Moscow.

5. The South Caucasus after the Russian–Georgian Conflict

The Russian–Georgian conflict in August 2008 changed the geopolitical situation in the Caucasus. The Turkish strategy of seeking harmonious relations with all its neighbours was challenged by the conflict. Turkey's increasing dependence on Russian energy imports also restricted its freedom of manoeuvre: there was little criticism of the Russian military operation by the Turkish government.[7] The situation is even more complex because Turkey has provided considerable support to the armed forces of Georgia and Azerbaijan, helping them to adapt to NATO standards. Ankara has also founded military academies in Baku and Tbilisi and modernised two airbases in Georgia. After the conflict, Russian officials therefore listed Turkey as one of the countries that had supplied military equipment to Georgia.

Turkey's immediate reaction to the Russian–Georgian war was to introduce a Caucasus Stability and Cooperation Platform (CSCP). Shortly after the conflict, Turkish Prime Minister Erdoğan visited Russia, Georgia and Azerbaijan to promote the concept. The main goal of the CSCP is to complement regional institutions and mechanisms to provide a framework for stability, confidence building and cooperation and to become a forum of dialogue.[8] Russia supported the initiative because it would not include the USA, NATO and the EU, but only states from the region. Concrete steps with regard to the initiative are still lacking, however, and it is still not clear whether it will be successful, because of the existing conflicts between the associated countries. Georgia in particular has no interest in negotiating with Russia on a platform that does not include the USA or the EU.

In the context of the conflict, concerns were raised about the security of pipelines in the Southern Caucasus and Turkey. Turkey's interest in becoming a key energy transit state was challenged by the changing security situation in South Caucasus. On the other hand, the conflict opened up possibilities for Turkey to normalise its relations with Armenia.[9] This development has influenced relations with Azerbaijan, which has developed close ties with Ankara over recent years. Currently, Georgia is the only land corridor connecting Turkey and Azerbaijan and the Caspian region. It is questionable, however, how safe energy investments in Georgia will be, unless Georgian–Russian relations improve. If, in the meantime, a new land corridor to the Caspian region could be established via Armenia, once the border between Armenia and Turkey opens, this would have strategic consequences for energy transit in the Caucasus region, as well as for Turkey.

The improved relations between Russia and Turkey influence the Nagorno-Karabakh conflict, where Turkish and Russian interests are in opposition. Russia unofficially supports Armenia and Turkey Azerbaijan. This balance has also been challenged by the Turkish–Armenian rapprochement and the rise of Azerbaijan as an oil and gas

6. ›Turkey's radioactive waltz with Russia comes to an end‹, on Radio Free Europe/Radio Liberty, 17.12.2009. Available at: http://www.rferl.org/content/Turkeys_Radioactive_Waltz_With_Russia_Comes_To_An_End/1885889.html (accessed on 8 March 2010).

7. Cf. ›Turkey cannot afford disruption in ties with Russia, says Erdoğan‹, in Hürriyet, 01.09.2008. Available at: http://www.hurriyetdailynews.com/h.php?news=turkey-cannot-afford-disruption-in-ties-with-russia-says-erdogan-2008-09-01 (accessed on 8 March 2010).

8. Cf. Eleni Fotiou, ›Caucasus Stability and Cooperation Platform: what is at stake for regional cooperation?‹, ICBSS Policy Brief, No. 16, June 2009. Available at: http://icbss.org/index.php?option=com_docman&task=doc_download&gid=622 (accessed on 8 March 2010).

9. Cf. Maciej Falkowski, ›Turkey's game for the Caucasus‹, in: OSW-Commentary, Issue 29, Centre for Eastern Studies, Warsaw, 5.10.2009. Available at: http://www.osw.waw.pl/sites/default/files/Commentary_29.pdf (accessed on 8 March 2010).

producer. Russia's relations with Azerbaijan are driven by the frozen conflict on Nagorno-Karabakh and the situation with regard to Azeri oil exports. With the Azeri–Georgian agreement on oil supply to Georgia in 2007 and the acquisition of the Georgian supply network by the Azeri state oil company SOCAR, Baku is challenging Russia's role in the Southern Caucasus. In addition, Russian gas supplies to Armenia go through the Georgian pipeline network, which is now owned by the Azeri state company.

Enhanced economic cooperation between Russia and Turkey can help to increase the pressure on the opposing parties in the Karabakh conflict in order to find a solution. Both have an interest in the stability of the region as this is an important precondition of trading in oil and gas. Good relations between Ankara and Moscow are also a precondition of the Turkish rapprochement with Armenia. But if the Armenian–Turkish question is solved without, in parallel, regulating the Nagorno-Karabakh conflict, Azerbaijan could interrupt its relations with Turkey and seek more cooperation with Russia.

6. Are There Prospects of an Energy Triangle between the EU, Russia and Turkey?

As the Russian reaction on the EU's Eastern partnership project recently showed, Moscow increasingly perceives the EU as a competitor for influence in the post-Soviet space. Russian Foreign Minister Sergey Lavrov, on multiple occasions, has condemned the establishment of the Eastern Partnership without Russia's participation and has equated it with the establishment of an »EU zone of interest in Eastern Europe«.[10] In the perception of the Russian political elite, international relations are a zero-sum game, and there is no possible win–win situation in the common neighbourhood with the EU. Besides its Soviet arsenal of nuclear weapons and its membership of the UN Security Council, energy is the only tool available to Russia to pursue its great power ambitions. On the other hand, Russia is extremely interested in an economic modernisation partnership with the EU and needs European investment in its infrastructure and energy sector and for technical cooperation. Therefore, it is necessary to integrate Russia into concrete projects of common interest in the region, in areas such as energy security, environmental protection and economic cooperation.

The EU has only just started to develop a common energy policy, since this is a policy area still determined by national interests. We can observe an overreaction on the part of some EU member states with regard to what Russia could do, especially with its energy power. The politicisation of energy relations between Russia and the EU is unfortunately often used as an instrument in relation to conflicts in other policy areas, on both sides. For the EU as a whole, it is important to develop a common internal and external energy policy. The EU is still the most attractive market for energy supply in the world but it has to strengthen its negotiating power by means of a common energy strategy. Russia is now the most important supplier of oil and gas to the EU and will remain so in the foreseeable future. Russia has the resources, geographical proximity and pipeline infrastructure to supply the EU cost-efficiently. Only if the EU and its member states are aware of how to develop a common energy policy in the future and how to integrate Turkey in this context, will they be able to offer Russia and Turkey proposals for common cooperation.

Turkey is the European gate to Central Asia and the Middle East. It can become an important transit route not only for energy supplies from Russia but also from the Caspian Sea, the Middle East and the Gulf region to the EU. The slow accession negotiations between Ankara and Brussels, without much discernible progress, may be an obstacle to deeper energy cooperation. But to use Nabucco as a bargaining chip in the negotiations with the EU, as Turkish Prime Minister Erdoğan did, is hardly the right approach to confidence building.[11] Nevertheless, Turkey must balance its ambitions as an independent regional power and as a future member of the EU. As an EU member state which is a key player in the region it can play a significant role by strengthening Brussels's position in the Caspian and Caucasian region but it must realign its relations with Russia.

The main future competitor for resources and influence in the Caspian and Central Asian region for all three

10. The Eastern Partnership, established in May 2009, is meant to expand and deepen the existing Neighbourhood Policy of the EU with Belarus, Moldova and Ukraine, as well as with the Caucasus states Armenia, Azerbaijan and Georgia.

11. Cf. ›Türkei stellt Nabucco-Pipeline in Frage‹, in: Handelsblatt, 20.01.2009. Available at: http://www.handelsblatt.com/politik/international/tuerkei-stellt-nabucco-pipeline-infrage;2129832 (accessed on 8 March 2010).

actors is China. Beijing is trying to secure its oil and gas needs with investments in, for instance, Kazakhstan, Turkmenistan and Russia. The first part of a new gas pipeline between Turkmenistan and China was completed at the end of 2009. From 2013, 40 billion cubic metres of gas will go through this pipeline to China, bypassing Russia. Russia will lose its transit monopoly on Central Asian resources, while the EU will possibly lose gas resources for the Nabucco pipeline. China has the economic and political power to enforce its energy interests in the region, while Moscow and Brussels still disagree on whether they should construct South Stream or Nabucco or both.

An EU–Russia–Turkey energy triangle will not be achieved as long as short-term national interests dominate relations. There is some cooperation between Russian, Turkish and EU companies in the energy sector, but at the moment there is no common vision or interest with regard to comprehensive trilateral energy cooperation. If Turkey joins the EU and Brussels develops a common energy policy, strategic cooperation with Russia on energy might be possible. The Lisbon Treaty constitutes a step in this direction. Only if all three players understand trilateral energy cooperation as a win–win situation and not as a bargaining tool will an energy triangle be possible.

About the authors

Dr Stefan Meister, Program Officer, Russia/Eurasia Program, German Council on Foreign Relations (DGAP)

Dr Tatiana Mitrova, Head of the Center for International Energy Markets Studies, Energy Research Institute of the Russian Academy of Sciences (ERIRAS)

Dr Friedemann Müller, Advisor, Research Division Global Issues, German Institute for International and Security Affairs (SWP)

Dr Yurdakul Yiğitgüden, Former Under-Secretary of Energy and Natural Resources, Turkey

About the editors

Kristin Linke, Department of Western Industrialised Countries, Friedrich-Ebert-Stiftung (FES)

Marcel Viëtor, Alfred von Oppenheim Center for European Policy Studies, German Council on Foreign Relations (DGAP)

Imprint

Friedrich-Ebert-Stiftung
Department of Western Industrialised Countries | Division for International Dialogue
Hiroshimastraße 28 | 10785 Berlin | Germany

Responsible:
Anne Seyfferth, Head, Department of Western Industrialised Countries

Tel.: ++49-30-269-35-7745 | Fax: ++49-30-269-35-9248
www.fes.de/ipa

To order publications:
info.ipa@fes.de

The **Friedrich-Ebert-Stiftung** is a non-profit German political foundation committed to the advancement of public policy issues in the spirit of the basic values of social democracy through education, research, and international cooperation. The foundation, headquartered in Bonn and Berlin, was founded in 1925 and is named after Friedrich Ebert, Germany's first democratically elected president. Today, the Friedrich-Ebert-Stiftung has six adult education centers and 13 regional offices throughout Germany, maintains branch offices in over 90 countries and carries out activities in more than 100 countries.

http://www.fes.de

The **German Council on Foreign Relations (DGAP)** has helped shape the foreign policy debate in Germany since 1955. The mission of the DGAP, as an independent and nonprofit institution, is to improve the understanding of international relations and to scientifically explore the pertinent current issues of foreign policy. Furthermore, the DGAP regularly hosts German and international experts and decision-makers in the fields of politics, economics, science and the media, in order to discuss foreign policy essentials and current events. The DGAP is funded by the German Federal Foreign Office, private corporations, foundations and others, as well as through the financial support of its more than 2,000 members.

http://www.dgap.org

ISBN 978-3-86872-303-8