Energy Relations with Russia and Gas Market Liberalization

JONAS GRÄTZ

Russian Energy Policy: Challenges for the EU

Current Russian energy policy is based on the conception of oil and gas resources as strategic goods. This entails a reliance on the direct influence of state actors rather than on market forces to regulate their extraction and distribution. This has been a common trend in oil and gas exporting countries since the 1970s, but Russia is unique in that no other hydrocarbon exporter considers itself to be a »great power.« Increasing state influence and regulation by legislative manipulation can be seen, on the one hand, as a deliberate policy enabling the state to use oil and gas corporations, especially Gazprom and Rosneft', as both domestic and foreign-policy tools in the absence of other amenable instruments (for example, ideological or institutional), and on the other hand, as the result of spontaneous processes of property redistribution to the administration, especially the security services.

In the gas sector, recent changes in the relevant laws consolidated the positions of majority state-owned companies, most notably Gazprom. Gazprom obtained not only a monopoly on all gas exports, but also the legal right to be awarded certain exploration licenses without competition from the state. Thus, competition is absent and foreign ownership contingent on the decisions of the monopolist and of political actors. In an effort to control interdependencies politically, many foreign oil companies with controlling stakes in oil or gas exploration have been forced to leave the country or to reduce their stakes to below 25 percent. The expropriation of Yukos (one of the world's largest non-state oil companies) stands out as the most visible example of arbitrary state action, benefiting only a narrow elite. Meanwhile, the increasing reliance on state companies has led to a deinstitutionalization of the oil and gas sector, which is now managed primarily in accordance with »state interests,« that is, the vested interests of the federal politico-economic elite in rent capture and political control.

State influence also affects the external behavior of energy companies. Gazprom and Rosneft' are used as foreign policy tools to obtain leverage over »unfriendly,« resource-scarce countries in the EU's neighborhood, such as Ukraine or Georgia. One recent example is the announcement by Rosneft' in late May 2009 that it would begin drilling for oil off the coast of Abkhazia, the breakaway Georgian republic, which is recognized as a sovereign state only by Russia and Nicaragua.[1] In the meantime, Gazprom is using its position as a powerful supplier and trying to obstruct the EU's diversification strategies by launching competing pipeline projects and courting potential suppliers in third countries (Milov 2008: 6). At the same time, state corporations are able to access capital on European financial markets on favorable terms due to the backing they receive from the state.

If we look at EU-Russian relations in the energy sector, the advocates of a »mutual dependency« (Götz 2009) perspective seem, at first sight, to be right. The EU imports 25 percent of its gas from Russia, while Gazprom obtains more than 60 percent of its revenues from EU markets. But the situation is more complex than that and the perspective of »mutual dependency« neglects the various asymmetries involved in this relationship. Gazprom is a state-dominated corporation, which is bound rather by the goals of state actors than by corporate interests. On this basis, the picture looks rather different. Gas exports accounted for only six percent of Russia's overall exports to the EU in 2007, while oil and oil products made up 67 percent. Correspondingly, Gazprom contributed only about eight percent to the Russian federal budget, whereas the oil sector accounted for more than one-third.[2] Thus, the asymmetry of the EU–Russia dependency lies not only in the fact that money has different characteristics from natural gas – money being a highly fungible good and gas supplies a rather specific one (Liuhto 2009) – but also in that the Russian regime is much less dependent on gas than on oil exports, whereas the EU depends on Russian gas supplies a lot more than on Russian oil. The EU's dependence has much to do with the physical nature of gas and the

1. Rosneft' claims to be carrying out official Russian policy with regard to Abkhazia. See: »Rosneft namerena rabotat v Abkhazii kak v suverennom gosudarstve,« in: RIA Novosti (May 27, 2009).
2. All data: author's calculations based on federal tax laws, data from Rosstat, UN Comtrade, the Federal Customs Service, the Federal Tax Service, Gazprom and Rosneft'.

lack of investment in liquefied natural gas (LNG) facilities. As a result, although there is a flexible world market for oil, there are only regional markets for gas. This is exacerbated by the lack of interconnections between member states, which means that there is no EU gas market, but only many member-state markets with different dependencies (Noel 2008).

In consequence, Russia's vulnerability is relatively low, as oil flows can be shifted easily and gas exports are relatively unimportant as a source of revenue. In addition, the relevant Russian actors are capable of acting in unison and strategically, while the EU is internally divided, both structurally and institutionally. The outcome is the high short- and mid-term vulnerability of the fragmented member-state gas markets within the EU, as exemplified by the gas cut-off in January 2009. Indeed, all the experts who claimed repeatedly that Gazprom would not cut off gas to the EU in order not to »jeopardize its contractual credibility« (Finon/Locatelli 2008: 432) were proven wrong by the crisis, as it is relative power considerations and not contracts which determine the Kremlin's actions. The current situation therefore poses several challenges for the EU and its member states:

- Renationalization in the Russian oil and gas sector and its resulting deinstitutionalization have resulted in politically determined investment priorities. In this context, there will be no more investment than what is deemed appropriate by the political elite. This way, scarcity can be created politically and used for various ends, for example, to play consumers off against each other (Christie 2009).
- The nationally fragmented gas markets in the EU face a monopolistic-unitary and politicized actor on the supply side, which has full control over its own market and access conditions. This stark asymmetry in the structural and institutional environment could severely hamper the functioning of the EU's internal energy market, as Gazprom drives expansion to downstream markets, striving not only to enlarge its market share and profits, but also to strengthen the asymmetries in interdependence. Another important issue is the import of non-transparent business practices and corruption that comes with the growing influence of Russian energy companies and is diametrically opposed to the kind of open and rules-based market that the European Commission is trying to shape (Kupchinsky 2008; Globalwitness 2009).

EU External Energy Policy: Institution Building vs. Barter Deals

So far in this article, the EU has been presented as a coherent entity. However, the 27 member states have fundamentally different energy mixes and their dependence on Russian gas ranges from zero to 100 percent of domestic consumption. Given these structural conditions, it is not surprising that member states' outlooks and policies towards Russia also differ or that a common EU energy policy – or even an EU foreign energy policy – has not emerged so far. However, coordinated action is necessary, as all member states share the common fate of being dependent on oil and gas imports.

EU energy policy vis-à-vis Russia comes down to the question of institutions and general rules versus individualistic barter deals. While the Commission, supported by some member states, prefer the former, some large member states, such as Germany, Italy, and France, rely on barter deals, which suits the interests of the current Russian elite. In these deals, Russian actors pursue their own »reciprocity rule«: in order to access the Russian market, it is not sufficient to provide capital, but substantial asset swaps must be offered in order to get things done. However, instead of »rapprochement through interdependence,«[3] such deals have done nothing but encourage the Russian elite to reify and strengthen the monopolistic, politicized institutional configuration of the Russian market, a configuration that the Commission is striving to overcome.

To summarize, such deals are detrimental to European energy companies, as they are drawn into lengthy negotiation processes which sometimes lead to an agreement and sometimes not. Even where an agreement is reached, there is no mutually agreed institutional regime to protect property rights, and so it is highly fragile and subject to politically motivated changes at any time, as has happened in the past to companies from »less friendly« countries, such as Great Britain or the Netherlands. In what follows, the EU's approach to energy relations with Russia and the reasons for its failure are delineated, leading to a discussion of member-state strategies vis-à-vis the supply of gas from Russia.

3. This term is used by the German Foreign Ministry to describe the foreign policy strategy towards Russia.

The EU's Approach to Energy Relations with Russia

Since the last days of the Soviet Union, the European Commission's approach has been not to try to reduce vulnerability to Russian energy imports per se, but to counterbalance asymmetries by means of the participation of capital from the EU in Russia's energy sector and, most importantly, by protecting these investments on the basis of institutionalized rules agreed and protected at the international level rather than individual deals. Furthermore, an international regime, in principle, limits the potential of political actors to interfere with economic actors. This was the rationale underlying the proposal for an Energy Charter Treaty (ECT), put forward in 1991 as an integrated regime regulating investment, trade, and the transit of energy resources. The treaty was signed in 1994, but never ratified by Russia. However, negotiations on the ECT were delayed, not because of resistance from Russia, but because of disunity concerning regulatory policy in the EU and the Western camp in general. The proposal for mandatory third-party access to export and transit pipelines, put forward by the Commission and supported by Great Britain, was dismissed by France and other member states, fearing liberalization of their monopolistic energy sectors. The same disagreements came to the fore with regard to allowing access to foreign investors. These disagreements revealed a lack of consensus on regulatory policy in the EU and substantially delayed the negotiation process.[4] Different views on regulatory policy in the EU continued to be a problem in the subsequent negotiations on the transit protocol under the charter, as EU member states insisted on a provision that would exempt them from the mandatory application of the protocol. Thus, the EU itself established a number of disincentives for Russia to ratify the treaty by its disunity and incoherent approach to the ECT. Nevertheless, as Russia has not withdrawn its signature from the treaty it may be bound by it, notwithstanding the harsh remarks of Vladimir Putin and Dmitri Medvedev. The treaty includes a clause on provisional application, obliging all signatories to observe its rules. A pending case with the Court of Arbitration in the Hague, initiated by former Yukos shareholders, will provide some answers to this question soon (Kiselyov 2009).

4. See, for example, »Energy Charter Progress Delayed despite Strong Soviet Support,« in: European Energy Report (May 1991).

Member State Policies: A Response to a Fragmented Market

EU disunity is rooted in the national fragmentation (physical and institutional) of the EU gas market, leading to an emphasis on national supply security and different concepts of energy market regulation. While the Commission and certain member states, such as Great Britain, promote a liberal rules-based, regulated internal energy market, other large member states, such as France and Italy, have traditionally relied on state control, or have delegated market governance to companies, as in Germany. These countries were characterized by national or regional monopolies, supported by the government. Thus, although state companies were privatized due to pressure from the EU in Italy in the 1990s and later on in France, they still had to ensure *national* security of supply. After the privatization and initial liberalization of the EU market, the tasks of these utilities were enhanced to include expansion into other markets. Hence, market integration was not seen in terms of rules-based development but to be carried out on the basis of »national champions,« building corporate energy empires.

Developments were somewhat different in Germany, but the results were similar. Private regional monopolies contracted with each other to demarcate their territories and were entrusted to handle security of supply on their own, although there were strong ties to economic ministries at all times. Ironically, initial liberalization efforts in the absence of an EU-wide level playing field facilitated the expansion of utilities from other member states into the German market, most notably France's EdF. This led to the vertical integration of these German regional monopolies in the 1990s and to large-scale mergers at the beginning of the new millennium. The mergers, most notably of E.ON and Ruhrgas, had political support. The rationale was that the creation of »national champions« would prevent hostile takeovers and enable German companies to expand into other regional and international electricity and gas markets. As a result, energy supply security was framed as a national business issue in Germany, too. This is not to say that these companies are not acting as profit-maximizers or do not have a global outlook, quite the contrary. But they can enlist the support of the state in their homeland, if they so wish.

With regard to external energy relations, the division of labor between politics and the economy is somewhat different in this model than in the rules-based model envisaged by the Commission. Historically, national utilities negotiated bilateral deals with Gazprom, backed by the state. Furthermore, political actors would offer specific support in gaining access to the Russian market by providing and sustaining an undisturbed political environment. In this context, it was not the absence of a general framework for energy relations and investments that was seen as problematic, but the »politicization« of energy supplies by the Commission and some member states that wanted to go beyond these barter deals in promoting such a framework. It was stressed that beneficial agreements could be reached by »pragmatic« cooperation on a bilateral, case-by-case basis. With regard to gas deliveries, strong (and sometimes corrupt) elite networks involving Russian and member-state elites developed, at least in Germany, Italy, and some Central Eastern European countries (Dahlkamp et al. 2008; Smith 2008; Globalwitness 2009).

The popular view that it is possible to cooperate with Russia in a depoliticized, pragmatic manner neglects the fact that bilateral deals, in the absence of a general institutional framework, actually provide incentives to maintain and strengthen the Russian status quo. »Gatekeepers« to the Russian market, such as Gazprom, obtain high yields from their control of the »rules of the game.« The readiness of European companies to compete with each other for cooperation with Gazprom strengthens the latter's hand. Thus, »pragmatic« cooperation leads to a reaffirmation and strengthening of existing rules that are taken for granted by European companies and governments. In the end, this contradicts standard goals of foreign policy, such as the spread of democratic values. It also reduces the influence of incentives set by the EU, such as the ECT. While the focus on and accommodation to existing rules is logical and legitimate for a corporation, political actors are failing to do their job if they act simply as facilitators and insurance providers for economic barter deals, as this renders them unable to transcend existing rules and hampers diversification. However, there is potential for change. If the EU acts cohesively, it will be able to leverage its bargaining power more effectively. As will be argued below, the completion of the internal market for gas is likely to limit the influence of the existing coalitions of actors inside the EU, leading to greater convergence of member-state interests and the emergence of new interests that transcend national borders. Furthermore, some of the rules laid down in the package will directly limit Gazprom's downstream expansion. The former will lead to better utilization of the EU's bargaining power with regard to Russia, while the latter will have direct implications for market rules in Russia, too.

Utilizing the EU's Potential: The Third Liberalization Package

As has been argued so far, it is not so much the EU's dependence on Russian gas that explains its failure to respond to challenges, as its lack of cohesion. This, in turn, is facilitated by fragmented markets, leading to differing vulnerabilities and member-state interests. Thus, disunity in external energy relations will prevail until an internal market for gas is created. The deadlock of divergent member-state interests is more likely to be overcome on the basis of internal market measures due to institutional features, thereby facilitating consensus. First, the internal energy market is a European Community (EC) project and the EC is far better equipped institutionally to facilitate consensus between member states than the EU's external governance mechanisms. This is due to the enhanced role of the Commission and of the European Parliament in the codecision procedure, as well as majority voting in the Council. This leads to the second feature. Progress with the completion of the internal market has gained the support of different stakeholders – not only of some member-state governments, but also of the European Parliament and of non-energy companies. Furthermore, energy prices are a common concern in most member states and liberalization in the electricity sector has already brought substantial benefits to the population. Thus, further liberalization efforts have the support of the population in almost all member states, which makes resistance to proposed measures more difficult to justify for member-state governments. As a result, the »thick« EC institutional environment, involving many players and support for market liberalization by several societal groups, makes success likely.

Goals and Instruments of the Third Gas Market Liberalization

The overall goal of the third liberalization package, proposed in September 2007 by the European Commission, was to achieve greater competition and efficiency in the grid-bound internal energy market, thereby reducing energy prices and increasing energy security by facilitating investment in interconnections between member states. This, in turn, would increase the global competitiveness of the EU's internal market. The starting point was the belief that the liberalization measures taken so far had not proven to be effective due to »[m]arket fragmentation along national borders, a high degree of vertical integration and high market concentration« (EC – COM (2007) 529 final) – the same factors considered above as leading to the prevalence of *national* energy policy solutions with regard to Russia. The central problem for market functioning in grid-bound energy sectors, such as electricity and gas, is the access of independent producers to the transportation network and the possibilities for shifting energy flows between countries and regions. In order to transport energy, infrastructure has to be (a) in place and (b) accessible. Problems persist regarding both conditions. Vertically integrated utilities (VIUs), simultaneously carrying out production, transport, and sales to the end consumer, were identified as the main obstacles to achieving these goals, as they permanently face a conflict of interests as both operator and supplier of transmission networks. Thus, acting simultaneously as suppliers and sellers, competition from independent producers cannot be in their interest. In their role as network operators, therefore, they exploit their informational advantages and impose excessive transportation and access charges, as well as congestion surcharges. Furthermore, they have no incentive to invest in infrastructure if that would enhance competition from connecting additional suppliers. Generally, investment in networks is carried out by a VIU only if it suits the interests of its own supply branch.[5] Thus, unbundling supply and transport companies emerged as the main means of achieving the stated goals, as this would fundamentally change the incentives facing the economic actors.

In what follows, in order to assess the potential impact of the third liberalization package on the structure of the internal market, member-state interests, and Gazprom, a short overview will be given of the unbundling models currently in the gas market directive. This will be followed by an assessment of the potential impact on Gazprom of the »reciprocity clause« proposed by the Commission, the European Parliament, and some smaller member states.

The gas market directive, adopted by the European Parliament in April 2009 at its second reading, gives member states the opportunity to

5. A good case in point are the Opal and NEL pipelines built by the Gazprom/Wintershall joint venture Wingas, which will be connected to the Nordstream pipeline in order to transport gas to Southern and Western Europe. Wingas applied for an exemption from competition rules for the new pipelines. See: »OPAL NEL TRANSPORT GmbH beantragt Ausnahme von Regulierung,« WINGAS PM, July 28, 2008. Available at: http://www.wingas.de. See also: »Opal will allein glänzen,« in: *Der Spiegel,* 45/2008, November 3, 2008: 80.

choose between three unbundling models. In order to grasp the differences between these models, it is useful to consider the theory of property rights, conceptualizing property as a bundle of rights to a resource which can be divided into four categories, which may or may not be held by the same actor: the right (i) to use the resource (business management), (ii) to retain revenues from its use (shareholding), (iii) to modify the form and substance of the resource (investments, capital increase), and (iv) to alienate the bundle of rights freely (Tietzel 1981: 210). In each of the three models, the first three categories of rights which a vertically integrated company has with regard to the network are affected in different ways.

The first model proposed by the Commission, in September 2007, foresaw complete unbundling, meaning that the VIU would have been forced to sell off the transmission operator completely. As resistance from member states emerged from the very outset, the Commission proposed a second model to allow for »effective unbundling,« named the Independent System Operator (ISO). In the ISO model, the VIU would be able to remain the main shareholder, but would lose its right to manage and to determine the investment policy of the transmission operator. As this model has met with resistance from member states, it is not likely to be used and will therefore not be analyzed here. Instead, a coalition of eight member states, led by Germany, France, and Austria, introduced a third model, which they labeled »Effective and Efficient Unbundling,« at the Energy Council in June 2008.

The Independent Transmission Operator (ITO), as this model is now called, allows the VIU not only to retain all rights to extract revenue, but also partly to retain modification rights with regard to the transmission operator. The management is relatively independent of the VIU, subject to detailed prescriptions. For example, it has to be proved to the regulatory authority that the majority of executive managers did not work for the VIU less than three years prior to their appointment. To exercise modification rights, a supervisory body is appointed by the VIU, where the VIU has the majority. This body appoints the management of the transmission operator and takes more important financial decisions, such as investments. However, the body has no decision-making rights regarding the ten-year network development plan that is negotiated between the transmission operator's management and the regulatory authority, including other stakeholders, and has to be implemented by the operator.

Impact on Member-State Interests

With regard to the potential impact of these three models on economic actors' goals, the Commission has suggested that ownership unbundling would be the most efficient solution to the stated problems. Full unbundling would remove conflicts of interest and enable the transmission operator to concentrate on its core business – the provision of transmission services. Furthermore, it would create incentives for the extension of networks and of interconnections, providing for the emergence of regional markets. This would be achieved with only small regulatory efforts, which would concentrate on network access conditions and some planning coordination. These arguments are supported by both econometric and case studies (Pollitt 2008; Brunekreeft 2008). The third, »ITO« option can provide a good unbundling of network operation, reducing discrimination in network access. However, the positive effect on investment incentives is impeded, as the VIU retains important decision-making rights in this sphere. Furthermore, regulation will be pervasive and difficult, as it needs not only to oversee network access and network planning, but to engage deeply in corporate governance issues in order to maintain the independence of the transmission operator. Thus, the functioning of the internal market depends to a great extent on national regulatory capacity if the ITO model is chosen. Obviously, this model is much more costly to the taxpayer and prone to regulatory capture than full ownership unbundling or the ISO model.

Regarding the politico-economic consequences of full unbundling, or the ITO model, two broad conclusions can be drawn. First, by facilitating network access, both models will substantially enhance competition in the member states. This will lead to the weakening of existing VIUs and the strengthening of other economic actors, leading to a pluralization of energy interests represented in the member states and the EU. In all probability, strengthened independent suppliers will push for additional liberalization and it is becoming increasingly likely that political actors will listen to them. Thus, the VIUs' traditional monopoly of representation at the national level will be diluted. This effect will naturally be stronger in member states opting for unbundling than if VIUs are preserved, as in the ITO model. Second, by facilitating investments in the expansion of transportation networks and interconnections between member states' gas markets, energy interdependencies between member states would be strengthened, allowing for the emergence of a real internal gas market.

Provided that the EU supports the development of internal networks and interconnections with financing from the Trans-European Networks fund, security of supply for individual member states will be greatly enhanced (Geden 2008). An interconnected market would also »Europeanize« bilateral relations with Russia, as transmission operators, suppliers, and governments would have to take into account not only their own markets, but that of the EU as a whole. Thus, it would no longer be so easy for Gazprom to exploit differentials between member states' markets (Noel 2008: 9). In any case, if the ITO model is chosen by many member states, existing coalitions of actors and vested interests would remain largely intact, making regulation to achieve a competitive market a tough and costly issue. Furthermore, the incentives to invest would remain distorted, again requiring political will on the part of the regulatory authority to construct a market.

Impact on Gazprom's Downstream Expansion

So far, the potential indirect effects of the third liberalization package on unifying member states' energy policies have been considered. But the package would also have a direct effect on Gazprom's downstream expansion. The initial Commission proposal, endorsed by the European Parliament, foresaw a »reciprocity clause« that would completely bar companies from non-member countries from exercising decisive influence on transmission assets in the EU, unless a bilateral agreement on mutual market access to transmission assets in the investors' country of origin had been concluded. This would stop ongoing asset swaps between Gazprom and European utilities and thus severely impact the payoffs for Gazprom that the current rules of the Russian market provide.

One should keep in mind that the EU's market is the most important one for Gazprom now and in the medium term, and the company would therefore either refrain from further investments in the EU or open up to rules-based investment by EU companies, once the reciprocity clause was implemented. Nevertheless, the clause has some shortcomings, as it severely limits or at least retards the possibility of attracting foreign capital for investment in transport infrastructure, if agreements with third countries are not in place. Thus, observers have some justification in calling it »protectionist« (Milov 2008: 4). As a result of German resistance, the clause was scrapped at the Energy Council in October 2008. In the regulation adopted recently, investors from third countries face the same limitations as investors from the EU. Hence, Gazprom would have to prove the compliance of its subsidiaries with effective unbundling regulations to the national regulator. In addition, the risk to the EU's security of supply has to be considered before the regulator approves an investment and the Commission has to be consulted prior to granting the approval. Furthermore, in countries opting for full ownership unbundling, subsidiaries of Gazprom or other corporations representing Gazprom's interests, cannot acquire transmission operators due to the »level playing field« provision that bars VIUs from these markets. Nethertheless, there are problems inherent in the approval procedure for foreign investors. It is difficult for the regulatory body to gather information on foreign investors and the quality of information provided by the investor is likely to be low, as the body does not possess effective instruments to prove their accuracy (office raids as an ultimate threat to back up demands for disclosure by the regulator cannot be carried out, for example). This problem is severe, especially in the case of Russian investments, which are often carried out by letterbox or offshore companies linked to Gazprom (Smith 2008; Globalwitness 2009).

To summarize, the rules regarding third-party investments agreed upon in the Council constrain the barter deals that have been common between German, Italian, and French VIUs and Gazprom until now, but are not able to exert the same influence on rules in the Russian market as the reciprocity clause would. This will limit the possibilities for investment by EU companies in Russia, at least until the rules in Russia change. As the reciprocity clause has been scrapped, the effectiveness of the rules on foreign investment will again largely depend on the actions of member states' regulatory authorities, the work of which is complicated due to severe informational constraints.

What Is the Way Forward for the EU?

The best solution for solving the challenges posed to the EU by Russian energy policy lies in directing efforts towards the internal market, as the EU's overall dependence on Russia is not excessively high. On the other hand, Gazprom's dependence on the European market is high and will remain so for the foreseeable future. In this context, the implementation of the third liberalization package, preferably the full unbundling option, would not only reduce the vulnerability to gas supply disruption, but also limit the impact of Gazprom's downstream expansion via unbundling provisions and binding network expansion plans. Furthermore, the creation of a real gas market with solidarity provisions would limit Gazprom's ability to play member states off against each other, as they would have less reason to feel insecure and to lobby for import pipelines. A real internal market for gas would not only enhance security of supply for individual member states, but also open the way to greater convergence of member-state preferences with regard to energy relations with Russia.

However, several challenges lie ahead. The agreed rules for the gas market can be effective only if the member-state regulatory authorities are equipped with the necessary resources and cooperate effectively in the new European agency for cooperation, ACER. Effective regulation will determine the success of liberalization, especially under the ITO model. If the EU is determined to exert influence on how business is done in the Russian energy sector it should implement unbundling provisions firmly and prevent further asset swaps. In order to swiftly create a robust market for gas, investments in interconnectors should be speeded up by allocating resources from the EU's Trans European Network fund (Geden 2008: 4). Another path that should be taken simultaneously is the better merging of climate change with energy security goals, as energy conservation would reduce vulnerability even more. This way, the EU could mitigate its current relationship of asymmetric interdependence with Russia and create the conditions for effective negotiations on mutually agreed rules for energy investment, trade, and transit.

References

Brunekreeft, Gert (2008): »Ownership Unbundling in Electricity Markets – A Social Cost Benefit Analysis of German TSOs,« UNECOM Discussion Paper DP 2008–05 (August).

Christie, Edward (2009): »European Security of Gas Supply – A New Way Forward,« in: Kari Liuhto (ed.): *EU–Russia Gas Connection: Pipes, Politics and Problems,* Publications of Pan-European Institute 8/2009, Turku: Turku School of Economics: 3–22.

Commission of the European Communities (2003): *Proposal for a Directive of the European Parliament and of the Council Amending Directive 2003/55/EC Concerning Common Rules for the Internal Market in Natural Gas,* COM (2007) 529 final.

Dahlkamp, Jürgen, Frank Dohmen, Uwe Klußmann, Gunther Latsch, Jörg Schmitt, and Stefan Simons (2008): »Giftiger Cocktail,« in: *Der Spiegel,* 35/2008 (August 25): 78–86.

Finon, Dominique, and Catherine Locatelli (2008): »Russian and European Gas Interdependence: Could Contractual Trade Channel Geopolitics?,« in: *Energy Policy* 36 (1): 423–42.
Geden, Oliver (2008): »Mehr Pragmatismus, weniger Geopolitik,« in: *SWP-Aktuell* A 83 (November).
Globalwitness (2009): »More Funny Business in Europe's Gas Trade,« *Global Witness* Briefing (May). Available at: http://www.globalwitness.org/media_library_get.php/889/1244496335/gw_emfesz_may09.pdf (accessed on June 13, 2009).
Götz, Roland (2009): »Pipeline-Popanz – Irrtümer der europäischen Energiedebatte,« in: *Osteuropa* 59 (1): 3–18.
Kiselyov, Yevgeny (2009): »Yukos Could Bankrupt the Kremlin's Reputation,« in: *Moscow Times* (April 23).
Kupchinsky, Roman (2008): »YugoRosGaz – Another Gazprom Scandal,« in: *Eurasia Daily Monitor* 5: 212 (November 5).
Liuhto, Kari (2009): »The EU Needs a Common Energy Policy – Not Separate Solutions by Its Member States,« in: Kari Liuhto (ed.): *EU–Russia Gas Connection: Pipes, Politics and Problems,* Publications of Pan-European Institute 8/2009, Turku: Turku School of Economics: 109–40.
Milov, Vladimir (2008): *Russia and the West: The Energy Factor,* CSIS/IFRI (July); Washington, DC and Paris. Available at: http://www.ifri.org.
Noel, Pierre (2008): »Beyond Dependence: How to Deal with Russian Gas,« in: ECFR Policy Brief 9 (November), London.
Pollitt, Michael (2008): »The Arguments for and against Ownership Unbundling of Energy Transmission Networks,« in: *Energy Policy* 36: 704–13.
Smith, Keith C. (2008): *Russia and European Energy Security. Divide and Dominate* (October); CSIS, Washington, DC.
Tietzel, Manfred (1981): »Die Ökonomie der Property Rights: Ein Überblick,« in: *Zeitschrift für Wirtschaftspolitik* 30 (3): 207–43.