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Peril of using energy as an instrument of political pressure

Opinion¹

Committee on Economic Affairs and Development

Rapporteur: Mrs Jelleke Veenendaal, Netherlands, Alliance of Liberals and Democrats for Europe

A. Conclusions of the Committee

1. The Committee on Economic Affairs and Development is grateful to the Political Affairs Committee and its Rapporteur, Mr Mihkelson, for having brought before the Assembly the highly pertinent issue of European energy security in which economic and political considerations intertwine closely. Concerns over the continuity of smooth energy supplies across Europe – in both short and medium term – made us all realise that energy can be an issue that *divides* or *unites* Council of Europe member states. The Economic Affairs Committee therefore wishes to present its contribution in the spirit of support and complementarity so as to enrich the current debate and to highlight the need for this Assembly's continued attention to the challenges and opportunities energy cooperation is raising.

2. The Committee believes that a steady flow of energy is an indispensable prerequisite to building a sustainable and competitive European economy on the basis of solidarity and capable of ensuring continued prosperity and stability in the context of globalisation. While much of the debate in Europe still centres on the supply of fossil fuels in the near future, all agree that sustainable energy supplies can only be guaranteed through consumption reduction, diversification, both geographical (supply routes and source countries) and of the energy mix (types of energy sources). Long term solutions in the form of sustainable energy projects and coherent energy policies should be sought to ensure ongoing and short-term energy security. This presupposes the gradual emergence of a single energy market in Europe based on sound regulation, efficient cooperation, sufficient investment and solid networks.

3. There is a manifest wish in many European countries to diminish their dependence on fossil fuels, which inevitably calls for greater support for the development of renewable and nuclear energy sources, as appropriate in particular national contexts, as well as enhanced involvement in joint research projects leading to the development of alternative energy sources for the future. This should translate into clear policy benchmarks and specific incentives for the private sector to take active part in the shaping of a functional and competitive energy market in Europe.

4. Given the legitimate expectations and complementary interests of energy producing, transit and importing countries, the state holds a special responsibility for providing a transparent and fair legal framework for the energy sector, facilitating energy dialogue in accordance with market economy principles, and preventing any unilateral moves to curtail interstate energy supplies even as bilateral negotiations prove difficult. Council of Europe member states should therefore use the European institutions to the full as forums for dialogue and exchange towards tackling energy challenges in a comprehensive manner and thus dissipating energy crises at an early stage.

¹ See Doc. 11116 tabled by the Political Affairs Committee.

B. Explanatory memorandum
by Mrs Jelleke Veenendaal, Rapporteur

I. Introduction

1. The report by Mr Mihkelson on the “Peril of using energy supply as an instrument of political pressure” addresses a close, and sometimes worrying, interdependence of European states in the field of energy. As the gas flow from Russia to Ukraine was reduced significantly in January 2006 and supply to Belarus was reduced in early 2005, several other states in central Europe were affected. Every effort should be made to prevent further damage in the future due to irregularities in the supply of energy to member states.

2. Member states of the Council of Europe are also facing a changing global energy market where energy demand keeps growing² at a much higher rate than available supplies, leading to high and growing energy prices. It is imperative to reassess present energy strategies and, if necessary, adapt these to future needs in order to avoid any costly disruptions. It is also important to make the best possible use of market mechanisms so that both energy buyers and sellers have a strong interest in ensuring stable supply of energy.

3. Against the background of ongoing liberalisation in the energy sector of most European countries, a major energy supplier – the Russian Federation – needs to determine its future energy strategy. The recent legal foundation for Gazprom’s position as a monopolist of the country’s gas exports, its growing involvement in the oil sector and ties with the Government suggest that both ends of the market need to continue cooperation to ensure economic growth and stability. The Council of Europe, as a pan-European organisation, is the right body to play this role among its member states.

II. Selected issues in the energy sector of the Council of Europe member states

4. The Russian Federation has substantial proven reserves of gas, oil, coal, uranium ore and other primary sources of energy. Its gas reserves amount to nearly a third of the world’s total. The state controlled company Gazprom controls over 55% of the country’s gas resources and all of its gas pipelines, thus de facto confining other domestic gas producers to the national market where gas prices are kept well below the level of global markets. Access to important parts of the energy market by independent producers remains problematic despite a recent welcome move to liberalise a small portion of the country’s gas market. Gazprom’s monopoly position in gas transportation was legally strengthened as the state Duma passed, in July 2006, a bill that stipulates that all of the Russian Federation’s exports of natural gas must run through state-owned pipelines.

5. The gas export market, thus controlled by a state company, mainly consists of central and eastern European countries and western European countries. As current export is exclusively based on the pipeline grid, there is little room for the company to diversify its export market without investing heavily in, for instance, LNG (liquefied natural gas) technology or pipelines to other parts of the world, such as China. As Gazprom is effectively a state company, state interests are able to influence the company’s decisions. Concerns about the possible present and future use of gas export policies as a political tool were raised in several incidents with regard to gas supplies to Ukraine, Georgia and Belarus, indirectly affecting other countries down the pipeline. In the cases of Ukraine and Belarus, the agreements reached resulted in not only sudden price hikes but also enhanced control by Gazprom over these countries’ pipeline networks.

6. A similar pattern is shown by the incident regarding Sakhalin 2, a project that would enhance the export of the Russian Federation’s gas in the form of LNG. Shell was the main operator of this project, until it met unforeseen expenses. The media reported that these costs were the result of a “harassment campaign”, quoting the delay in the necessary permits and the prosecution of foreign employees over alleged visa violations. As Shell was forced to cut down some investments that would not have a sufficient pay-back period, Gazprom was brought in as a major investor on 21 December 2006 and thus gained control over this new method of exporting Russian gas.

7. As the energy market in the member states is increasingly based on market principles, one would expect the price of oil and gas to be determined by a system of supply and demand. This is problematic in the case of the delivery of oil and gas to many eastern European countries for two reasons. Firstly, there is a long-standing relationship in which Russian oil and gas were supplied at a reduced rate or even on the basis

² Estimates of the International Energy Agency suggest that global energy demand is set to rise by 60% by 2030. IEA, *World Energy Outlook Key Graphics*. <<http://www.worldenergyoutlook.org/graphics.htm>> as of 3 January 2007.

of barter agreements, resulting in skewed price arrangements that do not form a reliable basis for present price expectations. Secondly, the monopoly position of Gazprom allows it to determine how much of the Russian Federation's gas is supplied to the region, making it the price setter of a very important source of energy in the region.

8. One way to solve pricing problems is the use of oil indices. As a gas market was created in European markets a few decades ago following the discovery of Groningen gas in the 1960's, the pricing mechanism applied needed to take into account that consumers could largely choose between oil and gas as a static fuel. Thus, the gas price was determined in a way that reflects the price consumers would be willing to pay for an alternative product. The imaginary demand for gas curve thus used approaches the real curve, assuming that at the same price, a unit of energy produced by oil represents a value to the customer equal to a similar unit produced by gas.

9. In the absence of a fully mature market for gas in eastern European countries, it is legitimate for the price of gas to be determined in a similar manner although neither Gazprom nor the Russian Federation has an obligation towards any country to supply gas at a rate below the market price. However, it can hardly be said that present prices reflect a market based pricing scheme. As the table below shows, prices vary greatly for different countries. Presuming that differences in transportation costs cannot fully explain these differences, it can be concluded that the prices charged do not reflect the market principle. As each country is faced with the same supply curve, it is hard to believe that the differences in the countries' demand curves explain the price differences.

Table³: Cost of the Russian Gas for 2007

Country	Price paid per 1,000 cubic metres	Historic Price
Ukraine	\$ 130	\$ 95
Georgia	\$ 235	\$ 110
Belarus	\$ 100	\$ 47
Azerbaijan	\$ 235	\$ 110

10. It has been claimed that the influence of the Russian Federation's Government on Gazprom enables it to use export policies as a political tool, rather than to let these policies be led by economic motivations. Whether this assumption is true or not is hard to tell for the present, and nearly impossible to determine for the future. However, either way, the situation is problematic for western European countries.

11. Free markets allow for multiple companies to operate on the same market. If one of these companies fails to deliver the products demanded by consumers, a larger market share is available to other companies, allowing them to invest more and service the consumer. Whether Gazprom uses its position as a monopolist to maximise its profits, or the Russian Federation's government utilises its shares to strengthen its position in political negotiations with its partners, many European consumers are largely dependent on one actor and are thus at risk of supply interruptions.

12. It is for similar reasons that Gazprom's dominance is not beneficial for the Russian Federation. In open markets, capital is able to flow in freely, allowing for instance for development of transportation technologies and further development of the pipeline grid. Thus a multiplicity of companies guarantee that investments are made where needed. Gazprom and some Russian oil companies have been criticised for their sluggish investment policies, especially as regards the development of new gas fields and the upstream transportation system. Opening up the market for transportation of gas would secure that the country does not face underinvestment in these areas in the future. With a global LNG market emerging, it is in Russia's interest to attract foreign companies in order to develop extraction capacity, the export market and transportation network. The latter is necessary for Russia to increase gas imports from central Asia significantly with a view to fulfilling its domestic needs and export commitments.

13. As an open system for transportation would be in the interest of all parties involved, it is advisable for foreign companies to invest in this gas flow from central Asia. In order to spread the risk of supply interruptions, it is advisable to diversify the supply routes of Europe geographically. The development of a pipeline network from central Asia through Turkey and to Europe, in addition to the Russian pipeline network, is necessary as a further guarantor of investment in the security of supply.

³ <<http://news.bbc.co.uk/2/hi/business/6211605.stm>>, published on 27 December 2006, with the updated price for Belarus based on <<http://news.bbc.co.uk/2/hi/europe/6221835.stm>>, published on 31 December 2006.

14. In conclusion, the market for the Russian Federation's gas shows several outstanding aspects. Firstly, domestic production is opening to non-Gazprom investors which is a welcome development that should continue, although some indicators suggest the Government might be following a different path. Secondly, the market for transportation is monopolised by Gazprom. In order to stimulate investment and security of supply, it is advisable for other companies to be granted access to this market. A good example of such an opportunity for investment would be a pipeline running through Turkey and connecting Europe to central Asia directly.

15. The top 3 external sources of gas for the EU countries are the Russian Federation (107 bcm), Norway (72bcm) and Algeria (59bcm), and the top three internal suppliers are the UK (92bcm), the Netherlands (79bcm) and Germany (20bcm). The reliance on Russian gas varies from country to country, generally increasing for the countries to the East of the EU, as became apparent in the various recent gas disputes. Gas is also a very important source of energy in these countries' energy mixes. For example, Hungary relies on gas to supply almost 45% of its total primary energy. The security of the supply of this gas is therefore a matter of utmost importance. With the decline of the EU's domestic production accelerating from 2005, the partnership with the Russian Federation (and Gazprom) is set to tighten even further in the future.

16. The analysis of future energy supplies in Europe should go beyond an overview of the options for securing stable supply of fossil fuels: these fuels are only available in limited quantities. The riches the earth has blessed mankind with, have to be used wisely. It is in the interest of all society to prevent unsustainable growth of demand in fossil fuels, as such growth would certainly lead to energy shortages in the future. Moreover, our planet suffers from the consumption of fossil fuels through the emission of CO₂ and other greenhouse gases. Member states should accept a greater responsibility towards the environment. Lastly, with prices for energy set to rise in the future, fossil fuels should be used as efficiently as possible.

17. End energy users – private and commercial – should also consume energy more rationally. Better isolating houses, minimising the standby functions of electrical equipment, using more efficient heating systems and energy saving light bulbs and technologies are just a few examples of possible options for reducing energy consumption. There are various explanations for the fact that consumers do not make full use of these opportunities.

18. Firstly, financial incentives for consumers to lower their energy use are not strong enough. As consumers got used to energy bills that reflect an over-consumption of energy, they have accounted for the higher costs. Especially in countries that used to be supplied with relatively cheap energy there were few reasons to save energy. Rising prices may encourage savings, although the facts show that at least in the short run the energy market is rather inelastic. Whether this is also true in the longer run is as yet unsure.

19. However, even when consumers are aware of saving opportunities, the investment required is often not made. This could be because the pay-back period is too long, because their financial situation prevents them from making the investments, or simply because they do not care enough about the matter. Raising consumer awareness to stimulate energy efficiency seems to be a priority. Awareness raising campaigns should not only rely on the financial aspect but also explain consumers' individual responsibility towards the environment and the prevention of possible future energy shortages. In addition, consumers should be encouraged to make the 'green choice' more easily by being offered 'green energy' and the option to choose which source of energy to use. For instance, heating efficiency can increase by utilising electrically powered heat pumps which use refrigeration technology rather than fuel combustion to provide warmth and cooling, making it much more efficient than conventional heating systems.

20. As for commercial energy users, financial considerations incite them to use their resources as economically efficiently as possible. When prices go up, commercial users tend to become more efficient, use more advanced technology and invest more in reduction of power consumption. Recent increases in energy prices have shown this mechanism to work. However, the level of investment in energy efficiency remains determined by economic factors, rather than application of the best available technologies. Much is still to be done in eastern European countries to significantly reduce energy consumption by commercial users.

21. In addition to energy saving measures, possible technical failures of energy supply systems have to be tackled efficiently. For the electricity transmission networks this implies the need to increase interconnections and to improve the co-ordination of network operators. To avoid negative effects of cuts in gas and oil supplies due to accidents in pipelines or to cater for extraordinarily high demand and seasonal fluctuations, storage capacity is particularly important for both individual companies and states. The latter

have a special responsibility towards each other in this respect that is not seen between actors in the private sector. It is this collective interest in the availability of storage capacity that suggests that member states ought to monitor the development of storage capacities. This should be done by overseeing the development of the technologies available for storage, as well as the investment in storage capacity.

22. Another important factor towards the enhanced security of energy supply is the emergence of the LNG (liquefied natural gas) market. A number of European states (such as the United Kingdom, Belgium, France, Greece, Italy, Portugal, Spain and Turkey) are diversifying their supplies by entering this market. The most outstanding example of such a strategy is Spain, which imports (from North Africa, the Middle East, Nigeria, Trinidad and Tobago, Malaysia and Australia) almost 80% of its gas via ships in the form of LNG.

23. As it is not only the present but also future generations that member states carry responsibility for, it is imperative that a long term solution to the energy problem is sought. This means that the earth is to be preserved by reducing the emission of greenhouse gases, but also that it is desirable to seek sustainable sources of energy. Although present estimates suggest that with the current progress of technology the renewable sources of energy will not be profitable before 2030, this should not prevent further investment needed to improve the economic viability of renewables.

24. With the future of energy in Europe looking rather feeble at the moment, nuclear energy is one of the options that has the potential of providing much reliable energy on a long term basis. With 55% of the world supply of uranium coming from Australia and Canada, supply of the material should be considered to be relatively stable, as these countries will have abundant supply for many years to come⁴. However, the question of nuclear technology is also a politically complicated one and is not sufficiently discussed in the Council of Europe member states. The Council of Europe can and should urge its member states to realise that the future of energy requires strong measures and an open debate when deciding on the role the nuclear energy should play. As the matter currently stands, nuclear energy has a clear potential to form a part of the energy mix and to contribute to long-term security of energy supply.

25. Major issues regarding the use of nuclear energy concern safe operation and waste disposal. Finland and France count as examples of responsible management of their nuclear power plants. With a large proportion of the revenues being invested in the development and maintenance of their waste management system, the waste produced does not overly burden present or future societies. Although the long history of production of nuclear energy has shown that accidents can have catastrophic consequences, it also shows that application of stringent security measures can make the technology very safe. Other countries, such as Bulgaria, Germany, Lithuania, Russia, Switzerland and Ukraine, currently use nuclear energy although some are considering phasing it out.

26. Another major concern with regard to nuclear energy is nuclear proliferation. It is important, however, to realise that there is not necessarily a direct link between the civil and military uses of nuclear technology. Moreover, the technologies needed to produce nuclear energy differ greatly from those required for military purposes. Keeping the nuclear energy option open would be a right step in the direction of providing sufficient supply of energy in Europe.

27. As the member states have expressed their concerns about the environment on various occasions, a greater use of environment-friendly fuel sources (such as biogas from sewage, urban waste and agricultural over-production) would be very relevant and could replace as much as 20% *or more* of the petroleum in the transport sector by 2030.⁵ Thus, renewable methane would provide an indigenous European fuel solution that could also deal with substantial waste management issues and cover clean water goals. Even the residual materials left over from the bio-gasification process can be re-used to replace chemical fertilizers for agriculture and for a variety of other commercial purposes.

28. As such, bio-methane offers a multifaceted 'environmentally closed loop solution' to multiple urban and agricultural waste and environmental problems: send a low-emissions methane truck out to collect waste; reprocess the waste into methane; upgrade the methane, compress it to fill up the truck and send the truck out for another load of fuel. On a well-to-wheel basis, biogas upgraded to biomethane for vehicle applications can reduce CO₂ by 100% over the normal petroleum-using car⁶. The energy efficiency of the

⁴ <<http://www.world-nuclear.org/education/mining.htm>> consulted on January 4th 2007.

⁵ Analyse und Bewertung der Nutzungsmöglichkeiten von Biomasse, Wuppertal Institut, 2006.

⁶ Well to Wheel Analysis of Future Automotive Fuels and Powertrains in the European Context, Concawe, European Council for Automotive Engineering (EUCAR), European Joint Research Centre, Version 2a, December 2005, Figure 4.4, page 29.

waste conversion process also can reach as much as 70% (in the case of wood-to-biogas) so renewable biomethane offers sound alternatives for the transport sector and electricity generation.⁷

29. With the continuing emergence of a single market for energy on the European continent, policy measures in one member state will increasingly have implications in others. The Council of Europe, as a truly pan-European organisation is in a good position to facilitate the coordination of cooperation on the energy policies of its member states. It is therefore advisable for it to assert its role in this respect.

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Secretariat of the committee: Mr Newman, Ms Ramanauskaite, Mr de Buyer

⁷ « Is Methane Gas Really a Credible Alternative in the Road Transport Sector ? », Peter Boisen, Chairman European Natural Gas Vehicle Association, September 2006.