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**COMMISSION STAFF WORKING PAPER**

**Energy dialogue with Russia - progress since the October 2001 EU-Russia  
Summit**

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### Energy dialogue with Russia - progress since the October 2001 EU-Russia Summit

#### 1. INTRODUCTION

Designed to give an impetus to the definition and arrangements for an EU-Russian Energy Partnership to be established within the framework of the Partnership and Co-operation Agreement (PCA)<sup>1</sup>, the Energy Dialogue was launched at the EU-Russian Summit of 30<sup>th</sup> October 2000 in Paris<sup>2</sup>. It is to be seen within the context of the “Common Strategy of the EU on Russia”<sup>3</sup>, adopted by the European Council in June 1999, which underlined the aim of the PCA as “promoting the integration of Russia into a wider area of co-operation in Europe (and) ... creating the necessary conditions for the future establishment of a free trade area between the European Community and Russia”.

The remit of the Energy Dialogue was defined in the Joint Statement to the Summit of Paris as providing a framework within which all issues of common interest in the energy sector, including co-operation on energy saving, rationalisation of production and transport infrastructures can be jointly examined and discussed. It is designed to achieve a substantial breakthrough, over the medium term, in a specific sector where there is strong mutual interest and where relations are already well established. Commitments achieved through this dialogue in the energy sector could then serve as a model for other sectors.

The preparatory phase from February through to September 2001 saw groups of experts analysing areas of common interest in the energy sector and the presentation of a joint Synthesis Report to the October 2001 EU-Russia Summit.

#### 2. THE FUTURE DIRECTION ESTABLISHED BY THE EU-RUSSIA SUMMIT IN BRUSSELS<sup>4</sup>.

The Joint Statement from the EU-Russia Summit of 3<sup>rd</sup> October 2001 in Brussels clearly recognised that the Energy Dialogue was now entering its next, operational stage following the completion of the initial analytical phase. It established the future directions of the Dialogue by drawing attention to a number of the conclusions and recommendations of the experts, recognising that, in the short term, progress could be obtained in the following areas:

- improvement of the legal basis for energy production and transport in Russia, completion of the regulatory provisions for production sharing agreements (PSA) and a mechanism for assisting investors in the energy sector, aimed primarily at simplifying administrative and licensing procedures, which are essential preconditions for boosting European investment in the energy sector;

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<sup>1</sup> The PCA with Russia was signed in June 1994 and came into force on December 1<sup>st</sup> 1997. Published in the Official Journal of the European Communities L 327 of 28.11.1997, page 3.

<sup>2</sup> The 6<sup>th</sup> Summit to be held since the Partnership and Co-operation Agreement with Russia came into force.

<sup>3</sup> Common Strategy of the European Union of 4 June 1999 on Russia.

Published in the Official Journal of the European Communities L 157 of 24.06.1999, page 1.

<sup>4</sup> Russia-EU Summit. Joint Statement.

External Relations press release: Nr: 12423/01 (Press 342). (<http://ue.eu.int/newsroom/>)

- legal security for long-term energy supplies, recognising the important role played in this context by long-term contracts and energy markets in ensuring energy security. Russia stresses the importance it attaches to long-term "take or pay" contracts;
- ensuring the physical security of transport networks. In this context, the European Union is ready to co-operate in the networks, in particular those used for exports, if and when this is considered necessary by the Parties. The development of a regional satellite monitoring system for accident prevention and leak detection for oil and gas infrastructures will be examined;
- the recognition of certain new transport infrastructures as being of "common interest", such as the Yamal-Europe gas pipeline network through Belarus and Poland, the northern trans-European gas pipeline, the development of the Shtokman field, the connection of the Druzhba oil transmission system through Belarus and Ukraine with the Adria network and the interconnection of the Parties' electricity networks, which will ensure non-discriminatory transit of energy products and increased supplies to the EU and the candidate countries. Such projects, and the choice of routes, are the responsibility of the States and companies concerned;
- in the light of the importance of rational energy use and savings, it is recommended that pilot projects in the Arkhangelsk and Astrakhan regions of Russia be carried out as soon as possible. During 2002, detailed summary reports for these regions will have to be drawn up with financial support from various European sources including industry. This should create a basis for the implementation of other such regional projects.

The Summit also recognised that certain important issues required further examination and technical study:

- the potential and merits of an investment guarantee scheme which would mitigate non-commercial risks;
- a study of the prospects that the flexible mechanisms of the Kyoto Protocol could offer to Russia for attracting investment in the modernisation of its energy sector;
- the conditions for reinforcing energy research and technology co-operation, notably through the creation of a Russia-EU Energy Technology Centre in Moscow. The added value of co-operation between such a centre and any national energy centre set up under bilateral co-operation between Russia and an EU Member State should be taken into account;
- certain preconditions which should be required for the supply of electricity, such as sufficient availability of installed capacity on the Russian market, measures to protect the environment and a high level of nuclear safety, comparable to those in force in the EU Member States;
- a study of the possibilities for common implementation of energy-saving and renewable energy projects, in particular by drawing up a catalogue of such projects in Russia which could be financed under the joint implementation mechanism provided for in the Kyoto Protocol;
- the organisation of training in corporate governance (i.e.: international accounting standards, rights of minority shareholders etc).

### 3. PROGRESS SINCE THE LAST SUMMIT

During the final months of 2001, discussions were held with the Russian authorities, as well as representatives from European and Russian energy industries, to examine the modalities of implementing concrete actions in line with the priorities identified in the Summit conclusions.

The Energy Dialogue was discussed at the 5<sup>th</sup> EU-Russia Co-operation Committee meeting held in Brussels on 30 November 2001, and preparatory discussions have been held to define a programme of work for the coming year, based on the points set out in the annex to the Summit Joint Statement. The state of each dossier is detailed below.

The Russian side has indicated that an appropriate framework within the PCA is needed to pursue the Dialogue. The present Sub-committee on Energy, Environment and Nuclear Safety issues would not, in their view, be an appropriate vehicle for the whole range of contacts.

The Council preferred, in the course of the preparation of the Co-operation Committee meeting, not to recommend dividing this sub-committee, but concluded that this issue could be pursued in the context of an overall review of the sub-committee structure. As it will take some time to consider this more general question, one solution would be to leave the sub-committee in its present form for the moment and to use the Co-operation Committee as a vehicle for incorporating high-level contacts into the PCA structure. The possibility exists for the Co-operation Committee to meet as often as necessary and for it to concentrate on specific issues (as is already the case with Kaliningrad). In line with the annex to the Summit Joint Statement, a report on progress should be prepared in time for the May 2002 Summit in Moscow.

At all times in the discussions with Russia, the interests and concerns of the Candidate Countries have been and will continue to be taken into account, bearing in mind that the objective of the Dialogue is to enhance the energy security of the European continent. The Commission will continue to keep the Candidate Countries informed of developments and progress in the Energy Dialogue with Russia.

Despite the continued insistence of the European Union on the importance of Russian ratification of the Energy Charter Treaty, it has to be noted that little progress has been achieved, particularly in the light of the declarations made by the Russian representatives on the occasion of the 10<sup>th</sup> Anniversary of the Charter.

#### *Relevant developments in the energy sector.*

With respect to energy developments since the October 2001 Summit, the beginning of December 2001 saw Russia finally give way to the intense pressure from OPEC to reduce oil exports. OPEC had decided at its meeting on 14 November to reduce production quotas by 1.5 million barrels per day to stop the slide in international oil prices, provided that the non-OPEC oil exporters reduced their production by 0.5 million barrels per day. Mexico, followed by Norway, indicated within a week a willingness to reduce their production provided the other producers did likewise. Given the technical difficulties of reducing production, Russia finally committed on 5 December 2001 to reducing oil exports by 150,000 barrels per day from 1 January 2002 through to 31 March 2002, but not the level of production. While oil exports are normally reduced at this time of year due to the greater demand resulting from the climatic conditions in Russia, the commitment to OPEC has led to an oversupply on Russia's internal market and a build up of stocks. Internal oil prices in Russia are currently around 5.3 US dollars a barrel, a reduction of more than 50% in the past three months and, in most cases,

below the cost of production (which ranges from 5 to 7 US dollars a barrel). With the end of winter approaching, combined with the determination of the Russian oil companies to substantially increase production as a result of their heavy recent investments, Vice-Prime Minister Khristenko announced on 30 January 2002 that the Russian Government was considering the creation of a special oil reserve to alleviate the glut on the domestic market. He also expressed an interest in the ideas contained in the Commission's Green Paper on Security of Energy Supply for a better use of Community oil stocks.

### **3.1 Improvement of the legal basis for energy production and transport in Russia.**

While Russia has made significant strides in reforming its economy, many international companies still perceive that investing in Russia involves higher than "normal" commercial risks. So long as this perception continues, Russia will find it challenging to attract the necessary levels of foreign investment foreseen under its new energy strategy.

To obtain investment funds at a reasonable price, there is a need for a more stable legislative and taxation regime. Energy companies, be they Russian or foreign, are used to handling geological and market risks. However, worries about the legislative and taxation regime increases the "risk premium" element in the discounting rates that investors, Russian or foreign, use in evaluating investment projects. The costs of capital rise, and economically marginal fields will not be developed.

However, it is evident that the necessary reforms still to be carried out will take some time. Until these have been progressed considerably further, international companies will hesitate to take on the risks involved in concession or licensing agreements, or investing in Russian companies as minority shareholders. So, at least for this interim period, it is important that a secure legal framework, such as that offered by a comprehensive and efficient PSA (Production Sharing Agreement) regime, is established to provide the European investors with the necessary legal and fiscal stability. Evidently over the medium to longer term, as European companies become more confident in the evolving legal and tax regime in Russia, other legal frameworks can be examined for facilitating investments in energy exploration, production and transportation, such as Joint Ventures and concessions.

In contrast to other areas of the EU-Russia Energy Dialogue, no progress has been made on this issue. PSAs remain a sensitive issue in Russia and this is reflected in the slow progress being made in completing the normative acts. The local Russian oil companies, operating under concession arrangements, are opposed to a PSA regime as they claim it gives an unfair commercial advantage to European companies by suppressing certain elements of risk (such as the risk of new fiscal measures) while maintaining the same financial rewards. On the other hand, it is absolutely vital that a suitable legal framework is drawn up which will provide European companies with the kind of fiscal certainty and legal security offered by PSAs. Without such a framework, European companies will not embark on large scale investments in the Russian energy sector. It cannot be excluded that Russia will link progress on improving the PSA regime to solving the current difficulties surrounding long-term contracts.

This is currently the major issue which needs to be resolved in the Dialogue. It is regrettable that Russia has not been prepared, to date, to accept the technical assistance on offer to help draft the necessary normative acts such as the calculation of "cost recovery" and those addressing taxation issues.

### **3.2 Legal security for long-term energy supplies.**

Both the EU and Russia recognise that long term gas contracts have played an important role in the development of the European gas market by providing a risk sharing arrangement between producers and buyers, enabling in turn important new production and infrastructure projects to be undertaken. They are, and will remain, important in European gas supply.

While these are an essential element for energy security, these contracts must necessarily evolve with the effective disappearance of boundaries within the EU. The strategies of commercialising natural gas within the EU must be adapted to the principles of a competitive and integrated market, and notably to the competition rules.

The Commission is examining certain clauses which exist in some of these contracts between gas producers and European importers and prevent the purchaser from selling the gas outside of a defined territory. Such territorial restriction clauses are incompatible with the competition articles of the Treaty (Article 81) as they prevent the free circulation of gas within the internal market.

Russian gas is normally delivered by Gazprom to the European importers at the EU border. In order to adapt the price to the competitive conditions to which each importer is confronted in their traditional market (i.e., normally, the Member State in which the importer is established) and to maximise its revenues in each Member State, Gazprom sells the gas at different prices to different customers. In many cases, this price differential and the revenues optimisation strategy behind it has been supported by a territorial restriction clause, forbidding the customer from reselling the gas outside a defined area. Such clauses are incompatible with established EC competition law as they clearly and artificially segregate national markets.

Exploratory talks were held in Brussels on 12<sup>th</sup> September 2001 between representatives of Gazprom, the Russian administration and the services of the Commission. Following correspondence between the Commission and Gazprom during October and November, the President of Gazprom, Mr Miller visited Brussels on 18 and 19 December 2001, meeting with Commissioners Monti and Lamy, and with the Director Generals for Competition and for Energy and Transport. On 21 and 22 January 2002, the Commission services met with representatives of Gazprom in Moscow, and on 25 February 2002 in Brussels.

Progress has been made towards resolving this issue. In particular Gazprom has already indicated that it is willing to not introduce the territorial restriction clauses in future contracts and that it is ready to discuss with its European clients the elimination of this clause in the existing contracts. It should be possible for Gazprom and the European importers to develop commercial alternatives that are compatible with European competition law while respecting the legitimate commercial interests of Gazprom and its European contracting partners. While the identification of and agreement upon such alternatives is the task of Gazprom and its partners, the ongoing dialogue with the Commission services may ensure the compatibility of these alternatives with EC competition law. Different possibilities are currently under consideration and grounds for optimism exist that a mutually acceptable solution to this problem can be found that respects EC competition law and the EU's other legitimate interests, as well as Gazprom's interests, even if significant work still remains to be done. It has been agreed that talks between the Commission's services and Gazprom will continue in the coming weeks.

### **3.3 Physical security of transport networks.**

As underlined in the Commission's Green Paper on Security of Energy Supply<sup>5</sup>, it is not just sufficient to secure a steady procurement of energy sources at reasonable prices on a long term basis, but also to ensure the security of the energy transportation networks. In this context, a continuous assessment of the existing energy transportation systems developed by Russia is essential in order to both determine the rehabilitation requirements and the necessity for further extensions. This concern was reflected in the Summit conclusions by the commitment of the European Union to "co-operate in the export networks, if and when this is considered necessary by the Parties". There was also a commitment to examine the development of a regional satellite monitoring system for accident prevention and leak detection for oil and gas infrastructures.

Technical assistance under the TACIS National Programme for Russia 2002-2003, as well as under regional co-operation programmes, have already been identified to fund a joint evaluation of the rehabilitation and the level of investments needed. The tendering process for this technical assistance will be launched shortly in the context of the de-concentration of the Commission's external co-operation programmes.

With respect to the safety aspect, discussions are ongoing with the Russian authorities concerning the possibility of creating a trans-European accident prevention and surveillance monitoring system for the gas and oil transmission infrastructure covering pipelines and tankers, as well as for hazardous oil products such as LPG (Liquefied Petroleum products). Such a surveillance system could make use of satellite systems, notably the future European satellite navigational system GALILEO. Funds from TACIS have already been allocated for a feasibility study of such a system and the Terms of Reference will be discussed with the Russian companies concerned.

To be comprehensive, such a monitoring system would necessarily also have to cover the transit countries. Therefore it could be located within the framework of a "Trans-European Observatory for Accident Prevention and Surveillance in the Hydrocarbon Sector", which will bring together the EU, Russia and the transit countries.

### **3.4 Projects of "common interest".**

The Summit identified a number of new transport infrastructures as being of common interest.

Russia has indicated that it wants swift action on this issue, particularly with respect to the financing aspects and access to international finance on an equitable basis with that of European companies. While it is clear that the projects themselves will remain a matter for private sector decisions based upon economic and commercial judgements, it is intended that one or two high level experts will be mandated to assess each project of potential "common interest" by consulting interested parties to clearly define the technical requirements, the level of financing necessary and the timescale envisaged. The close co-operation of the Member States and European industry will be vital for ensuring that the assessments drawn up are as complete and accurate as possible, while it is important that Russia concentrates only on those projects which will enhance the security of energy supplies of the EU. It is also clear that the current difficulties concerning certain clauses in some long term contracts for gas need to be

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<sup>5</sup> Commission's Green Paper "Towards a European strategy for the security of energy supply". COM(2000) 769 final.

resolved rapidly to ensure that these “round tables” can operate in a fully co-operative atmosphere. The results of this work will be presented to a future EU-Russia Summit.

On the basis of this work, for the limited number of projects selected, high level, independent experts will then be called upon to assist in promoting the financing of the investments required through a series of “round tables” consisting of the Governments involved, financial institutions, the private financial sector and the energy companies.

In the framework of the TACIS programme, the tendering process for the high level experts should be completed shortly. It is anticipated that the experts selected would begin immediately on consulting European companies, as well as the appropriate Russian energy companies, for the technical and financial assessment of the first projects and on the preparation of the first meetings and round tables. The Commission counts on the active support and collaboration of the Member states and the European energy companies to ensure the success of this operation.

It is clear that the projects themselves and specific routes chosen remain the responsibility of the companies and States concerned, and the funding should primarily be a question for the private sector.

#### *The Yamal-Europe gas pipeline network through Belarus and Poland.*

The original Yamal pipeline project was designed to bring gas from the planned new fields on the Yamal peninsula in Northern Siberia to serve the Russian market and also, via Belarus and Poland, to the EU market. While the link to the Yamal fields is now unlikely over the medium term, the first of the two pipelines planned across Poland has now been constructed and is operational, although it is currently only carrying about 17 Billion cubic metres, compared to its full capacity of 30 Billion cubic metres, due to an incomplete section in Belarus and insufficient compression. The second pipeline, to be laid parallel to the first and with a similar capacity, is the project of immediate interest.

#### *The Northern Trans-European pipeline.*

The agreement to conduct a feasibility study for this approximately 1,295 kilometre pipeline to transport Russian gas from Vyborg on Russia’s Gulf of Finland coast under the Baltic Sea to northern Germany was signed in April 2001 between Gazprom and Finnish and German companies. The capacity of the pipeline would be between 20 and 30 billion cubic metres a year and the estimated cost of the project is 2.8 to 3.35 billion Euro<sup>6</sup>. The main source of the gas for this pipeline is foreseen to be the new Shtokman field, although it could also be supplied with gas from the existing fields in Northern Siberia.

#### *The development of the Shtokman field*

The massive Shtokman field, which lies some 650 kilometres north-east of Murmansk in the Barents Sea, is estimated to contain some 3,200 Billion cubic metres at a depth of 330 metres. Output would rise to a plateau of around 90 billion cubic metres. Under the envisaged arrangements Rosshelf, a Gazprom subsidiary, would have a 50% share in the project and four western companies would share the remaining 50% equally. The project was approved for development under Russia’s Production Sharing Agreement (PSA) law and the cost is

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<sup>6</sup> 2.5 to 3 billion US dollars - calculated at the rate of 1 USD = 0.8955 Euros (2001 exchange rate)

estimated at over 22.3 billion Euros<sup>7</sup>. While the field could be developed to use the second Yamal pipeline, there would be a geographical advantage in connecting the field to the proposed Northern Trans-European pipeline.

*Connection of the Druzhba oil transmission system with the Adria network.*

While the majority of Russian oil is exported via a number of terminals in the Baltic Sea and the port of Novorossiysk on the Black Sea, crude oil also is exported into central Europe via the Druzhba pipeline which transits Belarus, with one branch crossing the Ukraine to Slovakia and Hungary and the more northerly branch crossing Poland to Germany. Environmental concerns surrounding oil exports out of the Black Sea through the increasingly crowded Bosphorus lend weight to diversifying routes for Russian exports to southern Europe. Connecting the Druzhba oil transmission system with the existing Adria network<sup>8</sup>, by reversing the latter's oil flow, would permit Russian oil to reach the Adriatic port of Omisalj, from where it could be exported.

A regional working group of interested parties will be established and a meeting organised by the Commission in Brussels.

### **3.5 Pilot projects in the rational use of energy and savings.**

In order to give practical and achievable objectives to the challenging task of improving the rational use of energy and promoting energy saving, the Summit recommended that pilot projects be carried out in two climatically different regions of Russia – Arkhangelsk and Astrakhan.

Preliminary contacts have been made with the regional authorities in Astrakhan and a first exploratory mission to evaluate the possibilities took place during the week of 14-18 January 2002 in Moscow and Astrakhan. The Commission delegation met with representatives of the Ministry of Energy, Gazprom, Lukoil and RAO UES in Moscow and subsequently with the Governor and authorities in Astrakhan in order to:

- Establish an understanding with the Ministry of Energy on how to proceed on the pilot programmes and identify key aspects of the work;
- To familiarise themselves with the energy situation in Astrakhan, to explain to the Astrakhan authorities the objectives of the pilot projects within the overall context of the Energy Dialogue and to exchange views on the priorities for improvements in energy efficiency and energy savings.

To progress further, the Parties agreed on the necessity for a Memorandum of Understanding between the European Commission, the Russian Ministry of Energy and the Astrakhan regional authorities. In addition, the following immediate priorities were identified during the visit:

- the construction of a connecting pipeline from the local “TEZ-2” gas-fired power plant to the hot water distribution system in the city. This would permit the hot water currently wasted by the power plant to be used in the city and thereby reduce the

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<sup>7</sup> 20 billion US dollars - calculated at the rate of 1 USD = 0.8955 Euros (2001 exchange rate)

<sup>8</sup> The Adria network currently carries Middle Eastern oil from the terminal at Omisalj on the Adriatic inland to the territories of the former Yugoslavia and Hungary.

demand on the city's district heating plants. The investment necessary has been estimated by the Russians at some 2.5 million Euro, but the savings of natural gas in the district heating plants could be considerable.

- the overall improvement of the district heating system, both in the distribution system and in the use of heat in the individual houses, appears to offer a significant potential for energy savings.
- addition of a 130 MW CCGT (Combined Cycle Gas Turbine) to the existing 100 MW "GRES" gas-fired combined heat and power plant, including waste heat utilisation.
- The construction of around 10 small, decentralised gas-fired Combined Heat and Power (CHP) plants in towns throughout the region.

The Astrakhan authorities have been requested to provide further information and, if this is supplied rapidly, a two week in-depth review mission could take place in early April 2002.

Preliminary discussions took place with representatives of the Arkhangelsk authorities in January 2002 and a visit to the region is planned for April 2002.

### **3.6 Co-operation on implementation of the Kyoto Protocol**

The successful conclusion of the negotiations of the modalities of the Kyoto Protocol at the COP 7 meeting in Marrakesh in November 2001 puts important responsibilities on the energy policies of the parties planning to ratify the protocol. After the US withdrawal, ratification by the EU, Russia and Japan is a sine qua non for achieving the necessary representation of 55 % of 1990 CO<sub>2</sub> emissions from Annex-1 parties (industrialised countries), required for the Protocol to come into force.

In addition to the commitments following ratification, the Kyoto Protocol also offers important opportunities, particularly for economies in transition such as Russia and the Accession countries which generally have targets that will allow these countries to be net sellers of emission rights under the flexible mechanisms (emissions trading, joint implementation) agreed in the Protocol.

The first and absolutely necessary step to formally open the possibility for benefiting from these co-operation possibilities is ratification of the Protocol. The EU is in the process of ratifying, aiming for a formal decision early enough to allow the Protocol to enter into force before the "Rio+10" World Summit on Sustainable Development in Johannesburg in August and September of this year. It is very much to be hoped that the Russian indication of an early ratification will be consistent with this time frame.

With the Protocol in force, any co-operative project in energy savings or improved energy efficiency which "generates" a reduction in CO<sub>2</sub> emissions, will allow the resulting CO<sub>2</sub> credit to be transferred to the investor (for example in the EU) in accordance with the modalities in the Protocol. This possibility will create an additional economic incentive for such projects over and above the incentive of the value of the energy saved.

The magnitude of this incentive will depend on the amount of energy saved and on the specific value of the CO<sub>2</sub> credits. The value of these credits, in particular, is a subject of much uncertainty:

- Firstly, the concession on sinks (forests) agreed in Marrakesh has, de facto, meant a reduction in the commitments for several parties and thereby reduced the overall demand for CO<sub>2</sub> credits.
- Secondly, the withdrawal of the US implies a much more dramatic fall in demand for CO<sub>2</sub> credits, probably to the extent that the available emission rights in Russia, Ukraine and several Central and Eastern European Countries will significantly exceed the requirements of those Annex-1 parties interested in acquiring emission rights (EU, Japan, Canada, etc).

It is unlikely that any potential investor would consider that a transfer of CO<sub>2</sub> emission rights is particularly valuable until there has been further clarification of the interaction between the different flexible mechanisms and legislation in place which defines the rules for accepting transfers of CO<sub>2</sub> permits from outside the European Union. Russia, having the largest potential quantity of emission rights to sell through the Protocol's emissions trading and also the biggest potential for joint implementation projects in the area of energy savings and energy efficiency, will have not only a substantial influence on the development of international emissions trading but will also play a key role in deciding the future framework of joint implementation.

### **3.7 Investment support scheme.**

A mechanism which targets the residual non-commercial risks associated with medium and long-term investments in oil and gas, exploration, development and transport, as well as in energy savings and improved energy efficiency in Russia could help to stimulate capital inflows. This could cover non-commercial risks such as breach of contract, expropriation, civil disturbance and barriers to currency conversion and transfer.

It is intended that the high level experts engaged to assess projects of common interest will also work on defining a possible investment guarantee mechanism for non-commercial risks which could be co-financed by European and Russian private and public sector financial bodies as well as by International Financial Institutions. They will work in close liaison with all interested parties, including the European Bank for Reconstruction and Development (EBRD). One or two of the projects of common interest could then possibly be supported as pilot projects by this mechanism during 2003.

It is clear, however, that the funding for such a scheme should primarily be a question for the private sector.

Russia has insisted in its request for the European Investment Bank (EIB) to become active on its territory. A first step could be for EIB involvement in the energy transport infrastructure to supply energy resources from Russia to EU markets, notably through the territories of the Accession countries.

### **3.8 EU-Russia Energy Technology Centre.**

Reinforcing energy research and technology co-operation is a key element for deepening the Energy Dialogue. The Summit conclusions therefore underlined the importance of creating an EU-Russia Energy Technology Centre in Moscow, noting that the added value which co-operation between such a centre and any national energy centre set up under bilateral co-operation between Russia and an EU Member State should be taken into account.

Since the Summit, work has concentrated on compiling an inventory of all the energy technology centres in Russia and undertaking the preparatory work to establish the EU-Russia Energy Technology Centre.

Interest has already been expressed by a number of European entities, who would be obliged to provide additional co-financing. Current thinking is for the work of the Centre to be grouped into a number of work packages reflecting the main priorities highlighted in the report prepared by the thematic group on “Technology transfer and energy infrastructure” last year and to be led by two co-directors, one European and one Russian. It is also important that the Centre act as a focus for EU-Russian co-operation in energy technology by closely co-operating with existing technology centres, be they funded by the European Community, the Member States and/or by Russia, and to be in premises large enough to permit conferences, workshops and seminars to be held.

The objective is to inaugurate the Centre as soon as possible.

### **3.9 Trade in electricity**

It is clear that a number of preconditions need to be fulfilled before a substantial trade in electricity can take place, such as reciprocity in market opening (giving equal access to EU companies on their territory), cost-based pricing, environmental protection and a high level of nuclear safety comparable to that which exists in the EU Member states. The Commission’s Green Paper on Security of Energy Supply, however, underlined the importance of better interconnections between the networks of the EU and those of the applicant countries and Russia. Therefore a prior examination of the prospects for trade in electricity, the actual and potential bottlenecks in interconnection and the technical issues related to the incompatibility of the Russian electricity system with that of continental Europe could be undertaken. Once this is completed, the Commission would then be able to assess the prospects and the level of investment necessary. The funding of these investments should primarily be a matter for the private sector.

Several technical assistance projects on this subject have already been completed and are now being examined in order to be in a position to agree an action plan with the Russian electricity company RAO UES. Consideration is also being given to the possible updating and implementation of the recommendations contained in the 1999 TACIS report on this issue.

### **3.10 Clean coal.**

Russia is the world’s sixth largest hard coal producer and coal represents some 16% of Russia’s total primary energy supply. While production almost halved between 1988 and 1998 as the industry was heavily restructured, production is now increasing. With Russian energy policy thinkers increasingly worried about too high a dependence internally on natural gas, the main provisions of Russia’s recent “Energy Strategy until the year 2020” document project a 75% increase in coal production<sup>9</sup> and for an increasing role for coal in electricity generation<sup>10</sup>, which in turn could liberate more natural gas for export.

While any effort by Russia to increase coal-fired electricity generation at the expense of gas-fired generation is obviously of concern in the framework of climate change, the Russian targets under Kyoto can certainly accommodate an expanded use of coal. However, for the

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<sup>9</sup> From a 258 million tonnes in 2000 to between 340 and 430 million tonnes in 2020.

<sup>10</sup> The Strategy calls for coal-fired electricity generation to increase from 17% of total generation in 2000 to 29% by 2020, which could double coal consumption in the power sector.

EU to increase imports of natural gas from Russia in order to help meet its Kyoto targets could run counter to the overall objective of a global reduction in greenhouse gas emissions unless a significant amount of the additional natural gas imported into the EU is a result of energy efficiency and energy savings in Russia.

In this context, therefore, it is important that any increased use of coal for generating electricity in Russia is based upon modern, efficient and cleaner coal combustion technologies. For this reason, and to promote the most efficient EU Clean Coal Technologies, Russia has been considered a priority in the 2001 call for proposals<sup>11</sup> under the CARNOT programme<sup>12</sup> related to the promotion of the clean and efficient use of solid fuels, and will likewise be a priority in the 2002 call for proposals.

Two projects concerning Russia have been accepted under the 2001 call for proposals:

- “*Cost Effective Clean Coal Improvements to Russian Utility Plant*”. Many of the old coal-fired plant in Russia operate at an average efficiency of between 27% and 29%, compared to a typical efficiency in Europe of around 38% and some in the 42%-45% range. The objective of the project will be to gain better market and technical information to facilitate the technology transfer of relatively low cost methods to improve the efficiency and environmental performance of conventional coal-fired power plants in Russia. Three workshops will be held, one each in Moscow, Ekaterinberg and Novosibirsk, to exchange information and to present recent developments and best practices.
- “Promotion of Renovation Activities in the Russian Energy Sector”. This study will be market assessment of the perspectives for rebuilding/rehabilitating coal-fired power plants in Russia to increase efficiencies and thereby reduce the greenhouse gas emissions. On the basis of this work, proposals to overcome the barriers to the deployment of Clean Coal Technologies in Russia will be presented.

### **3.11 The realisation of the EU’s internal market in electricity and gas.**

It is evident in the discussions that Russia has had a perception that the development of the internal energy market in the EU will be injurious to their interests, rather than recognising the opportunities it may present.

For gas, Russia sees the advantages of a unified market from the Arctic to the Mediterranean, but feared that, as the deadline for full market opening approaches, the whole concept of long-term supply contracts might be undermined by the transformation of the gas market into a commodity market, with a large percentage of this market accounted for by spot trading. Russia believes that such a scenario might endanger the existing and long-standing system for guaranteeing the return on the high levels of investment necessary for developing new gas fields and transportation networks. In discussions, the Commission has recognised the importance that long term contracts have played in developing European gas markets. Such contracts have provided a risk sharing arrangement between producers and buyers which has enabled important new production and infrastructure projects to be undertaken. The Commission has also clearly underlined that such contracts will remain important in European gas supply to the extent needed to underpin large infrastructure investments, but that the

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<sup>11</sup> Call for proposals for 2001.

Published in the Official Journal of the European Communities, C 270 of 25.9.2001, page 8.

<sup>12</sup> Council Decision 1999/24/EC of 14.12.1998.

Published in the Official Journal of the European Communities, L 7 of 13.1.1999, page 28.

contents of the contracts must be compatible with EU internal market and competition rules[DG COMP]. The evolution of the system of contractual arrangements can be made to be in Gazprom's interest too, if sufficient imagination and entrepreneurial effort is devoted to the subject. Certainly the Commission has encouraged further reflection in this regard and, in this sense, has wholeheartedly welcomed the opportunity to assist at events organised by the Russian Federation to explore new avenues. A first event has been proposed to take place soon in Moscow, taking in consumers, producers and regulatory authorities.

With respect to electricity, the Commission has repeatedly stressed that there are a number of important preconditions that need to be fulfilled before a substantial trade in electricity can take place. Western Europe is currently oversupplied, whereas Russia has a generation deficit; first the reforms in Russia must ensure sufficient generating capacity for Russia's own domestic markets. Once this has been achieved, the issue of reciprocity in market opening must be addressed, as well as related trade issues such as cost-based pricing and environmental protection. It would be unacceptable to condone electricity trade unless there is a high level of nuclear safety in Russia, at least comparable to that which exists in the EU Member states. However, according to the Chairman of RAO-UES, Mr A. Chubais, it is currently possible to differentiate electricity generated by thermal power plants from that generated from nuclear. He therefore believes that it would be possible to guarantee that any electricity exported into the EU would be from non-nuclear power plants. It remains to be seen whether such a distinction is possible.

The creation of the world's largest and most integrated energy market should not be seen by Russia as a threat but as offering significant opportunities. However, in discussions, Russia has repeatedly raised a concern that, upon enlargement, the candidate countries will be subject to some legal Community restriction on the percentage of fossil fuels that may be imported from one source. While the Commission's Green Paper on Security of Energy Supply[SG] does recommend a balanced energy mix and a diversification of energy sources, there is no mention of specific quotas nor is there in any Community legislation. The Commission has therefore underlined that Russian fears of quantitative restrictions for fossil fuels are unfounded, but Russia keeps maintaining this view in public declarations.

In addition, the EU's experience in market opening could be useful as the Russian reform process begins to address the future of all grid natural monopolies[ECFIN] In this context, the Commission is ready and willing to offer assistance and experience on regulatory issues necessary for investment, such as non-discriminatory access to the transport infrastructure, separation of generation and transportation, and the concept of a public service obligation.

Success here could facilitate the future integration of the wider European market, thereby enhancing security of energy supply and the optimum use of resources. The Commission will look at transferring know-how and experience on the regulatory front to Russia and will seek to ensure that, as systems develop, they develop together and not apart.