



EU-UKRAINE ENERGY COOPERATION



THIRD JOINT EU-UKRAINE REPORT

Implementation of the EU-Ukraine Memorandum of Understanding on Energy Cooperation during 2008

CONTEXT

Re-enforced co-operation between the EU and Ukraine in the field of energy, with the common objective of bringing the respective energy markets closer together, is a key element of the increasingly close relationship as expressed in the EU-Ukraine Action Plan agreed in February 2005. The Action Plan was endorsed by the EU-Ukraine Cooperation Council under the Partnership and Cooperation Agreement.

The Memorandum of Understanding (MoU) on co-operation in the field of energy between the EU and Ukraine was signed on 1 December 2005 within the context of implementation of the EU-Ukraine Action Plan. It sets out how the two sides plan to organise their work to bring their energy markets closer together.

The MoU establishes a joint strategy towards the progressive integration of the Ukrainian energy market with that of the EU and consists of road maps covering (1) nuclear safety; (2) the integration of electricity and gas markets; (3) security of energy supplies and the transit of hydrocarbons; and (4) the coal sector. The MoU also envisaged a fifth roadmap which has now been developed for increasing co-operation in energy efficiency and the promotion of renewable energies.

Two reports on the progress achieved in 2006 and up to August 2007 were presented respectively to the EU-Ukraine Summits held in Helsinki on 27 October 2006 and in Kyiv on 14 September 2007. This third Joint Report highlights progress which has been achieved since September 2007.

KEY PROGRESS SINCE SEPTEMBER 2007

1. WORKING GROUP ON NUCLEAR SAFETY

In December 2007 the joint European Commission-International Atomic Energy Agency-Ukraine evaluation of the nuclear safety of the Ukrainian Nuclear Power Plants (the Joint Project) with a view to supporting the nuclear safety provisions of the Memorandum of Understanding got underway. The terms of reference for this project had been agreed in Spring 2007 by the Joint Working Group on Nuclear Safety. It is estimated that the Joint Project will take about two years to be completed. The involvement of external experts, as foreseen by the MoU, is essential to attain the required level of credibility of the project, necessary to obtain the acceptance of the EU Member States.

Ukrainian experts have started self assessments in the different areas relevant to nuclear safety. The Joint Project foresees these self assessments to be based on common task guidelines. These guidelines were presented by the International Atomic Energy Agency (IAEA), then discussed at the Joint Project Steering Committee meetings and approved by the parties.

The design safety (Task 1) work schedule and self-assessment forms have been revised and reconciled. In addition, a training seminar has been conducted for the Ukrainian organisations that will be involved in the self-assessment.

The self-assessment report for operational safety (Task 2) has been drafted considering the recommendations and findings of OSART missions to the Ukrainian Nuclear Power Plants in operation. In May 2008, the related working group approved the timetable of works.

In the area of radioactive waste management and decommissioning (Task 3), the first expert meeting took place in February 2008. In July 2008 a training seminar was held for the representatives of all Ukrainian NPPs that will be involved in the self-assessment in this area.

In relation to regulatory aspects (Task 4), the Ukrainian nuclear regulator (the State Committee of Nuclear Regulation of Ukraine) has completed its self-assessment in terms of its compliance with the IAEA standards. The results of this self-assessment were discussed on 1-2 April 2008 during a visit of the IAEA experts to the Ukrainian nuclear regulator. The IRRS mission for the assessment of regulatory safety aspects was conducted on 8-20 June 2008.

The Joint Project is mainly supported by the Community's Instrument for Nuclear Safety Cooperation.

2. WORKING GROUP ON THE INTEGRATION OF ELECTRICITY AND GAS MARKETS

Ukraine has confirmed its commitment to move towards opening up its gas and electricity markets, and the National Energy Regulatory Committee (NERC) has undertaken concrete steps to adapt its electricity and gas tariff-setting methodologies towards cost recovery levels. Further progress is however required to ensure the effective implementation of this commitment, bearing in mind its possible social impact.

At the same time, NERC is finalising its reform plan to move away from the current wholesale electricity market model to a balancing market model. In November 2007, the Ukrainian Government adopted a Resolution envisaging a three-staged Action Plan to implement this reform:

- Stage 1 (2008-2009) - Creation of the legal and regulatory basis and partial introduction of bilateral contracts between electricity market participants;
- Stage 2 (2010) - Introduction of mechanisms for balancing the sale and purchase electricity volumes, while maintaining a centralized load scheduling;
- Stage 3 (2011-2014) - Introduction of self-compilation of load schedules by the electricity market participants and establishment of a full-fledged exchange for the trade of electricity.

With respect to the objective of strengthening the independence of the NERC, a draft law is under discussion in the Ukrainian Parliament and is expected to be adopted soon. This draft

law also foresees the establishment of a special fund under the state budget to support the activities of the NERC.

A Community-funded twinning project is actively assisting the NERC in strengthening its capacity with respect to the regulation of the electricity market. The project concentrates on regulatory policy design, implementation of incentive regulation, quality of supply standards, unbundling of distribution and supply, transmission pricing and legal harmonisation with the *Acquis communautaire* in the field of electricity. However, the implementation of some components of the project remains suspended pending the adoption of the above-mentioned draft law on the regulation of energy markets.

A similar twinning project with respect to the regulation of the gas market was published in July 2008 and is expected to start in the beginning of 2009. It is important to continue the reform of the gas market and finalise the draft law on the principles of the gas market functioning.

The draft Law of Ukraine "On the Principles of the Natural Gas Market Functioning", commented by the ministries and institutions, is currently being modified by the Ministry of Fuel and Energy of Ukraine. This law will be discussed with the European Commission in view of its possible conformity with the EU *acquis*.

With respect to the joint application of Ukraine and Moldova to join UCTE, co-ordination between this work and the ongoing Tacis study in support of the progressive participation of Ukraine in the trans-European electricity networks has been ensured on a regular basis. The Tacis project has now delivered a series of technical reports on the legal and technical requirements for Ukraine's integration into trans-European the electricity networks that are currently under consideration within the Ministry of Fuels and Energy.

Following the Ministerial Council meetings of June and December 2007 in Montenegro and in Serbia, the Energy Community requested the European Commission to coordinate the process for the possible accession of Ukraine to the Energy Community. The Commission carried out exploratory talks with Ukraine on 27-29 February 2008 in Kiev. A mandate for the Commission to undertake negotiations with Ukraine on its possible accession was adopted by the EU Council on 15 July 2008.

3. WORKING GROUP ON THE SECURITY OF ENERGY SUPPLIES AND THE TRANSIT OF HYDROCARBONS.

Following up on the second Joint Report, the European Commission has been in discussions with the European Investment Bank, the European Bank for Reconstruction and Development and the World Bank to develop a concept for a financial mechanism to be open to Ukraine, the national financial agencies of the EU Member States and non-EU countries private sector financial bodies and other participants, to provide and oversee the financing which is needed to support the rehabilitation and modernisation of Ukraine's main gas transit infrastructure. The final report of the Audit of the Ukrainian gas transit system carried out under the Tacis Programme, which was submitted to the Ukrainian government in 2007, estimated the cost of the rehabilitation plan at €2.5 billion over the period 2009-2015. To ensure the development of a master plan detailing how the rehabilitation and modernisation should proceed, the Ukrainian side will prepare "The Concept Paper on the Ukrainian Gas Transit Network Development, Modernisation and Re-equipment" and, with the view of implementing the above-mentioned Concept Paper, will elaborate "The Programme on the Gas Transit Network Operation's Safety and Security Improvement by "Ukrtransgaz" for the Period of 2008-2015". In parallel, the European Commission and Ukraine will continue to discuss the overall approach for the

reconstruction and modernisation of the gas transit system in Ukraine as presented by the Commission on 2nd July 2008. These documents will form part of the master plan and be presented and discussed at the Investment conference to be arranged jointly by Ukraine and the EU.

Following technical assistance provided by the European Commission to analyse the various options for Ukraine's eventual compliance with Community *acquis* in the field of oil stocks, a draft law was prepared. Although its adoption was planned initially for the end of 2007, it is still under examination in the Cabinet of Ministers of Ukraine. Once approved by the Cabinet of Ministers, the Ukrainian side will provide a copy to the European Commission for a detailed examination of its conformity with the Community *acquis*.

The European Commission, together with Ukrtransnafta, has been also preparing a twinning project aiming at building the institutional capacity of the body to be defined in the above-mentioned draft law which would be responsible for the management of the oil.

Drawing on the conclusions of the EU-funded feasibility study which demonstrated the commercial viability of the extension of the Odessa-Brody crude oil pipeline to Plock, there is a recognition of the importance of moving ahead with this key infrastructure project. A step forward was taken recently to enlarge the implementing joint venture to include Azerbaijan, Georgia, Kazakhstan and Lithuania in addition to Ukraine and Poland. At the start of 2008, a new joint venture "Sarmatia Ltd" comprising DNKAR (Azerbaijan), GNGK (Georgia) and «Klaipedos Nafta» (Lithuania), in addition to "Ukrtransnafta" (Ukraine) and «Przyiazna» (Poland), was established. In May 2008, "Sarmatia Ltd" concluded a contract to update the above-mentioned feasibility study. According to "Sarmatia Ltd", the total cost of the extension of the pipeline to Plock is now estimated at € 252 million.

Following the inauguration of the Boyarka Gas Metrology Centre in December 2006, the final work is underway to make the centre fully operational. Discussions are now ongoing to give the Centre a regional dimension and further work is expected to begin before the end of the year to deliver international accreditation of the Centre, extend the scope of its activities to crude oil and oil products, and to organise the delivery of internationally recognised training in its facilities. A regional commercialisation conference will be organised by Ukraine before the end of the current year.

Further to a request from the Security and Defence Council of Ukraine, the European Commission launched in 2007 a technical assistance project to work out state-of-the-art statistical and forecasting methodologies as well as models for energy balances for Ukraine, based on EU methods and practices, with a view to harmonising Ukraine's decision-making processes in the field of energy security with international practice.

4. WORKING GROUP ON THE COAL SECTOR

With constant support of the members of the Working Group on the Coal Sector, the Tacis-funded coal sector policy and reform project was finalised in November 2007 and, following minor refining, published on tender in April 2008. The implementation phase of the project started on 1 September 2008.

The project has three main objectives:

- To further develop and maintain a programme for the coal industry for the period 2009-2016, paying due respect to the role of the coal industry in Ukraine's energy security strategy, the ongoing economic reforms and the government's social and environmental obligations;

- To provide the various stakeholders with the capabilities and means to implement the coal sector reform programme;
- To improve occupational safety in coal mines.

In addition, the importance of addressing the issue of the capture and use of methane from the coal mines has been recognised as a key area of importance, both from an environmental and a safety perspective. The European Commission is therefore developing, jointly with the Ministry of Coal Industry of Ukraine, a project to be funded under the Community thematic programme "Environment and sustainable use of natural resources, including energy (ENTRP)" 2007-2013. Also, with the objective of attracting external investments to address this issue, further technical assistance has been prepared to address co-operation in this area. The possibility of cooperation in clean coal technologies should also be further examined, particularly with respect to coal-fired thermal power plants.

5. WORKING GROUP ON ENERGY EFFICIENCY AND RENEWABLE ENERGIES

Upon a proposal from the European Commission in January 2007, the European Council of March 2007 adopted ambitious targets to improve energy efficiency and promote renewable energy sources. These targets included a reduction of at least 20% in greenhouse gas emissions by 2020 compared to 1990, an objective of 20% savings in energy compared to the projections for 2020, a binding target of a 20% share of renewable energies in the overall EU energy consumption by 2020 and a binding minimum target for all EU Member States of 10% of biofuels in overall EU transport oil consumption, subject to production being sustainable, second generation biofuels becoming commercially available and the Fuel Quality Directive being amended accordingly to allow for adequate levels of blending.

In this context, recognising the very significant opportunities for energy savings in Ukraine and to fulfil the objective in the Memorandum of Understanding, a roadmap on energy efficiency, renewable energies and measures to tackle climate change, was signed on 26 March 2008 following a second meeting of the implementation group in February 2007. This roadmap, attached as annex 2, has an initial focus on developing initiatives towards improving the energy efficiency of buildings and on ensuring a continual exchange of information on energy efficiency and renewable energy projects.

The Working Group has also discussed recent progress in relation to the building sector and building standards and domestic energy metering systems, as well as priorities in the area of renewable energy (projects development and database and programmes for heat supply to housing and communal services). Institutional issues in the energy efficiency and renewable energy sector have also been addressed.

Within the activities outlined in the Roadmap and following TAIEX workshops for Ukrainian officials on "financing instruments available for promoting energy efficiency and renewable energy sources in Ukraine" and on "policy issues and practical details concerning the raising of building standards for energy efficiency in Ukraine towards those in the European Union", the possibility of a twinning project in support of NAER, the Ukrainian Agency for Efficient Use of Energy Resources, is currently under discussion.

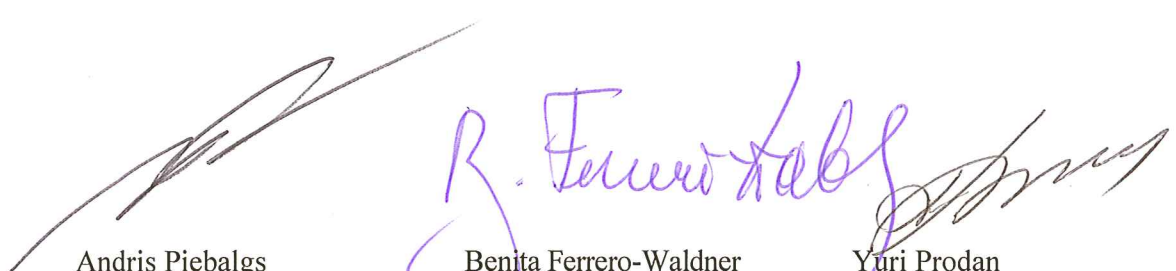
6. COMMISSION SUPPORT

With respect to future EU-Ukraine cooperation in the framework of the European Neighbourhood and Partnership Instrument (ENPI), the second Joint Report on the MoU

identified that the energy component of the ENPI Ukraine Annual Action Programme 2007 will be implemented in the form of a sector policy support programme (including budgetary support), the Financial Agreement which is currently being prepared for signature. This support amounts to € 87 million (including up to € 82 million of budgetary support) and is seen as a financial contribution to the implementation of all the provisions of the Memorandum of Understanding on Energy cooperation. Disbursements are conditioned to the attainment of jointly agreed benchmarks (attached as annex 1).

With respect to the ENPI Ukraine Annual Action Programme 2008, the European Commission has proposed to allocate € 70 million (including €66 million of budgetary support) to support Ukraine's plans in the area of energy efficiency and renewable sources of energy.

Signed on 29th August 2008:



Andris Piebalgs
EC Commissioner for Energy

Benita Ferrero-Waldner
EC Commissioner for External
Relations and European
Neighbourhood Policy

Yuri Prodan
Ukrainian Minister of Fuel
and Energy

Annexes:

1. The agreed indicators for the 2007 budget support.
2. The roadmap on energy efficiency, renewable energies and measures to tackle climate change.

Agreed Indicators for the 2007 budget support

Condition	Expected achievement date			Unit weight
	2008	2009	2010	
Tranche One: Fixed tranche, €40 million				
Establish Joint monitoring group (JMG) with a view to following up fulfilment of the programme's conditions	x			N/A
Adoption of the Law on State Budget 2008 and the financial regulation necessary for implementing the Budget support programme	x			N/A
Tranche Two : Variable tranche, maximum €42 million				
1. Submit and implement a Law on Public Procurement in line with EU Norms:				20%
1.1. Submit for the consideration of the Verkhovna Rada of Ukraine of the draft Law on Public Procurement, aligned with EU norms in that area	x			
1.2. Implement the new Law on Public Procurement *		x	x	
2. Further strengthening of the capacity and independence of the National Electricity Regulatory Commission:				12%
2.1. Submit for the consideration of the Verkhovna Rada of Ukraine of the draft Law on State regulation of energy	x			
2.2. Implement the new Law on State regulation of energy *		x	x	
2.3. Adopt and implement the "Strategy for providing Social Protection of the Population under Condition of Increases of Prices on Energy Resources" **		x		
2.4. Prepare draft primary and secondary legislation necessary to harmonise Ukrainian legislation with the EU Directives on electricity and gas, based on the agreed recommendations of the Twinning projects on electricity and gas market regulation. Implement the adopted legislation.	x	x	x	
2.5. Gas, electricity, and heat tariffs continue to gradually move towards economically justified levels	x	x	x	

Condition	Expected achievement date			Unit weight
	2008	2009	2010	
3. No increase in the quasi-fiscal deficit in the energy sector compared to 2006:				5%
3.1. Average cash collections at or above 95% and 85% in the electricity and gas sectors, respectively, in 2008	x			
3.2. Average cash collections at or above 96% and 90% in the electricity and gas sectors, respectively, in 2009 and 2010		x	x	
4. Achieve concrete progress on the preparation of the integration of Ukraine into the EU Energy market:				12%
4.1. Submit for the consideration of the Verkhovna Rada of Ukraine of the draft Law 'On Principles for the Functioning of the Natural Gas Market', aligned with relevant EU legislation	x			
4.2. Implement the new Law 'On principles for the Functioning of the Natural Gas Market' *		x	x	
4.3. Elaborate a comprehensive Action Plan to integrate the united power system of Ukraine into the electricity trans-European networks, drawing on the results of the Tacis project "Support to Ukraine's Progressive Integration into the Electricity Trans-European Networks" and the requirements of the UCTE (Union for the Co-ordination of the Transmission of Electricity). Adoption by the Government and implementation of the approved Action Plan.	x	x	x	
5. Adopt and ensure further implementation of a modernisation plan for the oil and gas transit network (trunk pipelines): ***				
5.1. Adopt and implement a development plan for the safety and security monitoring system for the hydrocarbon transit networks		x	x	
5.2. Provide for the conduct or the proper finalisation of the technical and financial audits of the oil and gas transit network infrastructure	x	x	x	
5.3. Present for commissioning by the State Commission the gas metrology line in the Regional Metrology Centre in Boyarka. Accreditation and international legalisation of the laboratories and testing stands of the gas metrology line.		x	x	
5.4. Further the construction project of the oil and oil products metrology line in the Regional Metrology Centre in Boyarka; and the establishment of a Regional Hydrocarbons Metrology Training Centre		x	x	

Condition	Expected achievement date			Unit weight
	2008	2009	2010	
5.5. Define additional sources and supply routes of oil and gas to Ukraine, including the potential for LPG and LNG, and define the additional requirements for the oil and gas transit system		x		
6. Finalise with the international financial institutions the financing agreements for priority infrastructure projects, taking into account the list of projects defined in the Aide-Mémoire of 22 October 2006 between the European Commission and the Ministry of Fuels and Energy (Annex A)	x	x	x	5%
7. Draft the primary and secondary legislation necessary to achieve harmonisation with the EU Oil Directives, including the establishment of the institutional arrangements for the management of strategic oil stocks. Enforce the adopted legislation	x	x		7%
8. Design and begin construction of a pilot international gas metering station at one of the entry points into the gas transit system of Ukraine		x		12%
9. Energy intensity of the economy in 2010 is reduced by at least 10% compared to 2005****			x	10%
10. Improvement of energy efficiency of the gas compressor stations on the gas transit system (trunk pipelines) through their modernisation		x	x	7%

* Following adoption of the Law by the Verkhovna Rada of Ukraine

** In accordance with the Resolution of the Cabinet of Ministers of Ukraine № 408 of 13.06.2007

*** In accordance with the provisions of the EU-Ukraine Memorandum of Understanding on co-operation in the field of energy signed on 01.12.2005

**** In accordance with the provisions of the Energy Strategy of Ukraine until 2030

EU-Ukraine Working Group on Energy Efficiency, Renewable Energies and Measures to Tackle Climate Change

Roadmap

1. The improvement of normative and legal frameworks in the sphere of energy efficiency, alternative and renewable energy sources and approximation of relevant Ukrainian legislation with that of the EU *acquis*.

- Making proposals to support and review the implementation of the existing action programs as well as the Energy Strategy of Ukraine until 2030 in the field of energy efficiency and alternative and renewable energy sources. Take stock of existing plans in this field.

- The Ukrainian side will provide copies of the existing action programs as well as copies of the relevant draft laws that are under preparation, notably the draft laws on biofuels and energy savings. The EU side will provide comments on these documents with a view to share experience and best practices and make recommendations for approximation with the EU *acquis*.

2. Priority fields for co-operation to promote energy efficiency and the introduction of energy efficient technologies.

- Making proposals to support and review the implementation of existing plans for improving energy efficiency in the Ukrainian building sector. Development of new proposals in this area, including financing plans and timetables for implementation. The Ukrainian side will provide the EU side with the current Ukrainian regulatory framework in this area as well as any relevant draft legislation by the 15th of April, 2008. The Parties will jointly organize a follow-up workshop for Ukrainian officials on the EU experience of implementing building standards and improving energy efficiency in the EU building sector. The Ukrainian side will initiate and complete an inventory of energy efficiency in the Ukrainian building sector by the end of 2008.

- Elaboration of methodology for the improvement of the domestic metering system of energy resources measurement in the housing sector. The Ukrainian side will provide the EU side with the current regulatory framework, administrative practices and state of play in this field by the 15th of April, 2008. The EU side will review the situation and make proposals for improvements by the end of 2008.

- Creation of an information system covering energy production and consumption and a single energy audit system. The Parties will exchange information about existing regulatory bases and administrative practices in this

field. The EU side will review the existing situation and give its recommendations about its improvement in Ukraine.

- Development of a twinning project - currently under identification - for the National Agency of Ukraine on Ensuring Efficient Use of Energy Resources (NAER) on the optimization of administrative structures and procedures in the domain of energy efficiency (precise scope to be confirmed). With the assistance provided through a Framework Contract to be managed by the Delegation, NAER will draft an application for the 1st semester of 2008 which will then be reviewed by the EU side and submitted to the relevant institutions.

3. Priorities to promote and facilitate the commercial production and use of renewable and alternative energy sources in Ukraine

- Development of proposals for switching heat supply systems of public buildings (schools, hospitals and other institutions) to use local fuels, including synthesis-gas. Take stock of existing programs for the improvement of heat supply systems for housing and communal services. The Ukrainian side will provide the EU side with information on ongoing projects in this field by the 1st of April, 2008.

- The Ukrainian side, with EU support, will develop a database of projects for the promotion of alternative energy sources, in particular biomass, accompanied by financing plans, estimated production costs, and timetables for implementation. The EU side will consider supporting and participating in a workshop in Ukraine, whose aim shall be to help Ukrainian decision-makers develop a full understanding of the potential contribution that various renewable energy sources can make to Ukraine's energy balance, and of what would need to be done on the policy side to make effective progress in this regard.

- Review of progress in developing alternative fuels in the transportation sector, including biofuels. Cooperate on regulatory standardization in this field. The Parties will provide each other with relevant legislative measures and applicable standards in this field periodically. The EU side will share information on the development of sustainability requirements.

4. Cooperation with International Financial Institutions and other donors in the field of energy efficiency and Renewable energy sources.

- Ensure a continued exchange of information on energy efficiency and renewable energy projects, including those implemented with the help of financing from International Financial Institutions and other donors.

- The EU side will continue to assist Ukraine in taking advantage of available funding for the preparation of lending operations in the energy efficiency and renewable energy sources fields in Ukraine.

5. Support and promote the establishment and development of energy services companies (ESCO).

- With the EU side promotion, establishment of institution of energy services companies network aiming at ensuring of practical implementation of energy efficient projects and technologies in regions of Ukraine and ensuring of further service and permanent work of equipment.

6. Financing.


- The EU side will inform the Ukrainian side about possibilities to take part in EU financial programs in the field of efficient use of energy resources and energy efficiency.

Signed for and on behalf of:

National Agency of Ukraine on
Ensuring of Efficient Use of
Energy Resources (NAER)

European Commission
Directorate-General for Transport
and Energy

Yevgen Sukhin



Matthias Ruete