



**Economic and Social
Council**

Distr.
GENERAL

ECE/ENERGY/68/Add.1
21 February 2007

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON SUSTAINABLE ENERGY

Fifteenth session
Geneva, 28 – 30 November 2006

**REPORT OF THE COMMITTEE ON SUSTAINABLE ENERGY
ON ITS FIFTEENTH SESSION**

Addendum

Part Two: Actions taken by the Committee on Sustainable Energy
and subsequently approved by the Executive Committee

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I. PROGRAMME OF WORK FOR 2007-2008 IN THE FIELD OF ENERGY OVERVIEW AND PROGRAMME ACTIVITIES

Related programme elements and implementing bodies

The Committee adopted its programme of work for the period 2007-2008 (Annex I). The Executive Committee subsequently approved it at its eleventh meeting on 11 December 2006.

(C: Committee; **WP.G**: Working Party on Gas; **EE21**: Steering Committee of the Energy Efficiency 21 Project; **GE.CEP**: Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels; **GE.CMM**: Ad Hoc Group of Experts on Coal Mine Methane; **GE.EE**: Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation; **GE.FE**: Ad Hoc Group of Experts on the Harmonization of Fossil Energy and Mineral Resources Terminology; **GE.G**: Ad Hoc Group of Experts on the Supply and Use of Gas; **ESF**: Energy Security Forum; and **G.C**: Gas Centre)

1. NORMATIVE ACTIVITIES IN THE ENERGY FIELD INCLUDING LABELLING AND CLASSIFICATION SYSTEMS AND RELATED LEGAL AND POLICY FRAMEWORK

Work to be undertaken: To develop and implement norms and standards and to harmonize legislation, regulations and policies in the field of energy in order to promote sustainable energy development, such as:

- (a) follow-up on the implementation of the United Nations Framework Classification for Fossil Energy and Mineral Resources (UNFC) and development of Guidelines, Specifications and Case Studies for its implementation (C, GE.FE);
- (b) ongoing harmonization of terminologies and classification systems for the evaluation and assessment of reserves/resources of energy commodities - petroleum, natural gas, solid fuels and uranium (C, GE.FE);
- (c) development of standards for carbon emissions trading (C, EE21);
- (d) harmonization/convergence of norms, practices and policies (C, EE21, GE.FE, WP.G, GE.G, G.C); and
- (e) provision of technical assistance to countries with economies in transition in the energy regulatory and policy fields (C, EE21).

Work methods: To be carried out at annual sessions of the Committee and through Ad Hoc Groups of Experts, Task Forces, conferences, seminars, workshops, special studies and through the Regional Advisory Services.

2. OPENING AND LIBERALIZATION OF ENERGY MARKETS; SERVICE TARIFF SYSTEMS AND SECURITY OF SUPPLY

Work to be undertaken: To assess the major developments and trends in the ongoing restructuring and liberalization of energy markets, inherent challenges and opportunities associated with the opening up of energy markets, and to address issues related to the implementation of the regulatory, trading and technical aspects of market liberalization, such as:

- (a) assessment, monitoring and exchange of experiences regarding the implementation of the European Union (EU) Gas Directives in EU Member States and, in particular, their extension to other UNECE member countries (G.C, WP.G);
- (b) dialogue with the private sector on the implementation of market liberalization principles and practices (C, G.C, WP.G);
- (c) assessment of overall energy security risks and potential policy responses (C);
- (d) assessment of the security of natural gas supplies (G.C, WP.G);
- (e) institutional capacity development and training for the benefit of economies in transition regarding industry restructuring, privatisation, pricing and tariff setting (C, G.C);
- (f) exchange of views as well as policy-related studies on implications of market liberalization for government objectives, such as energy security and protection of the environment (C); and
- (g) technical advisory missions relating to regulatory matters, industry restructuring and market liberalization (C, G.C).

Work methods: Exchange of information and experiences among member countries at annual sessions of the Committee and its subsidiary bodies, and through Task Forces, seminars, workshops, technical missions and Regional Advisory Services, including preparation of analyses.

3. SUSTAINABLE ENERGY STRATEGIES FOR THE TWENTY-FIRST CENTURY

Work to be undertaken: To promote the development and implementation of strategies and policies to facilitate the transition to a more sustainable energy future and to contribute a regional perspective to global events where issues related to energy sustainability are addressed, such as:

- (a) regional input to the work and activities of the Commission on Sustainable Development (C);
- (b) reappraisal of the key energy issues confronting the UNECE region and the energy policy responses required to meet the challenges of sustainable energy development as part of the Committee's contribution to CSD-15 in April/May 2007, which as with CSD-14 will focus on the thematic cluster of energy for sustainable development, air pollution/atmosphere, and climate change (C)
- (c) promotion and facilitation of implementation of the UNECE Guidelines on Reforming Energy Pricing and Subsidies to policymakers in countries with economies in transition (C);
- (d) dialogue with the private sector and non-governmental organizations to facilitate the transition to a sustainable energy future (C);
- (e) dissemination of information and provision of technical assistance to countries with economies in transition on sustainable energy issues (C);
- (f) participation in international efforts to develop bench-marking systems for industrial processes to promote environmentally benign best practices, notably in countries with economies in transition (C);
- (g) a periodic exchange of views on energy security risks and their interactions with the global financial community and investments in the energy sector; internet based information exchanges on the subject and a continued assessment of energy security, corporate

- governance, and energy efficiency undertaken in cooperation with other relevant international organisations (C);
- (h) assessment of how the UNECE can contribute to enhancing the stability of the global energy market and energy security risk mitigation (C); and
 - (i) completion, publication and dissemination of two reports in 2007, namely “Emerging Energy Security Risks and Risk Mitigation in a Global Context” and “Energy Security Risk Mitigation and the Caspian Sea Region (C, ESF).

Work methods: Through exchanges of experiences at the annual session of the Committee and through Ad Hoc Groups of Experts, Task Forces, conferences, seminars, workshops, special studies and through the Regional Advisory Services.

4. RATIONAL USE OF ENERGY, ENERGY EFFICIENCY AND CONSERVATION

Work to be undertaken: To harmonize and develop guidelines and strategies to enhance energy efficiency and energy conservation, as well as to enhance regional cooperation on energy efficiency market formation and investment project development to reduce greenhouse gas (GHG) emissions in countries with economies in transition, such as:

- (a) development of guidelines for improving energy conservation and efficiency, in particular in CEE (Central and Eastern Europe) and EECCA (Eastern Europe, Caucasus and Central Asia) (C, EE21);
- (b) regional networking between national participating institutions and international partners by enhanced internet communications for value added information transfers on financing energy efficiency projects and training (EE21, GE.EE);
- (c) development and harmonization of regional policies and standards to both introduce the economic, institutional and regulatory reforms and to remove the barriers needed to support energy efficiency investments to reduce GHG emissions (C, EE21, GE.EE);
- (d) promotion of municipal level projects to enable local and concrete Energy Efficiency development, also strengthening reforms, skills and capacities needed for investment projects that meet international environmental treaty obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the UNECE (EE21, GE.EE);
- (e) assistance in securing financing for energy efficiency projects, including through provision of support for the creation of a dedicated investment fund (EE21, GE.EE);
- (f) promotion of sustainable development of municipalities and regions through rational use of energy and water resources in cooperation with the Regional Network for Efficient Use of Energy and Water Resources in Southeast Europe (RENEUER) (EE21);
- (g) support biomass energy projects and the capacity of customers to finance and implement them, thereby addressing the reduction of GHG emissions (EE21);
- (h) increase the use of energy labels in the procurement process in public authorities (EE21);
- (i) development and study of Coal Mine Methane and Coal Bed Methane (CBM) Projects and raising the awareness of the benefits that coal mine methane (CMM) and CBM have in economic, social and environmental terms (GE.CMM, EE21, GE.G);
- (j) assessment of trends and development of market for vehicles using alternative (gaseous) fuels (WP.G); and
- (k) study of new and emerging methods for detection of gas leakages during gas industry operations (GE.G)

Work methods: Implemented through national participating institutions, private sector companies, international financial institutions, commercial banks, international organizations, other multi- and bilateral technical assistance programmes, Ad Hoc Groups of Experts and Regional Advisory Services, as well as through meetings, training sessions, workshops, seminars and special studies.

5. ENERGY INFRASTRUCTURE, INCLUDING ENERGY AND GAS NETWORKS

Work to be undertaken: To encourage the modernization, extension and transboundary interconnection of the energy infrastructure of member countries in order to promote energy trade, economic efficiency, security of supply and the fuller integration of energy systems in the UNECE region, through activities such as:

- (a) reviews of the situation and prospects for European interconnections in the fields of natural gas (C, WP.G, G.C);
- (b) evaluation and dissemination of information to promote and facilitate the security of supply of electricity, particularly in countries with economies in transition, in order to achieve reliable generation, transmission, distribution and delivery of electricity to the end-consumer, and all at economic levels over a continuous period (C);
- (c) updates of studies on Underground Gas Storage and Gas Grids (WP.G, G.C); and
- (d) ongoing development of an international programme, known as the Blue Corridor Project, to establish a transboundary corridor in the UNECE region for freight and public transportation by natural gas vehicles (NGVs) (WP.G).

Work methods: Exchange of information and views during annual sessions of the Committee, coordination of activities and joint meetings with sub-regional organizations, and through Ad Hoc Groups of Experts composed of representatives of interested governments, companies and other international organizations as well as through seminars and workshops, including special studies.

6. COAL MINE METHANE AND SUSTAINABLE ENERGY DEVELOPMENT

Work to be undertaken: To provide an overview of the policies and programmes carried out in member States related to the use of coal mine methane (CMM) in the context of the three pillars of sustainable development: economic, social and environmental, including through activities such as:

- (a) establishing a clear link between the economic benefits gained through the safe drainage and use of methane gas resulting from the mining of gassy coal seams and to encourage implementation of best practices through dialogue with the relevant technical, business and regulatory communities (C, GE.CMM);
- (b) facilitating financing of CMM projects in CEE and EECCA, including through active engagement with the international finance community to understand their needs and the barriers to funding of CMM projects in this region (C, GE.CMM);
- (c) providing a forum for exchange of information and experience on ongoing activities in the area of CMM development and for enhanced collaboration and cooperation thereof (GE.CMM);

- (d) identifying and seeking to mitigate the problems associated with the creation of incentives for CMM recovery (GE.CMM);
- (e) exploring opportunities for the CMM sector, in particular in UNECE member States with economies in transition, to participate in and benefit from the various public and private greenhouse gas emissions markets (GE.CMM); and
- (f) identifying any significant new developments affecting CMM, in particular in UNECE member countries (GE.CMM).

Work methods: Exchange of information and views at the annual session of the Committee and through Ad Hoc Group of Experts, dedicated Task Forces, seminars, workshops and study tours; and through the preparation of studies, as well as presentation of case studies on successful projects.

7. CLEANER ELECTRICITY PRODUCTION FROM COAL AND OTHER FOSSIL FUELS

Work to be undertaken: To encourage and facilitate the promotion of cleaner and, where possible, zero emission electricity production from coal and other fossil fuels in the UNECE region and to provide for an intergovernmental dialogue on investment and regulation for the promotion of such cleaner electricity production in the region through activities such as:

- (a) promoting the environmental sustainability of coal and other fossil fuel industries for the generation of electricity, and, in particular, promotion of technical cooperation (GE.CEP);
- (b) dissemination of information on technological innovations, including on zero emission technologies, that will result in a reduced environmental impact from electricity generation based on coal and other fossil fuels (C; GE.CEP);
- (c) conducting and disseminating an assessment of the current status of research, development and deployment of promising technologies, such as carbon capture and storage and zero emissions technologies (C, GE.CEP);
- (d) identifying the key legal and regulatory barriers to implementation of these new technologies and assisting member States to develop norms and standards to integrate new electricity production technologies (e.g., carbon capture and storage) into regulatory structures, including environmental regulations (C, GE.CEP);
- (e) dissemination of information on improving the thermal efficiency of large coal-fired power plants and the reduction of environmentally harmful emissions, particularly for the benefit of countries with economies in transition (GE.CEP);
- (f) facilitating capacity building for air quality management and the application of clean coal combustion technologies in Central Asia (C, GE.CEP);
- (g) assessing the relationship between electricity industry regulation and the choice of fuel mix with special focus on cleaner electricity production methods (GE.CEP);
- (h) evaluating policies and measures to reduce the electricity efficiency gap between developed market and emerging market economies in the UNECE region (GE.CEP);
- (i) appraising the development of a regulatory framework conducive to promoting investment in cleaner electricity production (GE.CEP); and
- (j) analysing short and long-term competitiveness, current and expected technological trends for clean-fuel-based electricity production (capital costs, fuel cost and other operational

costs, cost of capital/expected rate of return, risk mitigation and management) and security of electricity supplies(C, GE.CEP).

Work methods: Exchange of information and experiences among member countries at annual sessions of the Committee and its subsidiary bodies, and through Task Forces, seminars, workshops, technical missions and Regional Advisory Services, including preparation of analyses.

II. TERMS OF REFERENCE OF THE COMMITTEE ON SUSTAINABLE ENERGY

NOTE: The Committee adopted its revised Terms of Reference. The Executive Committee subsequently endorsed them at its meeting on 11 December 2006.

1. The Committee on Sustainable Energy is mandated to carry out a programme in the field of sustainable energy development. Energy is essential for economic development and for improving the quality of life. Ensuring sufficient, reliable and environmentally responsible supplies of energy at prices reflecting market levels is a challenge for the countries of the UNECE region and globally. The concept of sustainable energy development is broad and encompasses, inter alia, multi-dimensional criteria concerning all countries of the UNECE region and cuts across the interests of both present and future generations. These criteria include:

- (i) capacity to meet anticipated energy demand;
- (ii) ensuring security of energy supplies;
- (iii) reliance against temporary, localized supply disruptions;
- (iv) compatibility with global reserves/resources, including their effective management;
- (v) progress in energy efficiency and conversion;
- (vi) viability and cost-effectiveness of resource allocation;
- (vii) energy supply costs/technical feasibility;
- (viii) associated health, environmental and climatic hazards;
- (ix) trade considerations, including energy dependence; and
- (x) compliance with generally-shared policy objectives, societal and economic trends and public concerns.

2. Whilst recognizing that the overriding goal of the Committee is to facilitate the transition to a more sustainable energy future, the energy sector of the UNECE region is confronted by many challenges, including ensuring security of energy supplies in the short-, medium- and long-term, as well as the creation of conditions for the sustainable production and use of energy, all of which will require the technical, economic and institutional restructuring of the energy sector. Additional and serious challenges to be faced in meeting this goal include: increasingly high and volatile oil prices; the growing demand for energy that will largely be met by fossil fuels, which are finite resources; increasing import dependence in many countries; the significant investments required along the entire energy chain, but particularly for power generation; and the need to protect the environment. It is also noted that accurate and consistent methodologies for estimating and reporting fossil energy and mineral reserves and resources are necessary to establish a complete picture of the current and future energy supply base for more effective management of global resources.

3. In view of the above and the 2005 Work Plan on ECE Reform (E/ECE/1434/Rev.1) whereby the Committee on Sustainable Energy shall strengthen activities in the fields of energy efficiency, cleaner energy production, energy security and diversification of energy sources, taking into account environmental concerns, the mandate of the Committee is therefore:

- (a) to undertake an extensive exchange of information, views and experiences among member States on general energy issues and national objectives with an emphasis on sustainable energy policies;
- (b) to ensure sustained improvements in energy efficiency, in production and use, particularly in countries with economies in transition;
- (c) to develop and implement norms and standards, including labelling and classification systems, for the sustainable production and use of energy;
- (d) to assist in the harmonization of legislation and policies dealing with the exploitation and use of energy, including further strengthening the development and implementation of a global common code for the classification, estimation and reporting of energy reserves and resources (under the UN Framework Classification for Fossil Energy and Mineral Resources (UNFC)) and to facilitate implementation of ECOSOC Resolution 2004/233 inviting the Member States of the United Nations, international organizations and regional commissions to consider taking appropriate measures for ensuring worldwide application of the UNFC;
- (e) to address issues such as the restructuring of the energy sector in the context of sustainable development, including energy reforms in the CEE (Central and Eastern Europe) and EECCA region (Eastern Europe, Caucasus, and Central Asia), integration of energy systems, and new developments affecting energy demand and supply in the short- and medium-term, including policies on energy prices and subsidies;
- (f) to monitor and coordinate the work of its subsidiary bodies (Working Party on Gas, Ad Hoc Group of Experts on Supply and Use of Gas, Gas Centre, Energy Security Forum, Steering Committee of the Energy Efficiency 21 Project, Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation, Ad Hoc Group of Experts on Supply and Use of Gas, Ad Hoc Group of Experts on Harmonization of Fossil Energy and Mineral Resources Terminology, Ad Hoc Group of Experts on Coal Mine Methane and Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels or their successor bodies as periodically decided by the Committee and endorsed by the Executive Committee) and where possible to seek opportunities to consolidate and streamline the activities of any/all of these bodies;
- (g) to elaborate on a regular basis a programme of work, subject to annual review and approval by the Executive Committee/Commission, taking into consideration the need for regular cooperation and coordination with other Sectoral Committees of the UNECE, in particular with the Committee on Environmental Policy, the Committee on Inland Transport and the Committee on Timber;
- (h) to promote the implementation of the above mentioned goals by means of enhanced cooperation within the framework of the UNECE and with other United Nations bodies, sub-regional groupings and relevant international organizations, in particular the International Energy Agency and the Energy Charter Secretariat. Such cooperation could take the form of joint activities, Memorandums of Understanding, participation of members of other relevant organizations in the activities of the energy subprogramme and vice versa; and
- (i) to enhance cooperation with the business and private sectors, comprising both the energy industries and the financial community.

III. TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON CLEANER ELECTRICITY PRODUCTION FROM COAL AND OTHER FOSSIL FUELS

NOTE: The Committee adopted the Terms of Reference for the newly established Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels for a duration of two years. The Executive Committee approved the establishment of this Group of Experts, its Terms of Reference and duration at its meeting on 11 December 2006. These Terms of Reference are indicative only and will be refined by the Group of Experts at its first session in 2007.

1. The Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels is established for a period of two years by the Committee on Sustainable Energy to provide for an intergovernmental dialogue on investment and regulation for the promotion of cleaner electricity production between governmentally appointed experts, complemented by the participation of representatives from the electric power industry and other related industries, as well as the international financial sector and relevant international organisations, notably Eurelectric, Interim Energy Community Secretariat, CIS Electric Power Council, Central Asian Coordinating Electric Power Council, Organization of the Petroleum Exporting Countries (OPEC), OECD/IEA, and Energy Charter.
2. The tasks of the Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels are:
 - (a) to provide a forum for the exchange of information and experiences on the following topics:
 - (i) clean coal technologies;
 - (ii) carbon capture and storage;
 - (iii) “zero” emissions technologies;
 - (iv) impact of regulation on cleaner electricity production;
 - (v) competitiveness, investments and operating costs of cleaner electricity production;
 - (vi) contribution of renewable energies; and
 - (vii) sustainable nuclear energy;
 - (b) to assess the relationship between electricity industry regulation and choice of fuel mix with special focus on cleaner electricity production methods;
 - (c) to evaluate policies and measures to reduce the electricity efficiency gap between developed market and emerging market economies in the UNECE region;
 - (d) to appraise the development of a regulatory framework conducive to promoting investment in cleaner electricity production;
 - (e) to assist member States develop norms and standards to integrate new electricity production technologies (e.g., carbon capture and storage) into regulatory structures, including environmental regulations;
 - (f) to analyse short-term and long-term competitiveness, current and expected technological trends for clean-fuel-based electricity production (capital costs, fuel cost and other

operational costs, cost of capital / expected rate of return, risk mitigation and management) and security of electricity supplies; and

- (g) to pay special attention to the transfer of knowledge and experience in the aforementioned areas to UNECE member countries with emerging economies.

IV. TERMS OF REFERENCE OF THE WORKING PARTY ON GAS

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy re-adopted the Terms of Reference for the Working Party on Gas and extended its mandate for a period of five years (the mandate for the UNECE Gas Centre is included in the Terms of Reference for the Working Party on Gas). The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

1. The Working Party on Gas is mandated to carry out the UNECE programme of work in the field of natural gas (and liquefied petroleum gas (LPG)). The overall goal of the Working Party is to provide a multistakeholder dialogue aimed at enhancing, amongst other issues: sustainable energy development in the UNECE region, greater integration of the natural gas industries in Europe, securing natural gas supplies and the creation of a unified gas market. To facilitate these tasks, the Working Party brings together experts representing governments, the gas industry, public and private enterprises, international organizations and the financial community.
2. The Tasks of the Working Party on Gas are:
 - (a) to provide a forum for policy discussion and exchange of experience and information on trends in the gas industries and gas markets of the region, on enhancing the security of gas supply and consumer–producer dialogue as well as on issues, such as new and emerging gas markets, the financing of new projects, gas transportation infrastructure development, trade, consumption and the rational use of gas;
 - (b) to study and analyse, through the preparation of comprehensive regional studies, the current state and future prospects for the development of various segments of the gas sector, in particular on underground gas storage, interconnection and extension of the European gas networks, natural gas fields in Europe and on environmental aspects of natural gas use;
 - (c) to develop further, in cooperation with the UNECE Inland Transport Committee, the intersectoral Blue Corridor project, aimed at establishing transport corridors for freight and passenger vehicles using natural gas as an energy source. The project was specifically cited in the final declaration on Global Energy Security at the G-8 Summit Meeting in St. Petersburg in July 2006;
 - (d) to prepare consolidated reports, through the Ad Hoc Group of Experts on the Supply and Use of Gas, on selected issues related to downstream gas operations, including diagnostics of gas transmission lines; methods for detection of gas leakages during extraction, transportation, distribution and storage of natural gas; use of horizontal wells in underground gas storage; gas networks balancing; and development of marginal (“small”) gas fields;
 - (e) to examine issues related to normative activities, by conducting surveys on existing norms and standards, such as technological and ecological norms required for the design and operation of gas distribution networks; standards and regulations on permissible concentrations of harmful

components in gaseous fuels combustion products; technical standards and norms related to natural gas fuelling stations;

(f) to maintain, on a systematic, cooperative and coordinated basis through the extrabudgetary “Gas Centre” programme, a dialogue between the gas industries and Governments on issues of mutual interest. More specifically, the mandate of the UNECE Gas Centre is to:

- exchange information and experience among and between member companies of the Gas Centre and Governments on emerging trends and developments in gas markets and the gas industries, including on investment issues;
- promote dialogue between the gas industries and governments on policy issues, including on security of natural gas supplies, the restructuring and consolidation of the gas sector, and gas pricing principles and practices;
- assesses and exchange views, experiences and know-how on legal and regulatory matters, gas market liberalization, including the implementation of the EU Gas Directives and regulations, particularly in their implications for non-EU countries;
- promote cooperation and facilitate the integration of natural gas industries in Europe through greater convergence and harmonization of norms and practices, such as, recommend ways to harmonize gas transportation rules and rate making with the view to optimizing transportation efficiencies and minimizing barriers to cross-border trade;
- examine and document the routing of pipeline systems for the supply, transit and transportation of natural gas as well as maintain and update a data information base on gas markets and industries;
- assist, where appropriate, governments and gas companies in eastern and south-eastern Europe as well as the Caucasus and central Asia in their efforts to create more decentralized and market-based gas industries;

(g) to organize on a regular basis, in cooperation with interested governments, gas companies and organizations, symposia, conferences, seminars and technical workshops on selected topics related to gas industry operations and gas market developments; and

(h) to enhance cooperation with other international governmental and non-governmental organizations and the business community/private sector by undertaking joint activities and participating in joint events, such as surveys, seminars and workshops.

V. TERMS OF REFERENCE OF THE STEERING COMMITTEE OF THE ENERGY EFFICIENCY 21 PROJECT

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy adopted the terms of reference for the Steering Committee of the Energy Efficiency 21 Project and extended its mandate for a period of three years (in order to be in line with the duration of the Project Plan 2006-2009, document ECE/ENERGY/WP.4/2006/6/Add.1). The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

Background: The Energy Efficiency 21 Project is a technical cooperation project supported by UNECE regular budget and extrabudgetary funds implemented under the auspices of the UNECE Committee on Sustainable Energy in accordance with its Project Plan 2006-2009 (ECE/ENERGY/WP.4/2006/6/Add.1). It is to assist countries with economies in transition to develop and promote sustainable energy policies, pursue energy efficiency strategies, and reduce greenhouse gas emissions to meet international treaty obligations and enhance the security of energy supplies by producing the specific outputs listed below from operational activities in the industry, housing and services, transport and energy sectors.

Mandate: At its seventeenth session held on 29-30 May 2006, the Steering Committee of the Energy Efficiency 21 Project approved the next phase of its work on the basis of the Project Plan 2006-2009 (ECE/ENERGY/WP.4/2006/6). During its fifteenth session held on 28-30 November 2006 the Committee on Sustainable Energy endorsed the decisions of the Steering Committee.

General Objective: Enhance regional cooperation on energy efficiency market formation and investment project development to reduce greenhouse gas emissions in economies in transition.

Immediate Objective 1: Accelerate regional networking between national participating institutions and international partners by enhanced Internet communications for value added information transfers on financing energy efficiency projects and training, contributing to regional cooperation on sustainable energy development and debate to mitigate global energy security risks.

Immediate Objective 2: Promote municipal level projects to enable local and concrete Energy Efficiency development, also strengthening reforms, skills and capacities needed for investment projects that meet international environmental treaty obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the UNECE.

Immediate Objective 3: Develop and harmonize regional policies and standards to introduce the economic, institutional and regulatory reforms needed to support energy efficiency investments to reduce greenhouse gas emissions.

Work Methods: The Committee on Sustainable Energy will review progress of the project and provide general guidance at its regular sessions. The Steering Committee appointed by

Governments of ECE member States under the auspices of the Committee on Sustainable Energy is to review progress and provide detailed guidance on the execution of the project. The Steering Committee will normally hold an annual session, but may meet more frequently if necessary. The Steering Committee will be composed of governmental delegates from National Participating Institutions, international organizations, commercial companies, banks and international financial institutions.

The execution of the project is under the purview of the UNECE Executive Secretary. The Director of the UNECE Sustainable Energy Division is responsible for the implementation of project activities, while daily operations is the responsibility of the Project Manager. The project will be implemented by the Project secretariat within the UNECE Sustainable Energy Division of the UNECE secretariat.

Structure: The structure of the Energy Efficiency 21 Project provides for cross-cutting Objectives and Activities that are largely implemented through sub-projects in which the UNECE serves as the Executing Agency, Associated Agency or provides direct value added information dissemination services. The Ad Hoc Group of Experts on Financing Energy Efficiency Investments for Climate Change Mitigation is responsible for the implementation of one sub-project Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation in accordance with its project document (ECE/ENERGY/2006/6).

VI. TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON COAL MINE METHANE

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy adopted the Terms of Reference for the Ad Hoc Group of Experts on Coal Mine Methane and extended its mandate for a period of two years. The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

The Ad Hoc Group of Experts on Coal Mine Methane, an intergovernmental body launched in December 2004 to specifically support the activities of the Ad Hoc Group of Experts on Coal in Sustainable Development in the area of coal mine methane (CMM), is established for a period of two years by the Committee on Sustainable Energy. The Ad Hoc Group of Experts will carry out, under the Committee's guidance, activities related to development and profitable recovery and use of CMM and abandoned mine methane (AMM), with a specific focus on the three pillars of sustainable development: economic, social and environmental – recovery and use of CMM otherwise emitted mitigates climate change, improves mine safety and productivity, and generates revenues and cost savings.

The tasks of the Ad Hoc Group of Experts are:

- (a) to promote and provide support where applicable to the UNECE extrabudgetary project on "Development of Coal Mine Methane Projects in Central and Eastern Europe and the Commonwealth of Independent States (CIS)". This project, which is financed by the United States Environmental Protection Agency (US EPA) and the UN Foundation, will run for three years commencing in 2005;
- (b) to seek to facilitate financing of CMM projects in Central and Eastern Europe and the CIS, including through actively engaging in a dialogue with the international finance community to understand their needs and the barriers to funding of CMM projects in this region;
- (c) to provide a forum for exchange of information and experience on ongoing activities in the area of CMM development and for enhanced collaboration and cooperation thereof;
- (d) to identify and seek to mitigate the problems associated with the creation of incentives for CMM recovery;
- (e) to establish a clear link between the economic benefits and the mining of gassy coal seams based on the safe drainage and use of the gas, and to facilitate this through the establishment of a dedicated Task Force with membership from the technical, business and regulatory communities;
- (f) to explore opportunities for the CMM sector, in particular in UNECE member States with economies in transition, to participate in and benefit from the various public and private greenhouse gas emissions markets;
- (g) to identify any significant new developments affecting CMM, in particular in UNECE member countries; and
- (h) to seek to strengthen inter-agency cooperation and to cooperate and collaborate with all stakeholders, including other governmental and non-governmental organizations and the business community/private sector, in order to realise the above objectives.

VII. TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON ENERGY EFFICIENCY INVESTMENTS FOR CLIMATE CHANGE MITIGATION

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy adopted the Terms of Reference for the Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation and extended its mandate for a period of two years. The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

Background: The Ad Hoc Group of Experts on Financing Energy Efficiency Investments for Climate Change Mitigation is a subsidiary body of the Energy Efficiency 21 Project established to implement the sub-project 'Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation'. It is executed with the support of the UNECE regular budget and extrabudgetary funds from the United Nations Foundation (UNF), the French Ministry of Foreign Affairs (MAE) / Fonds Français pour Environnement Mondial (FFEM), the UNEP Global Environment Facility (UNEP/GEF) and the European Business Congress e.V. (EBC).

Mandate: At its seventeenth session held on 29-30 May 2006, the Steering Committee of the Energy Efficiency 21 Project approved the next phase of its work on the basis of the Project Plan 2006-2009 (ECE/ENERGY/WP.4/2006/6). The Project Plan provides for six sub-projects including 'Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation' that is implemented in accordance with its project document (ECE/ENERGY/2006/6). During its fifteenth session held on 28-30 November 2006, the Committee on Sustainable Energy endorsed the decisions of the Steering Committee.

General Objective: Promote an investment climate in which self-sustaining energy efficiency and renewable energy projects can be identified, developed, financed and implemented by local teams in municipalities, factories and energy utilities.

Objective One: Identify and develop investment projects in 20 locations in the private and public sectors at the local level: identify, develop, finance and implement demand side and supply side energy efficiency and renewable energy projects that meet environmental, health and institutional reform priorities.

Objective Two: Strengthen energy efficiency and renewable energy policies in the participating countries, assisting municipal authorities and national administrations to introduce the economic, institutional and regulatory reforms needed to support investments in energy efficiency and renewable energy projects.

Objective Three: Promote opportunities for banks and commercial companies to invest in energy efficiency and renewable energy projects through the development of new public private partnership investment funds or financing mechanisms.

Work Methods: The United Nations Economic Commission for Europe is the Executing Agency for the project carried out under the auspices of the UNECE Committee on Sustainable Energy by the Steering Committee of the Energy Efficiency 21 Project. Decision-making and guidance for the project will be in line with the participation and procedures of the EE21 Project Plan 2006-2009. As a sub-regional project of Energy Efficiency 21, the project will be the direct responsibility of the Ad Hoc Group of Experts on Financing Energy Efficiency Investments comprising National Coordinators (NC) who are representatives of National Participating Institutions (NPI) appointed by the Governments of the participating countries of the project.

The Ad Hoc Group of Experts will include representatives of UNEP and UNECE as well as the co-financing partners and representatives of International Financial Institutions active in the region (EBRD, World Bank, IFC, NIB, Black Sea Development Bank, EIB, Council of Europe Development Bank, etc). Similarly, the UNDP European Regional Office in Bratislava (Slovakia) and the UNDP Resident Representatives in the participating countries will be invited to take part in project activities.

The project will also implement activities through sub-regional networks, in particular, the Regional Network for the Efficient Use of Energy and Water Resources (RENEUER) hosted by the Centre for Energy Efficiency EnEffect located in Sofia, Bulgaria (www.reneuer.com). Monitoring and evaluation advisers will also participate in the Ad Hoc Group of Experts biannual meetings as observers. The Ad Hoc Group of Experts will elect a Chairman and a Vice Chairman on a rotating basis. The Ad Hoc Group of Experts will normally meet twice per year in Geneva in the Palais des Nations.

VIII. TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON HARMONIZATION OF FOSSIL ENERGY AND MINERAL RESOURCES TERMINOLOGY

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy adopted the Terms of Reference for the Ad Hoc Group of Experts on the Harmonization of Energy Reserves and Resources Terminology and extended its mandate for a period of one year. The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

Background: The Ad Hoc Group of Experts on the Harmonization of Energy Reserves and Resources Terminology was created by the decision of the UNECE Committee on Sustainable Energy at its eleventh session in November 2001 (ECE/ENERGY/47, para.13).

Mandate: The decision of the UNECE Committee on Sustainable Energy, November 2003 (ECE/ENERGY/53/ para. 16(viii)), which requested that the Ad Hoc Group continue its work for a period of two years starting in 2004 and report its achievements and plans yearly.

The objectives of the Ad Hoc Group of Experts are:

- (a) to seek to continue developing the harmonization code of the UN Framework Classification for Fossil Energy and Mineral Resources (UNFC) with the existing commodity definitions, bearing in mind ECOSOC Resolution 2004/233, which encourages Member States of the United Nations, the UN regional commissions and international organizations to consider taking appropriate measures for ensuring worldwide application of the UNFC. It would be appropriate to ensure that the development of a harmonization code be based upon cooperation with recognized industry professional societies by use of the framework facility provided by the UNFC.
- (b) to facilitate the development of the Specifications and Guidelines to the UNFC, through cooperation with the Society of Petroleum Engineers (SPE) for petroleum and the Combined Reserves International Reporting Standards Committee (CRIRSCO) for coal, uranium and minerals; (ii) in facilitating the development of these Specifications and Guidelines the Ad Hoc Group of Experts recognizes that it is useful that they be tailored to meet, to the extent possible, the needs of applications pertaining to energy studies, resources management functions, corporate business processes and financial standards.
- (c) to encourage the development of education programmes on the UNFC, using in particular industry professional societies capabilities.
- (d) to invite and facilitate development of case studies on a voluntary basis, using the developed Specifications and Guidelines, to fully assess the suitability of applying the UNFC to a comprehensive range of individual deposits of fossil energy and mineral resources. Such case studies would serve to demonstrate the various strengths of the UNFC under diverse applications.

(e) to seek to strengthen inter-agency cooperation and to cooperate and collaborate with all stakeholders, including other governmental and non-governmental organizations and the business community/private sector and professional associations in order to realize the above objectives. The international organizations include the International Atomic Energy Agency (IAEA), the International Energy Agency (IEA), the International Energy Forum (IEF), the Organization of Petroleum Exporting Countries (OPEC), the World Petroleum Council (WPC) and the World Energy Council (WEC). The professional associations include the American Association of Petroleum Geologists (AAPG), the Combined Reserves International Reporting Standards Committee (CRIRSCO), the European Federation of Geologists (EFG), the International Accounting Standards Board (IASB), the International Valuation Standards Committee (IVSC) and the Society of Petroleum Engineers (SPE).

IX. TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON THE SUPPLY AND USE OF GAS

NOTE: In line with the request of the Executive Committee, the Committee on Sustainable Energy adopted the Terms of Reference for the Ad Hoc Group of Experts on the Supply and Use of Gas and extended its mandate for a period of two years. The Executive Committee approved these Terms of Reference and the extension at its meeting on 11 December 2006.

The Ad Hoc Group of Experts on the Supply and Use of Gas carries out activities related to the downstream operations of the gas industry, e.g. construction, management and maintenance of gas transportation systems, design and operation of gas distribution networks, underground gas storage, marketing and various uses of natural gas (and liquefied petroleum gas), including for the transportation sector.

The tasks of the Ad Hoc Group of Experts on the Supply and Use of Gas are:

- (a) to identify and study topical issues related to downstream operations of the gas industry;
- (b) to implement technical projects and prepare reports on specific topics, such as diagnostics of gas transmission lines; methods for detection of gas leakages during extraction, transportation, distribution and storage of natural gas; use of horizontal wells in underground gas storage; gas networks balancing; development of marginal ("small") gas fields;
- (c) to examine issues related to normative activities, by conducting surveys on existing standards and norms, such as technological and ecological norms required for the design and operation of gas industry distribution networks; standards and regulations on permissible concentrations of harmful components in gaseous fuels combustion products; technical standards and norms related to natural gas fuelling stations;
- (d) to provide a forum for the exchange of knowledge and experience on new and emerging technologies in the transportation and distribution sectors, storage of gas and its use, by developing case studies and organising technical presentations for in-depth consideration and further study and dissemination of the information;
- (e) to assist the Working Party on Gas, where appropriate, in the implementation of regional studies on selected issues, such as on the underground gas storage, interconnection and extension of European gas networks, natural gas fields in Europe and the environmental aspects of natural gas use; and
- (f) to organize, together with interested companies, organizations and institutions, technical meetings, workshops and study tours on selected topics of the various branches of the natural gas industry in UNECE member countries.

X. ENERGY SECURITY FORUM

1. The Committee on Sustainable Energy approved the extension of the Energy Security Forum for one year for the sole purpose of finishing its outstanding work, notably the completion and publication in 2007 of the reports on “Emerging Energy Security Risks and Risk Mitigation in a Global Context” and “Energy Security Risk Mitigation and the Caspian Sea Region”. The Executive Committee approved this decision at its meeting on 11 December 2006.

XI. DISCONTINUED ACTIVITIES

2. The Committee on Sustainable Energy approved the discontinuation of the following bodies: Ad Hoc Group of Experts on Coal in Sustainable Development, Ad Hoc Group of Experts on Electric Power, and Joint Energy and Environment Task Force on Reforming Energy Prices for Sustainable Energy Development. The Executive Committee approved these decisions at its meeting on 11 December 2006.