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**ECONOMIC COMMISSION FOR EUROPE**

**COMMITTEE ON SUSTAINABLE ENERGY**

Ad Hoc Group of Experts on Cleaner Electricity  
Production from Coal and other Fossil Fuels

Preparatory Meeting  
Geneva, 19 March 2007

**REPORT ON THE AD HOC GROUP OF EXPERTS ON CLEANER ELECTRICITY  
PRODUCTION FROM COAL AND OTHER FOSSIL FUELS  
ON ITS PREPARATORY MEETING\***

**I. ATTENDANCE**

1. The meeting was attended by fifty representatives of Belarus, Croatia, Czech Republic, Denmark, France, Greece, Poland, Romania, Russian Federation, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, and United States of America.
2. The following intergovernmental and non-governmental organizations were in attendance: United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), European Commission Directorate for Energy and Transport, International Energy Agency (IEA), Organization for Security and Cooperation in Europe (OSCE), European Association for Coal and Lignite (EURACOAL), Union of the Electricity Industry (EURELECTRIC), World Coal Institute (WCI) and World Energy Council (WEC).

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\* Note: all United Nations documents for the Committee on Sustainable Energy are available in English, French and Russian on the UNECE website [www.unece.org](http://www.unece.org).

## **II. ADOPTION OF THE AGENDA (Agenda item 1)**

Documentation: ECE/ENERGY/GE.5/2007/1

3. The agenda was adopted.

## **III. ELECTION OF OFFICERS/BUREAU OF THE MEETING (Agenda item 2)**

4. Mr. Nick Otter (United Kingdom), Vice-chairman of the UNECE Committee on Sustainable Energy, served as Chairman of the meeting.

## **IV. MATTERS ARISING FROM THE FIFTEENTH SESSION OF THE COMMITTEE ON SUSTAINABLE ENERGY OF RELEVANCE TO THE AD HOC GROUP OF EXPERTS (Agenda item 3)**

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5. The meeting was opened by the secretariat with a presentation on the outcome of the fifteenth session of the UNECE Committee on Sustainable Energy, held in November 2006, and the eleventh meeting of the UNECE Executive Committee, held on 11 December 2006. In particular, the participants at the meeting were informed that these two bodies approved the launch of the Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and other Fossil Fuels for an initial period of two years. At the same time they approved the Draft Terms of Reference for the Ad Hoc Group of Experts on the understanding that they were indicative only and that they would be refined by the Ad Hoc Group of Experts at its first session. The Ad Hoc Group of Experts on Coal in Sustainable Energy and the Ad Hoc Group of Experts on Electric Power have been discontinued.

## **V. REVIEW OF THE PROVISIONAL TERMS OF REFERENCE ADOPTED AT THE FIFTEENTH SESSION OF THE COMMITTEE ON SUSTAINABLE ENERGY (Agenda item 4)**

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6. As part of the preparation for the discussion on the Draft Terms of Reference for the Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and other Fossil Fuels, the UNECE secretariat asked three leading experts from the UNECE region to introduce the issue to the meeting. Mr. Klaus Brendow, World Energy Council, delivered a presentation on Investing in Cleaner Fossil Fuel Power Generation and in Transmission in the ECE Region: The Issues. Mr. Branko Terzic, Global & US Regulatory Policy Leader, Energy & Resources, Deloitte Services LP, United States, presented a detailed overview of Regulation and Investments in Electricity Industry. The third presentation was on Carbon Capture and Storage: Views by the European Electricity Industry delivered by Mr. Paul Bulteel, Secretary-General of EURELECTRIC. In addition, at the request of the Government of Ukraine, Mr. Borys Gryadushchyy, Director, Donetsk Research Institute of Coal Mining and Mr. Volodymyr Fichov,

Deputy Minister, Ministry of Coal Industry, Ukraine made a short statement on the current state and prospects of the coal and electricity industry in Ukraine.

7. The key conclusions which could be derived from the presentations point to the necessity for the electricity industry in the UNECE region to produce cleaner electricity and to satisfy the expected increasing demand across the region, which includes sizeable technological, regulatory and financial challenges. Those challenges include the creation of a suitable regulatory and policy framework, maintenance of a favourable investment climate, mobilization of very large investments, achievement of an efficient allocation of resources, and fostering of the creation and implementation of new technologies leading towards cleaner electricity production and eventually the emergence and application of zero-emission technologies.

8. While certain progress has been made on making electricity production cleaner in the UNECE region, as a whole advances are insufficient and uneven, with emerging market economies lagging in many respects. Despite sizeable efforts made in the last 15 years, differences in the average age of the power plants fleet, technology employed, average thermal efficiency, impact on the environment and the availability of interconnections between developed market economies and emerging market countries are considerable. At the same time, although the technological progress in advanced market countries on very low and zero-emission power plants is promising, many issues remain unresolved and require further research and development and considerable investments. In particular, substantial investments would be required for perhaps up to a dozen demonstration zero-emission power plants, from which suitable and market-confirmed technology would emerge.

9. The expected transition of the electricity sector towards cleaner production and less unfavourable impact on the environment, including sizeable reductions in CO<sub>2</sub> emissions, in the UNECE region requires large long-term investments. Those investments will materialize only in a favourable regulatory and policy framework, which would foster the transition and create incentives to the electricity sector and financial markets to provide the needed capital. While certain elements of the required framework are emerging across the region, it is far from complete in most advanced countries while in less advanced countries the evolution of the old regulatory and policy regimes has not yet been concluded.

10. Following the presentations, the Chairman reiterated that, based on the discussions at the fifteenth session of the Committee on Sustainable Energy, in November 2006, and the eleventh meeting of the UNECE Executive Committee, held on 11 December 2006, UNECE member countries expected the focus of the Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and other Fossil Fuels to be on investment in cleaner electricity, regulatory framework, related inter-fuel competition, clean electricity technologies, and norms and standards.

11. The meeting approved the Draft Terms of Reference without any change and as drafted by the Committee on Sustainable Energy and approved by the Executive Committee. The Draft Terms of Reference, as annexed to this report, will be submitted to the sixteenth session of the Committee on Sustainable Energy for final approval.

**VI. PRELIMINARY PROGRAMME OF WORK FOR 2007/2008  
(Agenda item 5)**

12. The meeting decided that, pending the final approval of the Terms of Reference, the UNECE secretariat should prepare a short proposal to be circulated to member countries ahead of the sixteenth session of the Committee on Sustainable Energy, to be held in November 2007. The proposal should be based on a combination of the activities listed in the invited presentation by the World Energy Council and the comments expressed at the meeting on a possible programme of work.

13. Based on the proposal of the World Energy Council representative, the delegates approved a one-day event of the Ad Hoc Group of Experts to be held on 27 November 2007 on “Fostering Investment in Cleaner Electricity Production from Fossil Fuels”.

**VII. COOPERATION WITH OTHER INTERNATIONAL ORGANIZATIONS  
(Agenda item 6)**

14. The meeting reviewed the ongoing activities on promoting investments in sustainable electricity production and transmission in other international organizations. Delegates from OSCE, IEA, WEC, EURELECTRIC and the European Union expressed strong support for the proposed profile of work of the UNECE in the area and pledged cooperation on all relevant matters.

**VII EXTRABUDGETARY RESOURCES FOR SUPPORTING THE  
IMPLEMENTATION OF THE PROGRAMME OF WORK  
(Agenda item 7)**

15. The UNECE secretariat presented additional short observations in relation to the ambitious tasks outlined in the approved Draft Terms of Reference and the limited resources available to it to execute those tasks. The meeting approved the proposal to solicit in-kind contributions and to establish a UNECE trust fund to supplement the limited UNECE secretariat resources available to the foreseen activities of the Ad Hoc Group of Experts. The IEA offered close cooperation to the UNECE in executing its events on investment in cleaner electricity production.

**IX. DATE, PLACE AND DRAFT PROVISIONAL AGENDA FOR THE FIRST  
SESSION OF THE AD HOC GROUP OF EXPERTS  
(Agenda item 8)**

16. The meeting decided that the first formal session of the Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and other Fossil Fuels would take place on 26(pm) and 27 November 2007 in conjunction with the sixteenth session of the Committee on Sustainable Energy, scheduled for 28-30 November 2007. Organizational and administrative issues related to the operation of the Ad Hoc Group of Experts would be considered on 26 November, and the event on “Fostering Investment in Cleaner Electricity Production from Fossil Fuels” would be held on 27 November.

**X. OTHER BUSINESS**  
**(Agenda item 9)**

17. The Chairman of the meeting invited proposals for the nomination of the Bureau members of the Ad Hoc Group of Experts. Mr. Branko Terzic (United States of America) was nominated for Chairman of the Ad Hoc Group of Experts, and the following nominations were proposed for the Bureau: Mr. Brian Morris (United Kingdom), Mr. Vladimir Budinsky (Czech Republic), Ms. Mucella Ersoy (Turkey), Mr. Sergey Shumkov (Russian Federation) and Mr. Boris Gryadushchyy (Ukraine).

18. While the final decision on the structure of the Bureau of the Ad Hoc Group of Experts will be made at its first meeting on 26 November 2007, the Chairman invited the nominated Bureau members to work closely with the UNECE secretariat on the preparation of the first session. Other proposals for the Bureau members were invited, in particular from the electricity industry.

19. After completing the last agenda item, the Chairman closed the meeting.

## ANNEX

### **DRAFT TERMS OF REFERENCE OF THE AD HOC GROUP OF EXPERTS ON CLEANER ELECTRICITY PRODUCTION FROM COAL AND OTHER FOSSIL FUELS**

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