Economic Commission for Europe

Executive Committee


The Executive Committee, at its sixty-eighth meeting on 30 April 2014, approved the following with amendments:

(a) Work plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2014–2015 as contained in Annex I.

(b) Work plan of the Group of Experts on Coal Mine Methane for 2014–2015 as contained in Annex II.
Annex I

Work Plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2014–2015

I. Introduction

1. Annex V of the Executive Committee decision on Terms of Reference of the Committee on Sustainable Energy and Mandates and Terms of Reference of its subsidiary bodies (ECE/EX/2013/L.15) mandates the Group of Experts on Cleaner Electricity Production from Fossil Fuels to carry out concrete, result-oriented activities that significantly reduce greenhouse gas emissions from electricity production from fossil fuels. These activities are to be developed and implemented with the active participation of the Economic Commission for Europe (ECE) member States, representatives from the energy and financial sectors and civil society, independent experts, and academia. The mandate is approved until December 2015, with the possibility of extension.

2. According to its Terms of Reference, the Group of Experts will concentrate on the following areas of work:
   (a) Regulatory and policy dialogue;
   (b) Sharing best practices on cleaner electricity production from fossil fuels in the ECE region;
   (c) Carbon Capture and Storage (CCS), as well as carbon utilization;
   (d) Enhanced oil recovery with CO₂;
   (e) Advanced fossil fuel technologies for power generation; and
   (f) Evaluation of efficiency enhancing measures for coal-fired power plants including steam generators, air and flue gas systems, steam turbines, generators.

3. The Clean Coal Centre (CCC) of the International Energy Agency (IEA), the Global Carbon Capture and Storage Institute (GCCSI), and the Carbon Sequestration Leadership Forum (CSLF) each conduct a wide range of activities related to CCS, many of which should be of interest to various ECE member States and are closely related to the proposed activities for the Group of Experts on Cleaner Electricity Production from Fossil Fuels. ECE should engage in close contact with these organizations in order to create synergies and avoid duplications.

II. Concrete activities

4. At its meeting held in November 2013, the Group of Experts agreed to a self-imposed deadline of November 2014, in other words for the first year of its current two-year mandate, to address CCS and to conduct an analysis of other approaches to increasing conversion efficiency through the following four activities (see paragraphs 20, 26 and 27 of the report ECE/ENERGY/GE.5/2013/2):

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1 The Ad Hoc Group of Experts on Cleaner Electricity Production from Coal and Other Fossil Fuels, as it was called then, held its ninth session in Geneva on 18 November 2013.
A. Prepare a survey of carbon capture and storage (CCS): landscape, recent developments and stakeholders

Description: At the 18 November 2013 meeting a consensus emerged that during 2014 CCS should be a focus of work in the first year. As a first step, the Group of Experts agreed to prepare a survey on CCS covering the landscape, recent developments, and principal actors so that the role for the Group of Experts could be precisely defined and duplication of efforts undertaken elsewhere be avoided.

Work to be undertaken:

- Initial review of existing literature on CCS technology developments and policy frameworks (first bibliography and short report by 1 May 2014);
- The secretariat and the Bureau of the Group of Experts identify and contact principal stakeholders from government and nongovernmental sectors, academia and international organisations;
- The secretariat and the Bureau of the Group of Experts map who does what in CCS in an intergovernmental context;
- The Bureau of the Group of Experts and experts identify possible areas where the Group of Experts could provide value added; and
- The secretariat and Bureau draft a summary of the survey for consideration by the Group of Experts by September 2014.

Deliverables: A draft survey of CCS landscape, recent developments and stakeholders

Timeline: September 2014

B. Assist UNFCCC in assessing CCS technologies by preparing a communication to UNFCCC on the use of CCS in reducing Greenhouse Gas Emissions

Description: At its 18 November 2013 meeting the Group of Experts offered its assistance to the United Nations Framework Convention on Climate Change (UNFCCC) in assessing CCS technology. To this end, the Group of Experts agreed to prepare recommendations for the UNFCCC on how CCS in cleaner electricity production, as well as CCS for enhanced oil recovery, could be used in reducing greenhouse gas emissions. Building on the results of the survey in item (a) of this work plan, the Group of Experts would prepare a report containing recommendations and suggestions from UNECE to be transmitted to UNFCCC, with a request that the report’s recommendations and proposals be considered when a post-Kyoto, post-2015 Treaty is discussed and prepared. The Group of Experts would work with a self-imposed deadline of completing this action by November 2014, when this activity would be reviewed by the Group of Experts and a written report finalized and adopted. This work will be closely coordinated with the IEA’s Clean Coal Center (CCC).

Work to be undertaken by means of interactive, electronic exchanges:

- The secretariat and the Bureau of the Group of Experts draft a report to UNFCCC with recommendations on the use of CCS and enhanced oil recovery as tools for climate change mitigation by November 2014;
- The secretariat organises a peer review of the recommendations to UNFCCC;
• The Bureau of the Group of Experts drafts a note/letter to UNFCCC outlining the ECE position regarding the use of CCS in reducing Greenhouse Gas Emissions by April 2015;

• The secretariat organizes meetings between UNFCCC stakeholders and the Group of Experts to discuss and refine the recommendations as needed;

• The secretariat and the Bureau of the Group of Experts submit the recommendations to UNFCCC as a parliamentary document for adoption at the next session of the Group of Experts and endorsement by the Committee on Sustainable Energy in November; and

• The secretariat and the Bureau of the Group of Experts submit the recommendations and report formally to the UNFCCC.

Deliverables: Recommendations to the UNFCCC on how CCS in cleaner electricity production and through enhanced oil recovery could be used in reducing Greenhouse Gas Emissions

Timeline: November 2014 with a view to submitting the report to UNFCCC by April 2015.

C. Assess the efficiency of the existing fleet of conventional power plants in the ECE region

Description: An analysis serving the basis for developing best practices on the implementation of modernization measures from an economic and environmental perspective is prepared by secretariat and the Bureau of the Group of Experts.

Work to be undertaken:

• The secretariat and a task force of dedicated members of the Group of Experts conduct an initial review of actors and existing information to avoid duplication of efforts;

• The secretariat and the task force identify gaps in information on the efficiency of the existing fleet of conventional power plants;

• The secretariat and the task force prepare a background document for the next session of the Group of Experts on the status of conversion efficiency of fossil fuel-fired power plants in the ECE region;

• The secretariat and the task force present the findings to the next session of the Group of Experts; and

• The Group of Experts consider possible next steps, including collaboration with qualified partners (international organizations, academia) in assessing and improving the conversion efficiency of fossil fuel-fired power plants in the ECE region.

Deliverables: A baseline analysis of the efficiency of fossil fuel-fired power plants in the ECE region.

Timeline: Review of actors and developments (May 2014); background document (September 2014), presentation to the Group of Experts (October 2014), possible follow-up work (November 2015).
D. Define other activities through electronic exchanges among members of the Group of Experts

Description: In addition to CCS, the Group of Experts decided to explore other possible activities through an interactive electronic exchange among members of the Group of Experts. The additional activities should be concrete, tangible, and not duplicative with the work of other bodies and groups. In the past, the Group of Experts had examined ways of improving the conversion efficiency of coal-fired power plants through, for example, utilization of unconventional fossil fuels, pre-combustion treatment of coal and other fossil fuels, coal and electricity production clustering, and similar clean coal strategies that increase conversion efficiency.

Work to be undertaken:

• Organize teleconferences and electronic exchanges among members of the Group of Experts;

• Explore the possibility for the Bureau to physically meet and discuss and prioritize other activities; and

• The secretariat and the Bureau of the Group of Experts prepare a draft proposal for the tenth session on the work plan for 2015, including review and comment by and input from member States.

Deliverables: A work plan covering the period November 2014–December 2015 concerning the development of best practices.

Timeline: November 2014
Annex II


I. Introduction

1. Annex V of the Executive Committee decision on the Terms of Reference of the Committee on Sustainable Energy and Mandates and Terms of Reference of its subsidiary bodies (ECE/EX/2013/L.15) mandates the Group of Experts on Coal Mine Methane to carry out concrete, result-oriented activities with the objective to promote the reduction of greenhouse gas emissions from coal mines by means of activities that may help the recovery and use of methane in order to reduce the risks of explosions in coal mines. The principal area of work of the Group of Experts is best practice guidance for effective drainage, recovery and usage of coal mine methane. The mandate is approved until December 2015, with the possibility of extension.

2. Activities and outputs of the Group of Experts on Coal Mine Methane need to be approved by the appropriate United Nations Economic Commission for Europe (ECE) body.

II. Concrete activities

3. At its meeting held in November 2013, the Group of Experts agreed to concentrate on the following five activities in 2014–15 (see paragraph 21 of the Meeting Report ECE/ENERGY/GE.4/2013/2):

A. Electronic dissemination of Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines

Description: Using the remaining funds from the Cooperative Project on Methane Capture and Use: Best Practice Guidance on Effective Methane Drainage and Use in Coal Mines (ECE Trust Fund E141), this activity seeks to electronically disseminate the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines to a wide audience of potential beneficiaries:

- Coal mine operators (managers in charge of methane management and coal mine safety);
- Research institutes;
- Coal mine associations;
- Civil society;
- Independent experts; and

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2 The Ad Hoc Group of Experts on Coal Mine Methane, as it was called then, held its eighth meeting in Geneva, 19–20 November 2013.
The original intent of the project to disseminate best practices to audiences in China, Kazakhstan and Ukraine was achieved in 2011 and 2012. At the meeting held on 19–20 November 2013, the experts noted that it would be beneficial if the publication could be translated into more languages, such as Spanish, Mongolian, Vietnamese, and Bosnian/Croatian/Serbian so that a wider audience could be reached. The experts also noted the need to update the original English version, which is four years old and could benefit from being brought up to date.

Work to be undertaken:

- The secretariat and the Bureau of the Group of Experts identify professional translators to translate the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines into Spanish and Mongolian, as well as Vietnamese, Korean and Bosnian/Croatian/Serbian (depending on the availability of funds);
- The secretariat and the Bureau of the Group of Experts establish technically qualified national peer review bodies to compare the translations with the English original to verify their technical accuracy and linguistic quality;
- The secretariat and the Bureau of the Group of Experts agree the final drafts through an interactive electronic exchange among the Group of Experts; and
- The secretariat and the Bureau of the Group of Experts publish and disseminate translated versions electronically.


Timeline:


B. Update and further development of Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines

Description: The Group of Experts decided to explore how to update and further develop the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines. The Group of Experts recognized that this activity will depend on the availability of resources (experts or funds).
Work to be undertaken:

• The secretariat and the Bureau of the Group of Experts establish a task force to examine the content and structure of an updated Best Practice Guidance with a view to identifying themes that need to be addressed in a next edition;

• The bureau of the Group of Experts organizes communications among the Task Force to suggest possible changes and additions;

• The secretariat and the Bureau of the Group of Experts determine a new structure and content of the Best Practice Guidance to propose to the larger Group of Experts

Deliverables: Presentation to the Group of Experts with recommendations on a new content for the Best Practice Guidance.

Timeline: Establish a Task Force (April 2014), present newly proposed structure and content of the Best Practice Guidance to the Group of Experts (November 2014).

C. Prepare proposals for case studies, where appropriate and financed by extrabudgetary resources, on the application of best practice guidance in specific coal mines in different regions of the world

Description: Case studies are needed to demonstrate how the principles outlined in the Best Practice Guidance can be implemented at operating coal mines around the world. The original Best Practice Guidance contained seven case studies organized in a common framework (Initial Conditions—Gas Control Problems—Solution) for comparison purposes. Extrabudgetary funds could be used to expand the case study database by elaborating concrete, in-depth case studies and analyses that demonstrate the benefits of applying best practices. Any new extrabudgetary project would have to be submitted to the EXCOM for approval.

Work to be undertaken:

• Demonstrate the application of the best practice guidance by the Group of Experts at an operating coal mine, if accepted, using extrabudgetary funds if available and approved by EXCOM.

• The secretariat and the Bureau of the Group of Experts review the current framework for cases studies and, if needed, propose a new structure;

• The secretariat and the Bureau of the Group of Experts reach out to various coal mining institutions and coal mine operators to encourage them to share relevant case studies on the application of best practices;

• The secretariat and the Bureau of the Group of Experts review case studies by the Group of Experts through electronic exchanges and discuss them, as applicable, at the annual sessions planned for 2014 and 2015; and

• The secretariat publishes case studies on the ECE coal mine methane website after endorsement by the Committee on Sustainable Energy.

Deliverables: Case studies on the implementation of best practices in methane management.
D. Facilitate establishment of International Centre of Excellence on Coal Mine Methane

Description: The Group of Experts established a Task Force of group members to work towards establishment of International Centre(s) of Excellence on Coal Mine Methane (CMM), by one or more United Nations Member States. ECE’s International Public-Private Partnership (PPP) Centre of Excellence is an official inter-regional United Nations programme led by ECE on behalf of other four United Nations Regional Economic Commissions, in cooperation with relevant United Nations and other agencies. A specialist Centre of Excellence is an organization or part of an organization that cooperates with the ECE International PPP Centre of Excellence in promoting and disseminating best practices in a specific area, in this case in coal mine methane management. The proposed International Centre of Excellence on Coal Mine Methane (ICE-CMM) will be a specialist centre tasked to support capacity-building activities and dissemination of best practices in economically viable methane abatement and utilisation, and environmentally responsible methane management.

Once established, ICE-CMM will be a legal entity operating in the host country within the legal framework of that country. To this end, ECE and the host country will need to sign a Memorandum of Understanding.

Work to be undertaken:

- Solicit United Nations Member States to host ICE-CMM;
- Determine which country(ies) are interested:
- Select suitable candidates to host ICE-CMM; and
- Enter into procedure on structuring the Memorandum of Understanding needed to establish ICE-CMM.

Deliverables: Memorandum of Understanding on ICE-CMM.

Timeline: Deciding on the host country (November 2014), Memorandum of Understanding (November 2015).

E. Continue to provide advice to UNFCCC (on the matters related to ACM0008) and to other international, national and regional market-based coal mine methane emission reduction mechanisms and coal mine methane related standards

Description: The secretariat and the Bureau of the Group of Experts will:

- Invite members of the Group of Experts to correspond with the International Organization for Standardization (ISO) and determine possible synergies between ISO Technical Committee (TC) 263 Coalbed Methane and the Group of Experts;
- Continue to provide advice to the United Nations Framework Convention on Climate Change (UNFCCC) on the matters related to ACM0008 (Consolidated methodology for coal bed methane, coal mine methane and ventilation air methane emission reduction mechanisms).
capture and use for power (electrical or motive) and heat and/or destruction through flaring or flameless oxidation), in response to UNFCCC’s earlier requests;

• Collect data on coal mine methane emissions in the UNECE region; and

• Provide comments on other international, national and regional market-based coal mine methane emission reduction mechanisms, such as the California Air Resources Board Mine Methane Capture Protocol.

Work to be undertaken:

• Continue to liaise with the above-mentioned and similar organizations.

• Explore the opportunity to meet with UNFCCC and ISO.


Timeline: Through November 2015.