Report of the Group of Experts on Coal Mine Methane

I. Introduction

1. The tenth session of the Group of Experts on Coal Mine Methane was held on 28 October 2015.

II. Attendance

2. The meeting was attended by experts from the following United Nations Economic Commission for Europe (ECE) member States: Bosnia and Herzegovina, Germany, Kazakhstan, Poland, Romania, Russian Federation, Serbia, Sweden, Switzerland, Ukraine, United Kingdom, and United States of America. Representatives of the European Commission also participated.

3. Experts from Australia, Colombia, Cote d’Ivoire, Ethiopia and India participated under Article 11 of the Commission’s Terms of Reference.

4. Representatives of the International Labour Office (ILO), the International Organization for Standardization (ISO) and the Global Methane Initiative were present.

5. The private sector and academia were also represented.

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1 Official documents of the session are available at http://documents.un.org/. Unofficial room documents and presentations delivered at the meeting are available on the ECE website at: http://www.unece.org/index.php?id=38525
III. Adoption of the agenda (agenda item 1)

Documentation: ECE/ENERGY/GE.5/2015/1

6. The provisional agenda as contained in ECE/ENERGY/GE.5/2015/1 was adopted without amendment.

IV. Election of Officers (agenda item 2)

7. The Group of Experts elected a new Bureau to serve in 2016–17: Mr Raymond Pilcher (United States of America) as Chair, and Mr Sergazy Baimukhametov (Kazakhstan), Mr Jacek Skiba (Poland), Mr Milanko Savic (Serbia), Mr Sergey Shumkov (Russian Federation), Mr Yury Bobrov and Mr Igor Yashchenko (Ukraine), Mr David Creedy (United Kingdom of Great Britain and Northern Ireland), Mr Ozgen Karacan, Ms Felicia Ruiz, Mr Clark Talkington (United States of America), and Mr Martin Hahn (International Labour Organization), as Vice-Chairs.

8. The delegations from the United States and the Russian Federation raised questions regarding the procedure for nomination of members of the Bureau, particularly the nominee from the ILO who was not nominated by a member State. The Group of Experts and delegations agreed on the value of the involvement of the ILO in the work of the group and also agreed that the nomination process for the ILO representative to the Bureau would not be considered as setting a precedent for other ECE expert groups, groups of specialists, or intergovernmental bodies.

V. Opening remarks from the Chair (agenda item 3)

9. The Chair delivered opening remarks, outlining the important work accomplishments of the Group of Experts that have been achieved and the directions of its work in the future. He stressed the need to address the emissions that stem from the extraction and use of fossil fuels, given that fossil fuels have not been given deserved attention during the international conversations leading to the twenty-first session of the Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCCC) that will be held in Paris, 30 November – 11 December 2015. He expressed the hope to find an opportunity to influence decision makers and politicians by presenting facts on the role of fossil fuels in the current and future energy mix in a cohesive story that is easily understood and compelling to a more general audience. Talking about many economic challenges that the coal sector face recently and the need to restructure companies, the Chair expressed a concern over how the newly restructured companies would emerge with a strengthened sense of responsibility to the worker and to the environment.

10. The full text of the Chair's opening remarks is available on the session's website under Agenda item 3 – Opening remarks by the Chair of the Group of Experts.

VI. Introduction of participants (agenda item 4)

11. A tour de table was conducted during which all participants introduced themselves.

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2 http://www.unece.org/index.php?id=38525
VII. Activities and priorities of the United Nations Economic Commission for Europe and its Committee on Sustainable Energy (agenda item 5)

12. The Director of the Sustainable Energy Division of ECE provided an update on the outcomes of the twenty-third session of the Committee on Sustainable Energy, held on 19–21 November 2014. He also updated the Group of Experts on the relevant decisions adopted by ECE at its sixty-sixth session. He informed the Group of Experts on the preparations for and the possible outcomes of the twenty-fourth session of the Committee on Sustainable Energy to be held on 18–20 November 2015.

13. The Director provided details of the work of the Committee and its subsidiary bodies, stressing the relevance of the Group of Expert’s work on attaining the Global Goals that were adopted by the United Nations General Assembly in September 2015. The Director stressed the importance of the contribution of the Group of Experts to ECE’s work on methane management from extractive industries. An update on the preparation for and the possible outcomes of COP 21 was also provided.

VIII. Report on implementation of the work plan for 2014-15 (agenda item 6)

14. The Bureau, assisted by the secretariat, reported on the status of implementation of the five activities defined by the Group of Experts’ work plan for 2014–2015:

(a) Electronic dissemination of Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines;

(b) Update and further development of the Best Practice Guidance;

(c) Proposals for case studies on the application of best practices in specific coal mines in different regions of the world;

(d) Establishment of an International Centre of Excellence on Coal Mine Methane, and

(e) Providing advice to various international, national and regional market-based coal mine methane emission reduction mechanisms and related coal mine methane standards.

15. The Group of Experts noted that it had delivered on the concrete activities of the mandate and work plan for 2014–2015 and will report achievements and key milestones at the twenty-fourth session of the Committee on Sustainable Energy.

IX. Report from the fifth joint meeting of the United Nations Economic Commission for Europe and the Coal Subcommittee of the Global Methane Initiative (agenda item 7)

16. A report from the fifth joint meeting of the ECE and the Coal Subcommittee of the Global Methane Initiative (GMI) was presented. The meeting of the GMI Coal Subcommittee discussed, inter alia, Partner Country and Project Network updates, news from the most recent Steering Committee meetings, and plans for the Global Methane
Forum to be held in March 2016 in Washington, DC. A summary of the discussions during this agenda item and presentations are available at Global Methane Initiative's website.3

17. The Group of Experts thanked GMI and its members for their continued support and collaboration. Noting the synergies between the Group of Experts and GMI, the Group of Experts requested the secretariat to explore a possible strategic alliance between GMI and ECE that could be formalized through an agreement between ECE and GMI.

18. As a practical manifestation of such a strengthened collaboration, the Group of Experts recommended to participate in the GMI Global Methane Forum planned for March 2016 in Washington, United States.

X. Trends, developments and good practices in coal mine methane management (agenda item 8)

19. Recent trends, developments, and good practices in coal mine methane management in ECE member States and other coal mining countries were presented.


21. A representative of Kazakhstan presented the practices carried out in coal mines of the Karaganda Basin.

22. A representative of Serbia provided an overview of the developments in and challenges faced by the methane-rich underground coal mines of Serbia.

23. Details of all presentations are available on the ECE coal mine methane website.

XI. Work plan for 2016–2017 (agenda item 9)

24. The Group of Experts recommended that an additional activity be added to its work plan. This activity will focus on updating the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines. This work will be undertaken in response to comments from the Group of Experts that the Best Practice Guidance should be expanded to cover outburst hazards and prevention methods. The Drafting Group will finalize this in three weeks. This work will include a case study on outburst prevention. It is expected that it will take around five months to finish the revised Best Practice Guidance.

25. Regarding activity (c) of the draft work plan (Launch and support the work of the International Centre of Excellence on Coal Mine Methane), the Bureau will support the International Centre of Excellence (ICE-CMM) in its planning and work activities. It is anticipated the ICE-CMM will be launched by mid-2016, contingent on funding. The initial draft work plan and potential deliverables of the ICE-CMM should be developed by Vice-Chair Skiba by 29 February 2016 and presented and discussed for further development at the Global Methane Forum on 28 March 2016.

26. Regarding activity (d) of the draft work plan (Collect and disseminate case studies on the application of best practice guidance in specific coal mines in different regions of the world), the Group of Experts also recommended that a case study library be developed to complement the Best Practice Guidance. In response to the request made at the session, the

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3 https://www.globalmethane.org/news-events/event_detailsByEventId.aspx?eventId=443
The Group of Experts will solicit and publish on the ECE website a series of case studies on outburst risk and its detection and prevention. There is an open invitation to members to submit further case studies to this library that complement the Best Practice Guidance. Vice-Chair Talkington will lead this work and will call upon the Group of Experts for support.

27. The Group of Experts recommended to remove part (e)(i) of the draft work plan and strike the word coalbed methane from the description of activities (e) and (f), understanding that pre-mine drainage is included in the definition of coal mine methane.

28. The Group of Experts will provide comments on methane-related standards to ISO and other standard setting organizations on an as-needed basis.

29. Having paragraphs 24 to 28 in mind, the Group of Experts recommended that the secretariat amend the draft work plan for 2016–2017 (ECE/ENERGY/GE.4/2015/3) to reflect the proposed changes, circulate it to the Group of Experts for comments by 4 November 2015 and subsequently submit it to the Committee on Sustainable Energy for endorsement. The revised draft 2016–17 Work Plan of the Group of Experts on Coal Mine Methane is annexed to this report.

30. The Group of Experts recommended to the Committee on Sustainable Energy that its mandate be extended to 31 December 2017.

31. Taking note of the extrabudgetary project “Trust fund for dissemination of best practices in the emission abatement, recovery, and use of coal mine methane” approved by the Executive Committee of ECE on 30 June 2015, the Group of Experts recommended to offer its expertise to achieve the principal expected outcome of this project: a better understanding of the good practices in methane management that would result in safer mining operations and better utilization of methane, which would further reduce greenhouse gas emissions from coal mines.

XII. Preparations for the eleventh session of the Group of Experts (agenda item 10)

32. The eleventh session of the Group of Experts will be held in October 2016 in Geneva.

XIII. Other business (agenda item 11)

33. The Group of Experts noted the challenge to complete its work in one day and recommended that consideration be given to increasing the duration of future meetings of the Group of Experts to one and a half or two days.

34. The Group of Experts recommended to the Committee on Sustainable Energy that its annual sessions be supported by parliamentary documents and reports as needed in relation to the implementation of the work plan 2016–2017. The Group of Experts recommended to the Committee on Sustainable Energy that the secretariat be invited to continue supporting its work by, inter alia, the following: organizing planned work plan activities, preparing formal documentation required for the development, approval, implementation and reporting of work plan activities, including the translation of official documents into the three official ECE languages (English, French, Russian) to service the Group of Experts’ meetings.
XIV. Adoption of conclusions and recommendations  
(agenda item 12)

35. The conclusions and recommendations were adopted and are included under the relevant agenda items.

XV. Adoption of the report and close of the meeting  
(agenda item 13)

36. The report of the meeting was adopted, including the conclusions and recommendations, subject to any necessary editing and formatting.
Annex

Revised draft 2016-17 Work Plan of the Group of Experts on Coal Mine Methane

I. Mandate

1. In its decision on matters relating to the Committee on Sustainable Energy of 25 March 2014 (ECE/EX/7, Annex II, Chapter V), the Executive Committee of the United Nations Economic Commission for Europe (EXCOM) mandated the Group of Experts on Coal Mine Methane until December 2015, with a possibility of extension, to carry out concrete, result-oriented activities that promote the reduction of greenhouse gas emissions from coal mines through recovery and use of methane. The Group of Experts has successfully delivered on the concrete activities of the mandate and work plan for 2014 and 2015.

2. The Group of Experts recommends that the mandate be extended to December 2017.

II. Areas of work


III. Concrete activities in 2016-17

4. The Bureau of the Group of Experts, on the basis of the outcomes and lessons learned during the implementation of the work plan for 2014–2015, and following inclusive consultations with a wide range of stakeholders, and the outcomes of the tenth session of the Group of Experts held on 28 October 2015 in Geneva, is proposing to undertake the following activities to be carried out in 2016 and 2017:

(a) Revise and update the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines

Description: At its tenth session the Group of Experts recommended that an additional activity be added to its work plan: to revise and update the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines. This work will be done in response to comments from the Group of Experts that the Best Practice Guidance should be expanded to cover outburst hazards and prevention methods. This work will be done by the Drafting Group.

Work to be undertaken:

(i) Draft a case study on outburst prevention.

(ii) Review and amend as necessary the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines.

Deliverables:

(i) A case study on outburst prevention.

(ii) Complete and publish the revised Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines.
Timeline:

(i) A case study on outburst prevention by 22 January 2016.
(ii) The revised Best Practice Guidance by 3 June 2016.

(b) **Disseminate the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines**

**Description:** Over the past seven years the Group of Experts has collaborated with the Global Methane Initiative (GMI), a voluntary, multilateral partnership that aims to reduce global methane emissions and to advance the abatement, recovery and use of methane. In partnership with GMI, in 2010 the Group of Experts published and has since disseminated the "Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines". Dissemination of the Best Practice Guidance has become a core, long-term activity of the Group of Experts. On 30 June 2015, EXCOM approved a new extrabudgetary project “Dissemination of best practices in the abatement, recovery, and use of methane”, to be implemented in 2016 and 2017, with funding from the United States Environmental Protection Agency. This activity seeks to disseminate the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines to a targeted audience of potential beneficiaries in coal mining industry in the ECE region and beyond, in accordance with the Economic and Social Council (ECOSOC) Decision 2011/222 which gives the Group of Experts a global mandate. The beneficiary countries of the extrabudgetary project may include China, India, Kazakhstan and Turkey.

**Work to be undertaken:**

(i) Carry out and report on fact-finding missions in critical coal mining regions.
(ii) Plan, organize, and execute demand-driven capacity-building workshops, in accordance with the work plan and budget of this extrabudgetary project.
(iii) Continue the collaboration with the Global Methane Initiative (GMI), including through participation in the GMI Global Methane Forum planned for March 2016.
(iv) Explore how to further expand and deepen the collaboration with GMI in the context of the Committee of Sustainable Energy and in collaboration with other Groups of Experts in ECE.

**Deliverables:**

(i) Two to three demand-driven workshops on practical application of best practices in various coal mining regions, targeted at coal mining professionals and policy makers dealing with sustainable use of coal mine and methane. Some of the workshops could be expanded into multi-day seminars, organised in collaboration with the International Centre of Excellence on Coal Mine Methane, once the Centre becomes operational.
(ii) Participation in the GMI Global Methane Forum in March 2016.

**Timeline:**

(i) The workshops and other project outputs are to be delivered by 31 December 2017, in accordance with the work plan and budget of this extrabudgetary project.
(ii) Participation in the GMI Global Methane Forum in March 2016.
(c) Launch and support the work of the International Centre of Excellence on Coal Mine Methane

Description: In 2014–15, the Group of Experts worked to establish the International Centre of Excellence on Coal Mine Methane (ICE-CMM). The deliverable for 2014–15 was the selection of a host organization and signing a Memorandum of Understanding on ICE-CMM with it. An ICE-CMM is a non-profit entity to be established in a United Nations Member State under the national laws of that Member State that, under the auspices of and in close collaboration with the Group of Experts, supports capacity-building activities through dissemination of best practices in economically viable methane abatement and utilization, socially acceptable underground coal mine practices, and environmentally responsible methane management. The Bureau of the Group of Experts will support the ICE-CMM in its planning and work activities, anticipating its launch by mid-2016, contingent on funding.

Work to be undertaken:

(i) Develop and draft the work plan of the ICE-CMM, with potential deliverables.

(ii) Inaugurate the ICE-CMM.

(iii) Once the ICE-CMM is operational, assist the ICE-CMM in carrying out its work, as requested or needed in accordance with the ICE-CMM's Terms of Reference.

Deliverables:

(i) Initial draft work plan with potential deliverables.

(ii) Inaugural conference/workshop at the host organisation, combined with appropriate public relation activities.

(iii) Status reports on the activities of the ICE-CMM.

Timeline:

(i) Initial draft work plan with potential deliverables by 29 February 2016.

(ii) Inaugural conference/workshop by September 2016.


(d) Collect and disseminate case studies 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. In 2014–15 the Bureau of the Group of Experts reviewed this framework and found it a useful tool to describe various coal mine problems and their solutions. Extrabudgetary funds could be used to expand the case study database by elaborating concrete, in-depth case studies and analyzes that demonstrate the benefits of applying best practices. At its tenth session held on 28 October 2015, the Group of Experts recommended that a case study library be developed to complement the Best Practice Guidance.

Work to be undertaken:

(i) In response to the request made at its tenth session, the Group of Experts will solicit and publish on the ECE website a series of case studies on outburst risk, and its detection and prevention. There is an open invitation to members
to submit further case studies that complement Best Practice Guidance to this library.

(ii) Demonstrate application of the best practice guidance at operating coal mines, if accepted, using extrabudgetary funds.

(iii) 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.

(iv) Review case studies through electronic exchanges and discuss them, as applicable, at the annual sessions planned for 2016 and 2017.

(v) Publish case studies on the ECE coal mine methane website.

**Deliverables:** Case studies on implementation of best practices in methane management.

**Timeline:** Case studies are reviewed and approved as they are submitted. This is a continuing activity of the Group of Experts.

(e) **Expand the Group of Experts’ scope of work to cover integrated methane management in the context of sustainable development**

**Description:** In January 2015, the Group of Experts offered to participate in the Task Force on methane management in extractive industries that reports to the Bureau of the Committee on Sustainable Energy. The Group of Experts stands ready to assist ECE member States – and other United Nations Member States – in their efforts to reduce the carbon energy intensity of the coal mine industry through development of coal mine methane projects, as they relate to mineable coal.

**Work to be undertaken:**

(i) Look into other economic, environmental and social aspects on coal mine methane, with a view to treating coal mine methane management in the context of sustainable development, green economy and green job creation.

(ii) Develop recommendations on the enabling role of coal mine methane projects in restructuring the coal mining industry in the ECE region through adopting new business models that facilitate the transition from a single community producer to an integrated energy company.

**Deliverables:**

(i) Contribution to the Committee on Sustainable Energy’s report on methane management in extractive industries.

(ii) Recommendations on the enabling role of coal mine methane projects in restructuring the coal mining industry in the ECE region.

**Timeline:**


(ii) Recommendations on the enabling role of coal mine methane projects by October 2017.

(f) **Continue to provide advice on coal mine methane related standards to the United Nations Framework Convention on Climate Change (UNFCCC), the International Organization for Standardization (ISO), and other international, national and regional market-based coal mine methane emission reduction mechanisms**

**Description:** The Group of Experts has historically advised UNFCCC on matters related to methane standards and methodologies, namely ACM0008 (Consolidated methodology for
coal bed methane, coal mine methane and ventilation air methane capture and use for power (electrical or motive) and heat and/or destruction through flaring or flameless oxidation). The Group of Experts also provides 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 or the ISO Technical Committee 263 Coalbed methane (CBM).

**Work to be undertaken:** Continue to liaise with the above-mentioned and similar organizations and actively solicit the Group of Experts’ advice and services.

**Deliverables:** Advice and comments on coal mine methane related standards.

**Timeline:** To provide advice as requested.