



# Economic and Social Council

Distr.: General  
6 November 2017

Original: English

---

## Economic Commission for Europe

### Committee on Sustainable Energy

#### Group of Experts on Coal Mine Methane

##### Twelfth session

Geneva, 24-25 October 2017

## Report of the Group of Experts on Coal Mine Methane

### I. Introduction

1. The twelfth session of the Group of Experts on Coal Mine Methane was held from 24-25 October 2017.
2. This report summarizes the discussions on the work of the Group of Experts at its twelfth session. All the documents and presentations of the session are available on the United Nations Economic Commission for Europe (ECE) website<sup>1</sup>.

### II. Attendance

3. The meeting was attended by experts from the following ECE member States: Canada, Georgia, Germany, Kazakhstan, Poland, Romania, Russian Federation, Sweden, Turkey, Ukraine, and United States of America.
4. Experts from China, Colombia, and India participated under Article 11 of the Commission's Terms of Reference.
5. From the United Nations system and Specialized Agencies, a representative of the International Labour Organization (ILO) attended. A representative from the European Commission (EC), represented by the EC Directorate-General (D.G.) Joint Research Centre (JRC) participated.
6. The following international organization was represented: International Energy Agency (IEA) Clean Coal Centre (IEACCC).

---

<sup>1</sup> 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=44868>



7. Representatives of the following non-governmental organizations participated: Assocarboni, Association des ONG de L'environnement, Fédération des Bastides d'Aquitaine, Forum for Nature Protection NGO, iuventum, and Global Action for Sustainable Villages.

8. The private sector was represented by experts from seventeen companies. Academia was also represented by experts from four universities.

### **III. Adoption of the agenda (agenda item 1)**

*Documentation:* ECE/ENERGY/GE.4/2017/1

9. The provisional agenda as contained in the document ECE/ENERGY/GE.4/2017/1 was adopted without amendment.

### **IV. Election of officers (agenda item 2)**

10. The Group of Experts elected a new Bureau to serve for the 2018-2019 biennium. The new members are: Mr Raymond Pilcher (United States of America) as Chair, and Mr Admir Softic (Bosnia and Herzegovina), Mr Sergazy Baimukhametov (Kazakhstan), Mr Jacek Skiba (Poland), Mr Sergey Shumkov (Russian Federation), Mr Milanko Savic (Serbia), Mr Hasan Erdogan (Turkey), Mr Igor Yashchenko (Ukraine), Mr Özgen Karacan (United States of America), Ms Felicia Ruiz (United States of America), Mr Zhixin Jin (China), Mr Martin Hahn (International Labour Organization), Mr Clemens Backhaus (A-TEC Anlagentechnik GmbH), Mr Clark Talkington (Advanced Resources International, Inc), Mr Yuriy Bobrov (Association of Donbass Mining Towns), Mr Neil Butler (HEL-EAST Ltd), and Mr David Creedy (Sindicatum Carbon Capital) as Vice-Chairs.

### **V. Opening remarks (agenda item 3)**

11. In his opening remarks, the Chair advised that the Committee on Sustainable Energy at its twenty-sixth session had approved a mandate for the Group of Experts on Coal Mine Methane to continue its work to end-2019. He congratulated the newly elected members of the Bureau of the Group of Experts and thanked the returning members for their dedication and service. He also thanked the members of the Group of Experts who volunteered their time to help draft and edit the second edition of the Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines, as well as those who travelled to various workshops to deliver presentations in Kazakhstan, Poland, China and India. He acknowledged the successful completion of the 2016-2017 work plan, noting with appreciation the extrabudgetary funding from the United States Environmental Protection Agency (USEPA) that contributed to making the work possible. A work plan for an extrabudgetary project funded by USEPA for 2018-2019 has been approved. The Chair noted that the Group of Experts' work plan for 2018-2019 is ambitious and will continue to rely on the individual and collective efforts and expertise of the Group, as well as the newly opened International Centres of Excellence on Coal Mine Methane (ICE-CMM). He observed that the work of the Group of Experts has taken on a broader context as a result of the cooperation with other expert groups to develop approaches to cross-cutting issues that will facilitate sustainable energy development. One such issue is understanding the role that increasing the effective capture and use of methane throughout the coal mining lifecycle will play in modernizing the energy sector, especially within energy-centric industrial complexes located in many parts of the world.

12. In his opening remarks, the Director of the ECE Sustainable Energy Division highlighted the work of the Division and emphasized the role of methane in the general carbon budget perspective. He advocated for a focus on a broad methane management agenda that includes not only coal mine methane, but also pre-mining methane drainage, ventilation air methane, as well as methane from abandoned and open cast mines. The need to focus not only on mitigation but also on proper monitoring, reporting and verification was underlined, as was the importance of including unconventional methane resources in the United Nations Framework Classification for Resources (UNFC). The Director highlighted the strategic partnership between ECE and the Global Methane Initiative (GMI), and invited the Group of Experts to actively participate in the Global Methane Forum, which will take place on 16-18 April 2018 in Toronto, Canada. He also underlined the importance of cooperation with other United Nations Regional Commissions, particularly through their engagement in the work of the International Centres of Excellence on Coal Mine Methane that the Group of Experts establishes in key coal mining countries around the world. Similarly, highlighting the crucial role of good collaboration between all subsidiary bodies of the Committee on Sustainable Energy, the Director encouraged the Group of Experts to engage in cross-cutting projects of relevance to the Group's mandate and within its expertise.

13. The full texts of the Chair's and the Director's opening remarks are available on the session's website<sup>2</sup> under agenda item 3 - Opening remarks.

## **VI. Seventh joint meeting of the United Nations Economic Commission for Europe Group of Experts on Coal Mine Methane and the Global Methane Initiative Coal Subcommittee (agenda item 4)**

14. The Group of Experts thanked the Global Methane Initiative (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 continue to explore opportunities to strengthen the relationship between ECE and GMI.

15. The Group of Experts decided to take an active role in the Global Methane Forum (16-18 April 2018, Toronto, Canada). Recognizing the importance of the Forum, the Group of Experts requested the secretariat to undertake any efforts necessary to assure ECE's formal involvement in the event at the highest level.

16. In the spirit of strengthening cooperation, the Group of Experts and the GMI Coal Subcommittee requested their respective secretariats to consider drafting a single report summarizing their joint participation in the Forum and with recommendations directed to the GMI Steering Committee and the ECE Committee on Sustainable Energy.

17. The Group of Experts expressed its wish to organize an informal meeting of experts at the Forum comprising a number of technical sessions on Coal Mine Methane (CMM), Abandoned Mine Methane (AMM) and Surface Mine Methane (SMM). The secretariat was requested to organize the events in coordination with GMI.

18. The Group of Experts and the GMI Coal Subcommittee discussed their participation in the Twenty-fifth World Mining Congress (WMC) to be held 19-22 June 2018, in Astana, Kazakhstan. The Secretary-General of WMC proposed to organize in cooperation with the Group of Experts and GMI a session dedicated to methane at the Congress. The Group of

---

<sup>2</sup> <http://www.unece.org/index.php?id=44868>

Experts and the GMI Coal Subcommittee agreed to engage with WMC and explore this offer in greater detail.

19. The Group of Experts and the GMI Coal Subcommittee is contemplating participating in the Ninth International Forum on Energy for Sustainable Development in Q4 2018 in Ukraine, with specific activities related to methane management.

20. The Group of Experts underlined the importance of fossil fuels in the global energy mix and highlighted their critical role in assuring stability of energy supply. Recognizing important synergies between fossil fuels and renewable sources of energy in the field of energy production, the Group of Experts confirmed its interest to explore opportunities to cooperate with other Group of Experts operating under the umbrella of the Committee on Sustainable Energy.

21. The Group of Experts was informed about the situation related to CMM in Canada, Colombia, Georgia, India, Poland, Turkey, Ukraine and the United States, and was presented with an overview of the ongoing CMM projects in Poland. Following the proposal to hold a capacity-building workshop in Georgia, the Group of Experts requested the secretariat to contact the relevant institutions in Georgia to explore this offer in greater detail.

## **VII. Activities and priorities of the United Nations Economic Commission for Europe and its Committee on Sustainable Energy (agenda item 5)**

22. The Group of Experts was informed about the following activities ongoing under the umbrella of the Committee on Sustainable Energy:

(a) The outcomes of the Energy Ministerial and the Eighth International Forum on Energy for Sustainable Development. The Ministerial was hosted by Kazakhstan and was supported by the United Nations Regional Commissions, International Renewable Energy Agency (IRENA) and Sustainable Energy for All (SEforALL). A Ministerial outcome document is available on the Forum's website<sup>3</sup> under the "Forum outcomes" bookmark;

(b) The twenty-sixth session of the Committee on Sustainable Energy, 26-28 September 2017;

(c) The Pathways to Sustainable Energy project;

(d) The United Nations Framework Classification for Resources and its approach to Coal Mine Methane (CMM), Coal Bed Methane (CBM), Abandoned Mine Methane (AMM), Surface Mine Methane (SMM), and ventilation air methane (VAM);

(e) The project on Modernization of the Energy Sector.

23. The Group of Experts discussed the role of the Committee on Sustainable Energy in supporting, facilitating and enhancing the work of the Group and requested the Committee's assistance in:

(a) Identifying political champions that could help promote guiding principles developed by the Group at the government level in key coal mining states;

---

<sup>3</sup> <http://www.unece.org/astana2017.html>

(b) Identifying partners, including in the private sector, and additional resources that could assist the Group of Experts in effective delivery and promotion of its work as mandated by the Committee;

(c) Assisting in coordinating efforts put forth by the Group of Experts and other subsidiary bodies of the Committee in identifying and addressing crucial cross-cutting issues that impact sustainable energy development.

24. The Group of Experts requested the secretariat to engage with the Group of Experts on Cleaner Electricity Production from Fossil Fuels and explore the possibility to organize a joint session at the 2018 Global Methane Forum in Toronto.

25. The Group of Experts concluded that it will participate in the Pathways to Sustainable Energy project on issues related to methane emissions from coal, subject to identifying volunteers from the Group.

26. The Group of Experts concluded that it should cooperate with the Expert Group on Resource Classification, in particular on application of the United Nations Framework Classification for Resources to CMM, CBM, AMM, SMM, and VAM.

27. Following the presentation on the work and activities of the European Union's Research Fund for Coal and Steel (RFCS), the Group of Experts expressed its willingness to engage with RFCS, and requested the secretariat to explore opportunities for cooperation between RFCS and the Group.

## **VIII. Report on implementation of the work plan for 2016-2017 (agenda item 6)**

28. The Chair of the Group of Experts reported on the Group's work plan for 2016-2017 wherein the Group of Experts has been asked to:

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

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

(c) Launch and support the work of the International Centres of Excellence on Coal Mine Methane (ICE-CMM);

(d) Collect and disseminate case studies on the application of best practice guidance in specific coal mines in different regions of the world;

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

(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.

29. The Group of Experts noted that it has delivered on its 2016-2017 work plan.

30. In particular, the Group of Experts noted with appreciation successful delivery of the following activities: publication of the paper version of the Best Practice Guidance; opening of ICE-CMMs in Poland and China; organization of a number of large-scale Best Practice Guidance dissemination activities worldwide; significant focus on methane-related topics at the Eighth International Forum on Energy for Sustainable Development in Astana,

Kazakhstan; and active involvement of the Group in the cross-cutting activities conducted under the umbrella of the Committee on Sustainable Energy.

31. The Group of Experts was briefed by the secretariat on the status of the extrabudgetary project on Dissemination of Best Practices in the Abatement, Recovery, and Use of Methane, and noted with appreciation that the objectives of the project were accomplished. The Group of Experts expressed its appreciation to USEPA for providing funding.

32. The Group of Experts was presented with the results of the evaluation of its work in 2014-2016 conducted by an external evaluator. The Group of Experts found the conclusions and recommendations of the evaluation relevant and valid, and requested the Bureau in cooperation with the secretariat to develop an action plan for implementing the recommended measures.

33. The Group of Experts was provided with an update on the status and activities of the ICE-CMMs in Poland and in China. The Group noted with appreciation the progress made in the development of the worldwide network of the centres, and congratulated the host entities for the work accomplished. The Group requested that the secretariat and the host entities ensure communication and coordination of their respective activities among each other and with the Group. The Group further requested the secretariat to continue to keep the other United Nations Regional Commissions informed on the ICE-CMMs and to continue to seek their active engagement.

34. The Group of Experts was presented with the status report of the ICE-CMM in Poland and with its work plan for 2017-2019. The Bureau of the Group of Experts will review these documents and make a decision on endorsing them by written procedure by 31 December 2017.

35. The Group of Experts was presented with the status report of the ICE-CMM in China and with its work plan for 2018-2019. The Bureau of the Group of Experts will review these documents and make a decision on endorsing them by written procedure by 31 December 2017.

36. The Group of Experts noted with appreciation the interest of the Russian Federation and Ukraine to establish ICE-CMMs in these countries and requested the secretariat to facilitate establishment of additional ICE-CMMs.

## **IX. Conclusions and recommendations of the Workshop on Coal Mine Methane and Abandoned Mine Methane in the context of Sustainable Energy (agenda item 7)**

37. Following the results of the workshop held on 23 October 2017, as well as noting with appreciation endorsement by the Committee on Sustainable Energy of activities to address sustainable management of abandoned coal mines, and the recognition the Committee gave to the relevance of this matter in attaining a number of the Sustainable Development Goals, the Group of Experts recommended development and publication of best practices on AMM.

38. The Group of Experts recommended close cooperation with GMI, as well as with other relevant actors in this field, in its work on AMM.

39. The Group of Experts decided to establish a task force to lead the work on the development of the document on best practices and recommendations on sustainable management of abandoned underground coal mines. The following experts were appointed

to join the task force: Mr Michael Coté (as Chair), Mr Clemens Backhaus, Mr Neil Butler, Mr David Creedy, Mr Özgen Karacan, Mr Ray Pilcher, and Ms Felicia Ruiz.

40. The Group of Experts discussed the development of best practices and recommendations on sustainable management of abandoned coal mines and requested the task force to prepare the documents outlining the scope, organizational structure of the best practice document and timeline for the work.

## **X. Work plan for 2018-2019 (agenda item 8)**

41. The Group of Experts noted with appreciation that the Committee on Sustainable Energy at its twenty-sixth session endorsed the Group's work plan for 2018-2019 and extended the Group's mandate to 31 December 2019.

42. As envisaged in the work plan for 2018-2019, the Group of Experts committed to delivering on the following core activities:

(a) Disseminate and Expand the Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines;

(b) Launch and support the work of the ICE-CMMs;

(c) Collect and disseminate case studies on the application of best practice guidance in specific coal mines in different regions of the world;

(d) Contribute, in cooperation with other Groups of Experts and under the leadership of the Committee on Sustainable Energy, to the work on integrated methane management in the context of sustainable development;

(e) Further engage, in cooperation with other Groups of Experts and under the leadership of the Committee on Sustainable Energy, in the work on transition of the coal industry in the ECE region;

(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. Engage and develop robust professional ties with the recognized expert entities operating in the field of fossil-based energy.

43. The Group of Experts noted with appreciation that USEPA has provided extrabudgetary funds in the order of USD 200,000 for the second phase of the project on Dissemination of Best Practices in the Abatement, Recovery, and Use of Methane (2018-2019).

44. The Group of Experts determined that the following activities envisaged in the work plan for 2018-2019 will be delivered within the framework of the USEPA-funded project:

(a) Two fact-finding missions to the critical coal mining regions (active and abandoned mines);

(b) A report and recommendations from the fact-finding missions;

(c) Best practices (or recommendations) on sustainable management of abandoned coal mines in the ECE region and beyond;

(d) Three demand-driven capacity-building workshops, including on methane from abandoned mines (AMM), at a location close to coal mining areas in the host country;

(e) A standard training module on best practices in abatement, recovery, and use of methane from coal mines;

- (f) Three capacity-building seminars, organized in cooperation with the ICE-CMMs, in Geneva or other centrally-located site in the ECE region or beyond;
- (g) Dissemination of case studies and best practices (including printing);
- (h) Translation of case studies and best practices into additional languages;
- (i) A risk management tool, in the form of a document and associated templates, on gas control and explosion prevention for the purpose of raising awareness of and providing training on methods and practices for identifying and mitigating risk.

45. The Group of Experts confirmed its readiness to take a leading role in the development of the project on the Transformation of the Energy Sector. Following the opening of the ICE-CMM in China in September 2017, the Group of Experts requested the secretariat to invite Shanxi Coking Coal Group to participate in the project.

## **XI. Preparations for the thirteenth session of the Group of Experts (agenda item 9)**

46. The Group of Experts recommended the following topics for the substantive portion of its thirteenth session:

- (a) Progress in the work on best practices (or recommendations) on sustainable management of abandoned coal mines;
- (b) Progress in the work on a case-specific replicable model for transition of a particular legacy industrial site;
- (c) Production of standardized training modules for implementing best practices to assess risks and manage methane at coal mines; and
- (d) Progress in the work under the work plans agreed by ICE-CMMs in Poland and China.

47. The thirteenth session of the Group of Experts will be held on 24-25 September 2018 in Geneva immediately prior to the twenty-seventh session of the Committee on Sustainable Energy.

## **XII. Any other business (agenda item 10)**

48. The Group of Experts noted the need for additional extrabudgetary funds to support its expanded work plan and requested the secretariat in cooperation with the Bureau to work to identify and secure such funding.

## **XIII. Adoption of conclusions and recommendations (agenda item 11)**

*Documentation:* CMM-12-2017-INF.1 - Unofficial room document: Draft Conclusions and Recommendations arising from the Group of Experts on Coal Mine Methane dated 9 October 2017

49. The conclusions and recommendations were adopted and are included under the relevant agenda items highlighted in this report.

**XIV. Adoption of the report and close of the meeting  
(agenda item 12)**

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

---