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#### **Economic Commission for Europe**

Committee on Sustainable Energy

**Group of Experts on Cleaner Electricity Production from Fossil Fuels** 

Twelfth session

Geneva, 26-27 October 2016

#### Report of the Group of Experts on Cleaner Electricity Production from Fossil Fuels

#### I. Introduction

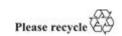
- 1. The twelfth session of the Group of Experts on Cleaner Electricity Production from Fossil Fuels was held from 26–27 October 2016.<sup>1</sup>
- 2. This report summarizes the discussions on the work of the Group of Experts at its twelfth session. All the documents and presentations of the twelfth session are available on the United Nations Economic Commission for Europe (ECE) website.

#### II. Attendance

- 3. The meeting was attended by experts from the following ECE member countries: Czech Republic, Kazakhstan, Poland, Romania, Russian Federation, Switzerland, Tajikistan, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland and United States of America.
- 4. Experts from India participated under Article 11 of the Commission's Terms of Reference.
- 5. The following international organization was represented: the International Energy Agency (IEA).

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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=41973#/

- 6. Representatives of the following non-governmental organizations participated: The Association of Mining Towns in Donbass, Bellona Europe, Czech Union of Employers in the Mining Industry, European Association for Coal and Lignite (EURACOAL), Global Carbon Capture and Storage Institute, IEA Clean Coal Centre, World Coal Association and the Zero Emissions Technology Platform.
- 7. In addition, the private sector was represented by experts from five companies. Academia was also represented by experts from three universities.

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

Documentation: ECE/ENERGY/GE.5/2016/1

- 8. The provisional agenda as contained in the document ECE/ENERGY/GE.5/2016/1 was adopted without amendment.
- 9. The Chair drew attention to the draft set of conclusions and recommendations circulated prior to the meeting, noting that this was the method of working for the Group of Experts adopted at its tenth session and which is in line with the Guidelines on Procedures and Practices for ECE Bodies that were adopted by ECE at its sixty-fifth session in April 2013. He emphasized that the draft conclusions and recommendations are not intended in any way to prejudice the discussions but rather to provide a draft text to facilitate discussions. The Group of Experts agreed to consider and approve conclusions as the agenda items were discussed rather than considering them en bloc at the end of the meeting.

#### IV. Opening Remarks (agenda item 2)

- 10. In his opening remarks, the Director of ECE Sustainable Energy Division highlighted the work of the Division and the emphasised the relevance and importance of the United Nations Sustainable Development Goals (SDGs). He highlighted how energy is important directly or indirectly for all of the SDGs and how they provide guidance for the work across ECE groups of experts on energy related topics.
- 11. In his opening remarks the Chair urged the Group of Experts to study carefully the SDGs since they provide the context for the entire work of the Group. The Chair advised that he participated in the twenty-fifth session of the Committee on Sustainable Energy (Geneva, 28–30 September 2016). On this occasion he informed the Committee that the Group of Experts was delivering on its mandate and was making progress in meeting the goals and deliverables as set out in its work plan for 2016–2017. During the Committee meeting, the Chair participated in a discussion that encouraged the Group of Experts to work more effectively towards attaining the SDGs through collaboration with the other subsidiary bodies of the Committee.

#### V. Election of Officers (agenda item 3)

12. The Group of Experts noted that at its eleventh session a new Bureau was elected to serve for a term of two years. Mr. Aleksandar Puljevic from Serbia was elected at the twelfth session to serve for a term of one year to be line with the existing Bureau membership.

# VI. Workshop: The Sustainability Credentials of Coal and its Role in the UN Sustainable Development Goal 7 (agenda item 4)

- 13. The Group of Experts noted with appreciation the collaboration with the World Coal Association (WCA) in the development of and expert participation in the workshop. The Group of Experts recommended that cooperation with WCA be strengthened.
- 14. The Group of Experts noted the conclusions of the workshop on the importance of fossil fuels in global sustainable energy systems and that improving power plant efficiency and reducing emissions will be essential to meet regional and global environmental goals. Low-carbon solutions such as carbon capture, use and storage and flexible operation of power plants in support of variable renewable generation technology are essential to decarbonize the electricity system whilst still using fossil fuels.
- 15. The Group of Experts recommended that the conclusions and recommendations of the workshop and stakeholder consultations be considered in its ongoing work and the development of its 2018–2019 work plan. The report should be sent to relevant stakeholders that such as the World Bank or other financial institutions.
- 16. The Group of Experts recommended that a one-day workshop and stakeholder consultations be organized as part of the thirteenth session.
- 17. The Chair thanked ECE for the unique platform it offers in allowing such a diverse range of stakeholders and regions to come together for the global good.

#### VII. Activities and priorities of the Committee on Sustainable Energy and any matters for consideration by the Group of Experts on Cleaner Electricity Production from Fossil Fuels (agenda item 5)

- 18. The Director of the Sustainable Energy Division of ECE provided an update on the relevant outcomes of the twenty-fifth session of the Committee on Sustainable Energy, 28–30 September 2016.
- 19. The Director drew attention to the work of the other subsidiary bodies of the Committee that are of most relevance to the Group of Experts. In particular, he outlined the work of one of the four Task Forces of the Group of Experts on Gas which is focusing on development of best policy practices on the role of natural gas in support of renewable energy in the ECE Region. He also noted that carbon capture and storage (CCS) for gas power generation could be an important topic for the Group of Experts on Gas.
- 20. The Director provided an overview of the Seventh International Forum on Energy for Sustainable Development that was held in Baku, Azerbaijan, 18–21 October 2016. Jointly organized by the Government of Azerbaijan, the United Nations Regional Commissions, and several other partners, the Seventh Forum combined a high-level session with plenary sessions, parallel workshops and site visits over four days.
- 21. The Director informed the Group of Experts on the Energy Ministerial that will be held at the opening of the EXPO-2017 "Future Energy" and under the auspices of the Eighth International Forum on Sustainable Development in Astana, Kazakhstan on 11 June 2017. The Ministerial is being hosted by Kazakhstan supported by the UN Regional Commissions, International Renewable Energy Agency (IRENA) and Sustainable Energy for All (SE4All). There will be a planned outcome document called the "Astana

Action Agenda" that is being reviewed through a consultation process. The concept note and draft outcome document of the Eighth International Forum on Energy for Sustainable Development and Energy Ministerial has the document symbol: ECE/ENERGY/2016/9. A Ministerial outcome document is currently available for consultation. The Director invited the Group of Experts to comment on the outcome document and to participate in the Eighth International Forum.

22. The Director lastly highlighted the ECE project Pathways to Sustainable Energy. The key question to be addressed by this project is How can the ECE Region attain Sustainable Energy in the Future? Three outputs were described: modelling of sustainable energy pathways, conceptualization of an early-warning system, and a policy dialogue. The project has just started and will be completed in 2019.

### VIII. Report on implementation of the Work Plan for 2016–2017 (agenda item 6)

- 23. The Chair provided a brief overview of the work of the four Task Forces<sup>2</sup> that are part of the Group of Experts.
- 25. The Group of Experts noted that it is making progress on delivering on the concrete activities of the Task Forces, as well as its mandate and work plan for 2016–2017.
- 26. The Group of Experts further noted that the work plan is ambitious and will require significant effort over the next year to complete. The Group of Experts will report on its achievements and key milestones at the twenty-sixth session of the Committee on Sustainable Energy.

#### IX. Report on the work of the Task Forces (agenda item 7)

Documentation:

CEP-12/2016/INF.2 – Unofficial room document: The role of thermal power plants in select electricity markets

CEP-12/2016/INF.3 – Unofficial room document: Opportunities for coupling wind and coal based generation in the electricity sector

CEP-12/2016/INF.4 – Unofficial room document: Workshop "Critical Element of the Green Bridge Initiative: Advanced Fossil Fuel Technologies", 9–10 March 2016, Astana, Kazakhstan (report)

CEP-12/2016/INF.5 – Unofficial room document: CCS in mid-2016: a high-level overview

CEP-12/2016/INF.6 – Unofficial room document: Policy Parity for CCS/CCUS

<sup>&</sup>lt;sup>2</sup> (a) Task Force to assess a future to assess a future role for thermal power plants in sustainable electricity system

<sup>(</sup>b) Task Force on increasing flexibility in coal power generation

<sup>(</sup>c) Task Force on decreasing emissions and increasing efficiency from new and existing coal power generation using best practices across the ECE region and globally

<sup>(</sup>d) Task Force to assess means for development and deployment of carbon capture, use and storage (CCUS) technology and know-how

### CEP-12/2016/INF.7 – Unofficial room document: CCS/CCUS Academic Curriculum

- 27. A detailed overview of the work and outcomes of the four Task Forces was provided.
- 28. The Group of Experts noted that CEP-11/2015/INF.4 Unofficial room document: Baseline Efficiency Analysis of Fossil Power Plants dated 9 October 2015 had been reviewed and presented at the eleventh session. The Group of Experts recommended that this report be issued as an official ECE publication as soon as possible and made available in all ECE languages.
- 29. The Group of Experts expressed its appreciation for the work undertaken by the four Task Forces.
- 30. The Group of Experts agreed to hold a workshop on decreasing emissions and increasing efficiency from new and existing coal power generation, carbon capture and storage, and/or other relevant topics within the Group's mandated work at the Eighth International Forum on Energy for Sustainable Development, Astana, 12–14 June 2017 under the auspices of the EXPO-2017 "Future Energy".

### X. Mandate, Terms of Reference and work plan for 2018–2019 (agenda item 8)

- 31. The Group of Experts reviewed and took note of the expiry of its existing mandate, terms of reference and work plan at the end of 2017. The Group of Experts recommended that its mandate be renewed for a period of two years and tasked the Bureau to draft a revised terms of reference and work plan for 2018–2019. The Group of Experts noted that the draft documents should be submitted to the Committee on Sustainable Energy at its twenty-sixth session in 2017.
- 32. The Group of Experts agreed to work by written procedure during inter-sessional periods for topics that are time sensitive.
- 33. In such a written procedure, approval of documents, including work plans and documents that require endorsement by the Committee on Sustainable Energy, should conform to the following procedure:
- (a) A "task force", supported by the secretariat, should prepare a draft document. During the preparation, the Bureau should be involved in periodic review and consultation;
- (b) The draft will be subject to a minimum 21-day comment period by the Group of Experts. Not submitting comments during this period is considered as tacit approval. Comments submitted to the secretariat should be considered for possible inclusion and the draft modified as appropriate. Reasons for not acting on specific comments should be documented;
- (c) Once comments have been considered, the Bureau should review the revised draft for approval. Any significant changes in the revised draft should be highlighted to the Group of Experts for consideration as per step (b);
- (d) The final draft should be submitted to the Committee on Sustainable Energy for endorsement.
- 34. Based on the workshop and Task Force discussions during the twelfth session, the Group of Experts highlighted a number of topics that could be included in future work plans. These included:

- (a) Continue the existing Task Forces and determine whether some or all of the suggested items could be incorporated or if they require establishment of an additional task force(s);
- (b) Strategic messaging to the energy and climate stakeholder community on the role of and pathways for fossil fuels in sustainable energy systems;
- (c) Opportunities in Combined Heat and Power, gasification and coal to develop other technologies or products (such as liquids or chemicals);
- (d) Small scale and/or modular carbon capture and storage including a focus on infrastructure and storage aspects;
  - (e) Economic comparisons of various electricity generation options;
- (f) Effective use of fossil fuels in modern energy systems with short- and medium-term considerations, and
  - (g) Working cooperatively with other ECE Groups of Experts, such as:
  - (i) The role of fossil fuels to support renewable energy deployments with the Group of Experts on Renewable Energy;
  - (ii) The role of fossil fuels in electricity generation including natural gas and liquefied natural gas (LNG) with the Group of Experts on Gas, and
  - (iii) Innovation in the extraction and use of coal mine methane for electricity production and other uses with the Group of Experts on Coal Mine Methane.
- 35. The Group of Experts also discussed possibly changing its name to something more broadly focussed on electricity systems. It was noted that justification for such a change would need to be prepared by the Group for consideration by the Committee on Sustainable Energy.

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

- 36. The Group of Experts recommended that the topical focus of its thirteenth session be determined during the planning process.
- 37. The thirteenth session of the Group of Experts will be held on 26–27 October 2017 in Geneva or another location if appropriate.

#### XII. Other business (agenda item 10)

- 38. 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 further 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 in the three official ECE languages (English, French, Russian) to service the Group of Experts' meetings.
- 39. No other issues were raised.

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

Documentation: CEP-12-2016-INF.1 - Unofficial room document: Draft Conclusions

and Recommendations arising from the Group of Experts on Cleaner Electricity Production from Fossil Fuels dated 14 October 2015

38. 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)

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

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