



Group of Experts on Coal Mine Methane

Unofficial Online Session

22 July 2020





Mr. Michal Drabik, Secretary Group of Experts on Coal Mine Methane

- Documents on the web at <http://www.unece.org/index.php?id=54684>.
- Conclusions and recommendations were shared with you before the session and will be discussed at the end of the meeting.
- Meeting times:
 - Today, Wednesday, **22 July 16:00-18:00**
 - Tomorrow, Thursday, **23 July 13:30-15:00**
- No Interpretation (meetings are held **in English only**)
- Please speak slowly and clearly
- Meeting is **recorded**








While on Session

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- Once you join the meeting and move your mouse on the screen you will see the following menu:



- In order to avoid technical difficulties and other disruption please follow the following rules:
 - Please **mute yourself** by clicking  You are muted if the icon of the microphone is crossed.
 - Please **keep your camera off** by clicking  You may turn on your camera once you speak). Your camera is off if the icon of the camera is crossed;
 - Should you wish to take the floor please **raise your hand** by clicking  I will see that you are signaling your wish, and I will give you the floor at the convenient moment;
 - If you wish to join to the discussion, but do not wish to speak please click  to use the chat and send a message (which will be visible to all) that I will read aloud on your behalf at the convenient moment.
 - If you are a speaker and you wish to share your presentation please click  and select the file that you would like to share with others. You may also share your desktop, in such case the others will see the same that you can see on your screen.



Item 1: Adoption of Agenda



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Documentation: INF.2 ONLINE Agenda



Item 1: Adoption of Agenda

- Item 1. Adoption of the agenda.
- Item 2. Election of officers.
- Item 3. Opening remarks.
- Item 4. Overview of delivered and upcoming events.
- Item 5. Future of the Group of Experts on Coal Mine Methane.
- Item 6. Tenth joint meeting of the United Nations Economic Commission for Europe Group of Experts on Coal Mine Methane and the Global Methane Initiative Coal Subcommittee
- Item 7. Preparations for the fifteenth and the sixteenth sessions of the Group of Experts.
- Item 8. Any other business.
- Item 9. Approval of draft conclusions and recommendations.
- Item 10. Approval of a draft report and close of the meeting.



Item 2: Election of officers



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Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

Nominations by States

Vice-Chairs:

- Ms. Volha Roshchanka (United States of America)



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Item 3: Opening Remarks

Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane



Item 4: Overview of delivered and upcoming events



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- Summary of the Workshop on AMM delivered at the School of Underground Mining, Cracow, Poland, 24-26 February 2020
- <https://www.unece.org/index.php?id=53280>



Item 5: Future of the Group (1)



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- Brief by the Secretary of the Committee on Sustainable Energy on the various positions of member States to dealing with fossil fuels and their role in the future energy mix

Ms. Stefanie Held, Secretary, Committee on Sustainable Energy

- UNECE Carbon Neutrality project and the Group's role in it

Ms. Stefanie Held, Secretary, Committee on Sustainable Energy

- Pathways to Sustainable Energy Project Policy Recommendations

Ms. Stefanie Held, Secretary, Committee on Sustainable Energy

- International Year/Decade of Methane

Mr. Michal Drabik, Secretary, Group of Experts on CMM

Mr. Raymond Pilcher, Chair, Group of Experts on CMM



Item 5: Future of the Group



ENERGY

Ms. Stefanie Held, Secretary Committee on Sustainable Energy

- Brief by the Secretary of the Committee on Sustainable Energy on the various positions of member States to dealing with fossil fuels and their role in the future energy mix
- UNECE Carbon Neutrality project and the Group's role in it
- Pathways to Sustainable Energy Project Policy Recommendations



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Opportunities for the Group of Experts

- Pathways to Sustainable Energy and Carbon Neutrality projects
 - Outreach and communication
 - Joint fund raising
- Committee on Sustainable Energy
 - Strategic review
 - Nexus and high impact activities – joint projects with other expert groups
 - Input into the Economic Commission for Europe

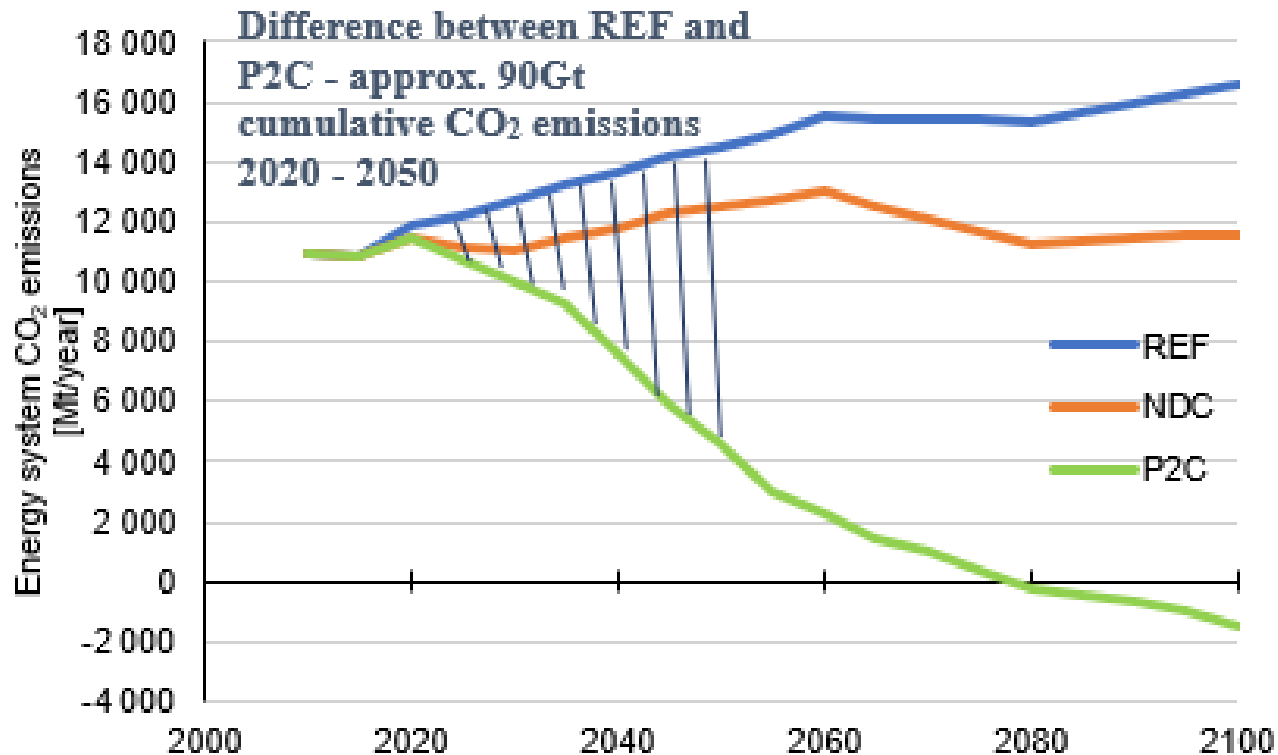


Pathways to Sustainable Energy - How Big is the Gap?



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- Current climate pledges do not meet 2°C.
- UNECE countries must cut/capture at least 90Gt of CO₂ or CO₂_{eq} (e.g. CH₄) by 2050 to meet 2°C.
- Achieving carbon neutrality will require deployment of CCS / CCUS and other compensating technologies and measures, such as increasing the absorptive capacity of forests that would allow clean fossil fuels to remain energy mixes.



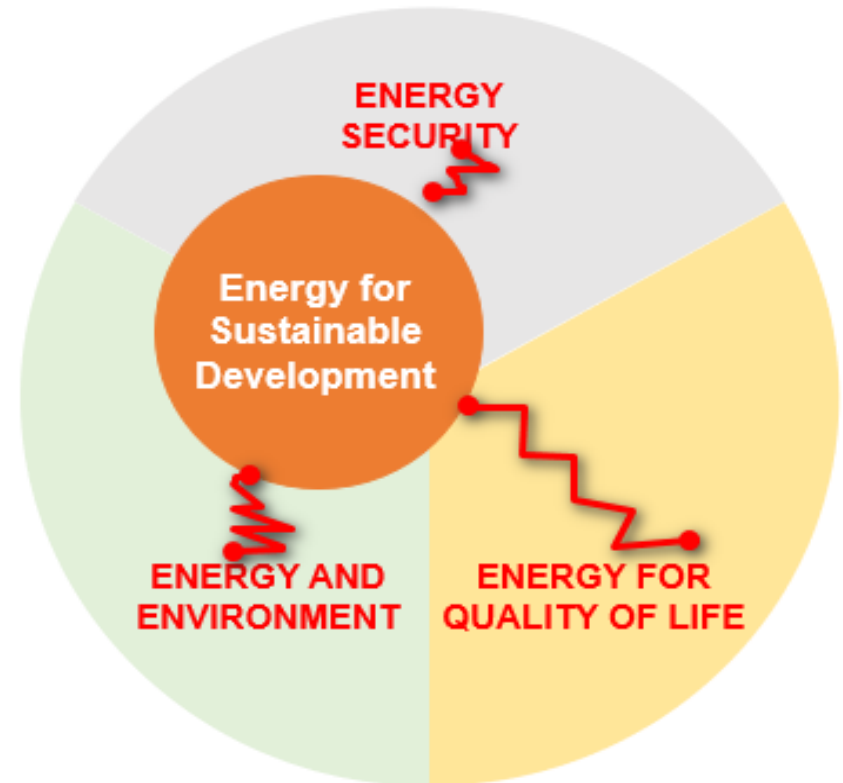


Sustainable Energy Framework Out of Balance



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- Various interpretations of sustainable energy
- Represents a complex social, political, economic and technological challenge.
- There are tensions between various options.
- Need to weigh the efficacy of alternative pathways.





Carbon Neutrality a 1st Milestone on Path to Sustainable Energy

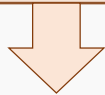
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Solutions to Attain Sustainable Energy

Immediate Action

Stop Growing the Problem & Reverse GHG Emissions

- Improve **system efficiency**.
- Stop excluding options. **All technologies play a role**.
- **Invest** in low and negative carbon technologies.
- **Address methane emissions**.



Target: Attaining Carbon Neutrality

Key question: How can countries in the UNECE region attain carbon neutrality?

Mid-term Action

Implement Credible Sustainability Policies

- Pay attention to **Just Transition**
- **Invest in low income countries** to accelerate energy transition.
- **Accelerate** the **interplay** between **renewable energy** and **decarbonised** gases.

Long-term Action

Transform the Energy System

- Promote **sustainable resource management**.
- **Manage resources** for **battery** energy storage solutions.
- Embrace **water-energy-food nexus** solutions.



Carbon Neutrality Project – Attaining carbon neutrality in the UNECE region





What are the elements of the carbon neutrality framework?

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Attaining carbon neutrality in the UNECE region by 2050

Targets for power sector and energy intensive industries to cut carbon emissions

Energy Supply	Energy Infrastructure	Energy Demand	Carbon sinks
<p>Policy levers:</p> <ul style="list-style-type: none"> • Available resources • New technology deployment • Energy self-sufficiency • Diversity of energy supply • Free trade of energy resources • Availability of capital • Standardization • ... 	<p>Policy levers:</p> <ul style="list-style-type: none"> • Interconnecting infrastructure (pipelines, LNG terminals, HV lines etc.) • State of existing energy infrastructure; 3rd party access • New and planned energy infrastructure projects • Availability of capital • Standardization • ... 	<p>Policy levers:</p> <ul style="list-style-type: none"> • Energy access • Energy affordability • Monetizing emissions & incentivizing emissions cuts • Efficiency improvements • Post-Covid-19 behavioral changes • ... 	<p>Policy levers:</p> <ul style="list-style-type: none"> • reforestation • Use of land • Oceans • Sustainable use of biomass • ...

Scenarios to attain carbon neutrality based on different technology options and across all UNECE subregions

Technologies			
renewable energy	nuclear energy (incl. SMR, nuclear fusion)	fossil fuel (coal, gas, oil)	HELE
CCS/ CCUS	hydrogen (from RE and fossil fuels w CCS)	energy storage (batteries, power-to-X, hydro)	
biomass w CCS	direct air capture		



Mirroring Carbon Neutrality Framework with Pathways to Sustainable Energy Framework

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Target : Attain carbon neutrality in the UNECE region by 2050

Elements of the Carbon Neutrality Framework

Energy Supply

Energy Infrastructure

Energy Demand

Carbon sinks

Pillars of the Pathways to Sustainable Energy Framework

Energy and Security

Quality for Life

Energy and Environment



Preparation for the modelling exercise – verifying data and technology assumptions

Verifying assumptions for different technology options across all UNECE subregions

MODEL

renewable energy – solar, wind, hydro, geothermal

nuclear energy – SMR, nuclear fusion

fossil fuels (coal, gas, oil)

advanced fossil fuels (coal, gas and oil with CCS and CCUS)

biomass with CCS, biochar

direct air capture

energy storage

hydrogen

energy efficiency

other

Cost curves and lead times

Technology readiness level (TRL)

Market readiness level / societal readiness level

Environmental impact assessment



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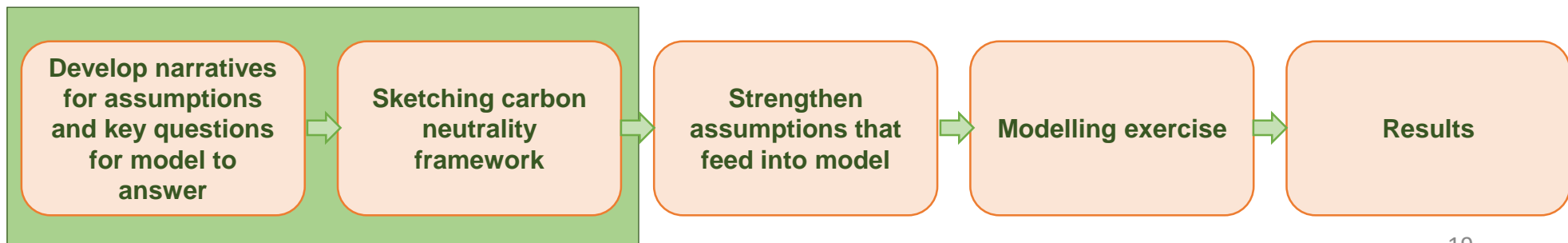


Deliverables and Next Steps



- **Defining Carbon Neutrality Framework**
- **Develop technology briefs:**
 - **Role of CCS and CCUS in attaining carbon neutrality**
 - **Role of innovative technologies (e.g. hydrogen, SMR nuclear) in attaining carbon neutrality and decarbonizing energy intensive industries**

Task Force Mid-term Objectives :





- Pathways to Sustainable Energy and Carbon Neutrality
 - Outreach and communication – use the data
 - Joint fund raising
- Committee on Sustainable Energy
 - Strategic review
 - Nexus and high impact activities – joint projects with other expert groups – Group of Experts on Cleaner Electricity Systems
 - Just transition
 - Accounting for coal mine methane reductions in coal fired power generation
 - Guiding principles for financing clean energy projects
 - Input into the Economic Commission for Europe
 - Concrete actions on methane

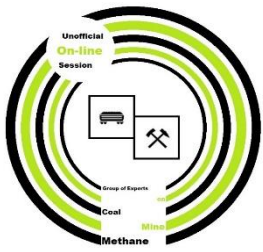


Item 5: Future of the Group



ENERGY

- Brief by the Secretary of the Committee on Sustainable Energy on the various positions of member States to dealing with fossil fuels and their role in the future energy mix
- UNECE Carbon Neutrality project and the Group's role in it
- Pathways to Sustainable Energy Project Policy Recommendations
- *Debate*
 - Mr. Raymond Pilcher**, Chair, Group of Experts on CMM
 - Ms. Stefanie Held**, Secretary, Committee on Sustainable Energy
 - All Participants**



International Decade for Methane Management (1)

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Mr. Michal Drabik, Secretary Group of Experts on Coal Mine Methane

Methane: significant GHG and precursor to ozone and air pollution

- Comes from energy, agriculture, and wastes
- Proper management: substantial near-term climate and economic benefits

Solutions exist

- UNECE working with GMI, CCAC, and others to get a GA declaration:
International Decade for Methane Management
- Aiming for Autumn 2021 for declaration. Need country support.



International Decade for Methane Management (2)



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Intended Outcomes of Decade

- Increased awareness across all sectors of the challenge and the solutions
- Tightened Commitments/Protocol/Convention
- Measurable Results: Reduced CH₄ concentrations in atmosphere (anthropogenic, all sources)
 - Detailed best practice guidance for all sectors
 - Dissemination, demonstration, and deployment
 - Training, regulation, and outreach
- Enduring Programmes and Structures (e.g., Centres of Excellence)

Because these outcomes cannot be achieved in a single year, Designating an International Decade is recommended.



International Decade for Methane Management (3)



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Possible Activities (1)

- Bi-Annual Global Methane Forum
- CCAC's global methane assessment and interactive tool available in 2021
- Workshops/Seminars covering all emitting sectors (energy, agriculture, waste)
- Coal Mine Methane Conference in China
- UNECE's Committee on Sustainable Development: sessions dedicated to methane
- Int'l Forum on Energy for Sustainable Development featuring a methane track
- Webinars on methane
- Development of case studies – application of concrete actions



International Decade for Methane Management (4)



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Possible Activities (2)

- Sponsored research
- Scientific meetings with WMO, CCAC, environmental groups (e.g., EDF), etc.
- Through UNEP's GMA, get MS to add methane emission reductions to NDCs
- Develop BPG, standards, protocol or convention on methane
- In collaboration with WEF, hold methane meetings
- European Union conference on methane in collaboration with DG ENER
- UN Conference on Methane (UN Headquarters, New York)
- Meetings on Methane in coordination with global climate meetings (e.g., COP)
- Dissemination/deployment activities in all sectors (extend ICE's)



Item 5: Future of the Group (2)



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- Rules of Procedure for the Group of Experts
 - Mr. Raymond Pilcher**, Chair, Group of Experts on CMM
 - Mr. Michal Drabik**, Secretary, Group of Experts on CMM
- Discussion on a potential cooperation with the European Commission on methane related issues
 - Mr. Raymond Pilcher**, Chair, Group of Experts on CMM
 - Mr. Michal Drabik**, Secretary, Group of Experts on CMM
- Discussion on the functioning of the Group
 - Mr. Raymond Pilcher**, Chair, Group of Experts on CMM
 - Mr. Michal Drabik**, Secretary, Group of Experts on CMM



Item 5: Future of the Group



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- **Rules of Procedure of the Group of Experts**

Debate

All Participants



Item 5: Future of the Group

ENERGY



Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- **Discussion on a potential cooperation with the European Commission on methane related issues**

Debate

All Participants



Item 5: Future of the Group

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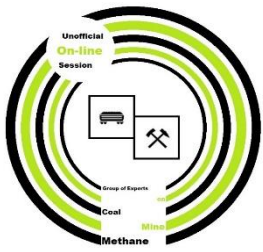
Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- **Functioning of the Group**

Debate

All Participants



Item 7: Preparations for 15th and 16th sessions of the Group of Experts



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- 15th session: week of 21 September 2020, Geneva, Switzerland;
- 16th session: 22-23 March 2021, Geneva, Switzerland.



Item 8: Any other business



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Mr. Michal Drabik, Secretary
Group of Experts on Coal Mine Methane

- ECOSOC Decision endorsing *The Best Practice Guidance for Effective Methane Recovery and Use from Abandoned Coal Mines*



Item 8: Any other business

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- Bearing in mind how potent pollutant methane is, that its emissions do not cease with the closure of a mine, and the fact that a large number of mines worldwide has recently been closed and many further are set to be closed in the near future, at its ... plenary meeting, on, the Economic and Social Council, taking note of its decision 2011/222, as well as of decision of the Economic Commission for Europe, and welcoming the endorsement by the Commission of the Best Practice Guidance for Effective Methane Recovery and Use from Abandoned Coal Mines, decided to invite States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the Best Practice Guidance in countries worldwide.*



Item 9: Approval of conclusions and recommendations



ENERGY

Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Documentation:

- INF.1 ON-LINE CnR
- CMM_15_2020_INF.1



Item 10: Approval of the report



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Mr. Raymond C. Pilcher, Chair
Group of Experts on Coal Mine Methane

Documentation: ECE_ENERGY_GE4_2_2020



Thank you!
See you Tomorrow

Sustainable Energy Division

UNECE

Date 22 | 07 | 2020

