International Workshop
on
Best Practices in Coal Mine Methane Monitoring, Capture, and Use

Główny Instytut Górnictwa – Państwowy Instytut Badawczy
Plac Gwarków 1
40-166 Katowice

5-6 November 2024

Concept Note

Methane is a potent greenhouse gas (GHG). The 100-year global warming potential of methane is 25 times higher than that of carbon dioxide (CO_2). Measured over a 20-year period, that number goes up to 84, and on an instantaneous basis the figure reaches 120. Methane global atmospheric concentrations have grown nearly 150% from pre-industrial levels and are currently responsible for about a third of the planetary warming.

About 60% of global methane emissions are a result of human activities such as extraction and use of fossil fuels, agriculture, landfills, and wastewater treatment. Fossil fuel production, distribution and use are estimated to emit 110 million tons of methane annually, which accounts for approx. 30% of anthropogenic methane emissions.

Coal and methane are co-located resources in many parts of the world. As a result, in those places coal mining related activities, such as extraction, crushing, distribution, and the like lead to the release of a substantial amount of methane trapped in coal. Methane can be emitted from active underground and surface mines, as well as from abandoned mines and undeveloped coal seams. Key coal producing nations emit over 52.5 billion cubic meters of methane per annum. Much of this amount is emitted in low concentrations mixed with air known as Ventilation Air Methane or VAM.

Unlike other GHGs, methane can be converted to usable energy. Capturing and using methane offers opportunities to generate clean energy and mitigate global climate change. In addition, reducing methane emissions offers also significant health benefits by improving local air quality. Technologies for capturing and using methane are readily available in every sector, including coal mining.

In that context, the UNECE Group of Experts on Coal Mine Methane (CMM) and Just Transition together with the International Centres of Excellence on CMM operating under its auspices and with its international Partners such as the Clean Air Task Force have been working for decades to support States and the coal industry in effective coal mine methane monitoring, capture, and use.

The Group is a platform for a dialogue between the Governments, the industry, academia, and the civil society. Its work rests on 4 pillars, focused on: (1) environment, (2) economy, (3) working safety, and (4) social justice. In its work the Group focuses on the whole coal value chain and the whole coal life cycle. It helps the Governments, as well as other stakeholders to address such matters as: (1) mining hazards, (2) coal mine methane (CMM) and abandoned mine methane (AMM) emissions monitoring reporting, verification (MRV) and mitigation (capture, destruction, and use), and (3) transition of the coal sector (coal mine closure, post-coal mining land reclamation and repurposing, and just transition).

The workshop in Katowice is directed to policy makers and practitioners working in the fields of methane management and coal mining. It will provide a platform for exchanging experience among international stakeholders and thus give an opportunity for finding best solutions to the problems and challenges that they encounter.

Timetable

1st day (Tuesday, 5 November) (9:00-16:30)

9:00-9:30 Opening

9:00-9:20 Welcome (UNECE representatives, ICE Poland representative, GIG representative)

9:20-9:30 Introduction to the workshop (Ms. Felicia Ruiz, CATF)

9:30-11:30 Status of CMM in UN Member States (statistics, problems, projects, and future plans) (Part I)

9:30-9:45 Bosnia and Herzegovina country report (Ms. Sanja Kapetina, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina)

9:45-10:00 Serbia country report (Mr. Radoslav Vukas)

10:00-10:15 Czech Republic country report (Mr. Jan Burda, VUHU)

10:15-10:40 Ukraine country report (Mr. Vadym Miroshnychenko, DTEK) (Online)

10:40-10:55 U.S. country report (Mr. Jim Marshall, Raven Ridge Resources)

10:55-11:10 France country report (Mr. Romain Chenillot, Francaise de l'Energie)

11:10-11:30 Audience Questions and Discussion

11:30-11:50 Coffee Break

11:50-13:00 Status of CMM in UN Member States (statistics, problems, projects, and future plans) (Part II)

11:50-12:05 Poland country report (ICE Poland representative)

12:05-12:15 Comment to the situation in Poland by the Ministry of Industry (Ms. Agata Tereba, Ministry of Industry)

12:15-12:40 China report: Best practices on CMM utilization and emissions reductions (Mr. Shen Jinming, ICE-CMM China)

12:40-13:00 Audience Questions and Discussion

13:00-14:30 Lunch Break

14:30-16:25 VAM Innovations for Abatement and Energy Production

14:30-14:50 JSW's view on VAM projects; potential, needs, and concerns (Mr. Artur Badylak, JSW)

14:50-15:10 Biothermica's VAM projects (Mr. Dominique Kay, Biothermica)

15:10-15:30 Dürr's VAM projects (Mr. Christian Eichhorn, Dürr)

15:30-15:55 VAM projects introduction in China (Mr. Yang Gao, ICE-CMM China)

15:55-16:25 Q&As and Moderated Discussion with Speakers and Audience (Moderator: Ms. Felicia Ruiz, CATF)

16:25-16:30 Closing Remarks

16:25-16:30 Concluding Remarks and Day 2 Preview (UNECE representative, CATF representative)

Conclusion of Day 1

2nd day (Wednesday, 6 November) (9:00-18:00)

9:00-9:05 Opening

9:00-9:05 Opening Remarks (UNECE representative)

9:05-10:55 Latest Advances in Methane Measurement

9:05-9:25 Latest developments in on the ground methane monitoring (Ms. Justyna Swolkien, AGH)

9:25-9:45 Latest developments in methane satellite monitoring (Mr. Tim Burgess, GHGSat)

9:45-10:05 Latest developments in methane satellite monitoring (Mr. Quentin Peyle, Kayrros)

10:05-10:25 Recent work and international findings of UNEP's International Methane Emissions Observatory (Mr. Robert Field, IMEO)

10:25-11:00 Audience Questions and Discussion

11:00-11:20 Coffee Break

11:20-13:00 CMM Emissions Capture and Use Policy in Poland; Implementation of EU regulations

11:20-11:40 Overview of EU Methane Regulation (Ms. Tamara Lagurashvili, CATF)

11:40-12:00 Implementation of the provisions of the EU Methane Regulation related to operating mines (Mr. Artur Badylak, JSW)

12:00-12:20 Implementation of the provisions of the EU Methane Regulation related to closed mines (Mr. Janusz Jureczka, PIG)

12:20-13:00 Moderated Discussion with Speakers and Audience (Moderator: Mr. Raymond Pilcher, GoE CMMJT)

13:00-14:30 Lunch Break

14:30-16:40 Coal Mine Closure and Methane Abatement – Current Practices and Future Plans

14:30-14:50 AMM project case introduction (Mr. Baoqiang Jia, ICE-CMM China)

14:50-15:10 Examples of other uses of coal and coal mining in the U.S. (Mr. Raymond Pilcher, GoE CMMJT)

15:10-15:30 Mine closure in Germany (Ms. Alina Mroz)

15:30-15:50 World Bank's perspective/programs on mine closure and repurposing (Ms. Magdalena Chawula, World Bank)

15:50-16:10 Mine closure and repurposing projects in Poland (Ms. Alicja Krzemien, GIG)

16:10-16:40 Audience Questions and Discussion

16:40-16:55 Closing

16:40-16:55 Workshop Closing Remarks (UNECE representative, CATF representative)

Conclusion of Day 2