

GMI Coal Mines Subcommittee 2022 Action Plan

FINAL Adopted by Subcommittee: 10 May 2022

Introduction

The Global Methane Initiative (GMI) Terms of Reference (TOR)¹ states that each Subcommittee should develop and execute an Action Plan that aligns with the TOR and current needs of the Subcommittee and Project Network members, as well as GMI's overarching goals of advancing project implementation, facilitating investment, and creating appropriate policy frameworks that support methane abatement, recovery, and use.

The Coal Mines Subcommittee Action Plan provides a blueprint for the important activities and priorities of the Coal Mines Subcommittee to advance coal mine methane (CMM) projects. The Action Plan recognizes and takes into account the work and program accomplishments to date, while also acknowledging the dynamic and rapidly changing environment affecting the global energy sector, particularly the coal industry, as well as the global carbon and environmental attributes markets.

In 2006, the Coal Mines Subcommittee developed its first Action Plan (the '2006 Action Plan'). In 2014, the Coal Mines Subcommittee drafted and adopted a Statement of Purpose (further refined in 2021), which clarified the focus of its work, as well as the roles and responsibilities of Subcommittee and Project Network members. Recognizing the evolution of the Subcommittee's work, subsequent Action Plans were developed in 2015² and 2018³. Collectively, the 2006, 2015, and 2018 Action Plans and the Statement of Purpose were instrumental in providing a framework for activities of the Coal Mines Subcommittee. Since its inception, the focus of Subcommittee activities has changed with the needs of Partner Countries and Project Network members, ranging from project identification and supporting CMM information clearinghouses to policy development and dissemination of best practices in managing CMM. More recently, countries have identified the need to integrate methane mitigation activities into climate policies and objectives, such as Nationally Determined Contributions or Global Methane Pledges, as well as to better account for and report methane emissions from coal mining, including more accurate and thorough monitoring, reporting, and verification programs. This is especially true with a greater recognition of methane's contributions to climate change in recent years, the coal industry's role as a major source of methane, and the potential for mitigation in the coal sector. In 2021, the GMI TOR was modified and extended for an additional 10 years. Updating the Coal Mines Subcommittee Action Plan was discussed at the 23 March 2022 Coal Mines Subcommittee meeting. To better align with the new GMI TOR and more accurately reflect the Coal Mines Subcommittee's evolving needs, this Action Plan (i.e., the '2022 Action Plan') was developed. The draft 2022 Action Plan was reviewed and adopted following the 2022 Coal Mines Subcommittee meeting. Like the 2006, 2015, 2018 Action Plans, the 2022 Action Plan will guide the future work and activities of the Coal Mines Subcommittee.

¹ See: <u>https://www.globalmethane.org/terms/</u>

² See: <u>https://www.globalmethane.org/documents/Coal_Subcommittee_Action_Plan_Oct2015.pdf</u>

³ See: <u>https://www.globalmethane.org/documents/Coal_Subcommittee_Action_Plan_September2018.pdf</u>

Coal Mines Subcommittee Overview

GMI's Coal Mines Subcommittee works to reduce the impacts of climate change by providing international leadership to mitigate global methane emissions through the abatement, recovery, and use of methane from coal mines.

The GMI Coal Mines Subcommittee focuses on supporting the identification and deployment of practical and cost-effective methane mitigation technologies and practices to reduce or eliminate emissions from coal mines. This is achieved by encouraging collaboration between Partner Countries, Subcommittee members, and Project Network members to build capacity, develop strategies and markets, and remove technical and non-technical barriers to methane mitigation project development. Ultimately, such collaboration can increase environmental quality, improve operational efficiency, and strengthen the economy via the additional methane brought to market.

Since 2004, the Coal Mines Subcommittee has had numerous achievements, as outlined below.

Coal Subcommittee Key Activities (2004 – 2022)

- Hosted meetings and workshops in nearly 16 countries;
- Collaborated to complete country-specific Action Plans and Country Profiles;
- Showcased countless project opportunities and success stories;
- Highlighted technological developments at GMI Expos and Partnership-wide events;
- Produced and updated widely used CMM country profiles for 37 countries;
- Co-published several reports with the United Nations Economic Commission for Europe (UNECE):
 - o <u>Best Practice Guidance on Effective Methane Drainage and Use in Coal Mines</u>
 - <u>Best Practice Guidance for Effective Methane Recovery and Use from</u> <u>Abandoned Coal Mines</u>
 - <u>Best Practice Guidance for Effective Management of Coal Mine Methane at</u> <u>National Level: Monitoring, Reporting, Verification and Mitigation</u>
- Developed technical resources and tools;
- Conducted over 50 feasibility and pre-feasibility studies in 11 Partner countries and provided technical support for implementation of emission reduction projects;
- Developed engaging self-guided web-based training courses on the basics of CMM and on conducting methane recovery and use project pre-feasibility studies at active and abandoned coal mines.

For a full list of Coal Mines Subcommittee activities and accomplishments, visit the <u>GMI website</u>.

Objectives of the 2022 Action Plan

Cooperative activities and collaboration are key components of the 2022 Action Plan. The Coal Mines Subcommittee will execute the plan in a manner that promotes collaboration among Partner Countries, Subcommittee members, Project Network members, and other organizations that share common goals, including strategic alliance partners like the UNECE. With such collaboration in mind, the Coal Mines Subcommittee's 2022 Action Plan identifies five main types of activities to undertake:

- (1) Develop overview materials,
- (2) Identify and address key barriers to project development,
- (3) Identify country-specific needs and opportunities,
- (4) Build strategic alliances and long-term relationships that complement the work of the Coal Mines Subcommittee Objectives,
- (5) Improve approaches to account for and mitigate methane emissions from coal mining.

Each of these five elements is discussed in more detail below.

Each element of this Action Plan incorporates cooperative activities to increase methane recovery and use in the sector as well as outreach to engage Project Network members. Through the Coal Mines Subcommittee's regular meetings and through contacts among Partner Countries and private sector members of the Project Network, the Subcommittee will continue to pursue activities on a bilateral or multilateral basis that meet the identified needs and overcome key barriers to project development.

Encouraging private sector organizations to join the Project Network will continue to be a vital component of the Subcommittee's activities in each of the specific areas identified above. Each country should work to establish open lines of communication with the relevant private sector parties to ensure active participation in the ongoing activities of the Partnership. In addition to private actors, non-governmental agencies in GMI countries, regional and multilateral agencies, and international financial institutions have also played critical roles in supporting the Subcommittee's plan.

To further this objective, the GMI Secretariat developed a comprehensive Coal Mines Subcommittee website (<u>https://www.globalmethane.org/coal/index.aspx</u>) with portals to key websites and tools to make information accessible to all.

Activity	Approach	Indicators for Evaluation	Responsible Party
Prepare value- added informational work products	 Regular updates to the GMI CMM Country Profiles, the GMI CMM Technology Database, and the International CMM Projects List (all available on the GMI website) Regular updates of other tools and resources on the GMI website and Coal Mines Subcommittee webpage 	 Number of resources and tools developed or updated Website "hits" on GMI Coal Mines Subcommittee documents 	 Coal Mines Subcommittee members

Objective One: Develop Overview Materials

Activity	Approach	Indicators for Evaluation	Responsible Party
Identify legal, regulatory, technical and market barriers to project development	 Solicit input from Subcommittee members and Project Network members Develop an overview of VAM project challenges, opportunities, and costs 	 List and prioritize barriers New resources on VAM 	 GMI Coal Mines Subcommittee Project Network
Build technical capacity to implement CMM projects	 Get updated information on technical capacity needs within country or region Hold seminars, workshops, and/or extended training to facilitate technology transfer on best practices, evolving from a more targeted approach Host delegations for CMM study tours Support information Centres or Clearinghouses Participate in and sponsor delegates from Subcommittee members to engage in quality technical symposia Continue cooperation with Coalbed Methane Clearinghouses and similar organizations in China, India, Mongolia, and other countries Continue cooperation with the China and Polish International Centres of Excellence 	 Number of training sessions, seminars, and workshops directly supported by GMI Number of study tours and number of participants 	• GMI Coal Mines Subcommittee
Overcome lack of demonstrated feasibility for CMM project development	 Prepare pre-feasibility studies in GMI countries Prepare full feasibility studies in GMI countries Conduct training on preparation and delivery of pre-feasibility and full feasibility studies, using interactive online trainings 	 Pre-feasibility and feasibility studies delivered Conduct at least one pre-feasibility/ feasibility training per year 	GMI Coal Mines Subcommittee

Objective Two: Identify and Address Key Barriers to Project Development

Activity	Approach	Indicators for Evaluation	Responsible Party
Identify financing options and build capacity of CMM project developers to secure finance	 Identify sources of financing and engage with financial institutions Hold project capacity building finance workshops Create link between prospective CMM projects and sources of finance and investment Update important tools: the CMOP International Cash Flow Model and the CMM Finance Guide 	 Number of representatives of the financial community at Subcommittee events. Workshops held Updates to the Cash Flow Model and CMM Finance Guide Connections between CMM project developers and investors 	 GMI Coal Mines Subcommittee Project Network

Objective Three: Identify Country-Specific Needs and Opportunities

Activity	Approach	Indicators for Evaluation	Responsible Party
Assist Partner countries in drafting country-specific Methane Action Plans, or updating existing plans on an annual basis ⁴	 Provide tools and guidance that help Partner countries identify national level actions, supportive policies, and priority project opportunities Update tools available on the <u>GMI</u> website and the <u>Coal Mines</u> <u>Subcommittee</u> webpage 	 Action Plans submitted to Secretariat for posting on the Subcommittee webpage List of needs and/or wants 	 GMI Secretariat, as well as Coal Mines Subcommittee members that can serve as mentors to particular countries
Technical studies for improving evaluation of CMM/AMM emissions	 Partner with country representatives interested in improving their methods of predicting methane emissions from coal mines Partner with technical professionals in-country on technical studies that will use geological and geospatial interpretation, monitoring, modeling, and forecasting tools Conduct trainings on approaches for effective CMM/AMM management 	 Number of regional studies conducted Number of trainings conducted Number of written documents Web-based GIS tool about probabilistic emissions under regional conditions, and capture and utilization potentials 	GMI Coal Mines Subcommittee

⁴ To date, the following Partner Countries have developed action plans and these plans are available on the GMI website: Australia, China, Colombia, European Commission, India, Mexico, Nigeria, Turkey, Ukraine, and the United States.

Objective Four: Build Strategic Alliances and Long-term Relationships that Complement the Work of the Coal Mines Subcommittee Objectives

Activity	Approach	Indicators for Evaluation	Responsible Party
Increase the participation of existing Coal Mines Subcommittee members in GMI activities and events	 Contact members about upcoming activities and events Contact GMI Partner countries to encourage them to nominate Coal Mines Subcommittee members Provide information to members to show that GMI and the Coal Mines Subcommittee provide added value to their methane management efforts Survey members to identify needs and develop a plan to address survey results Encourage members to provide updates on their methane management activities and Action Plans 	 People contacted compared to people attending meetings Nomination of new Subcommittee members Projects implemented New/updated contact information for individuals interested in joining, along with sector and technologies and practices of interest Member needs identified and addressed Member updates provided during Subcommittee meetings and webinars 	• GMI Secretariat
Build relationships with non-members and other organizations, with a focus on the finance community and GMI's strategic alliance partners	 Provide information to non- members that have expressed an interest to introduce them to GMI and the Coal Mines Subcommittee Seek opportunities for members of the finance community to speak at GMI events Engage members of the finance community in subcommittee activities 	 List of needs New/updated contact information Meetings/workshops that involved the finance community Co-located meetings with strategic alliance partners, where applicable 	GMI Coal Mines Subcommittee Co- Chairs
Collaborate with other GMI Subcommittees to identify crosscutting themes and to maximize synergies between work/efforts, where appropriate	 Communicate with other Subcommittees Define cross-cutting themes/ideas Support cross-collaboration at the Global Methane Forums 	 Designated primary point of contact for each Subcommittee and areas of interest List of cross-cutting ideas/themes and resources from other Subcommittees 	GMI Coal Mines Subcommittee Co- Chairs

Activity	Approach	Indicators for Evaluation	Responsible Party
Cooperate with the UNECE Group of Experts (GoE) on CMM	 Hold joint meetings where it is in the interest of the GMI Coal Mines Subcommittee and the UNECE GoE Continue cooperation in support of dissemination and publication of Best Practice Guidance reports 	 Annual meetings of the GoE and GMI Coal Mines Subcommittees held together Co-sponsoring, co- organizing or mutual support of GMI and UNECE GoE workshops, scoping missions, training programs, seminars and other activities 	 GMI Coal Mines Subcommittee UNECE GOE Bureau UNECE staff
Support UNECE International Centres of Excellence (ICEs)	 Support capacity building of ICE staff to facilitate dissemination of best practice 	 Self-sustainability of ICEs over time Successful Best Practice Workshops 	 GMI Coal Mines Subcommittee Co- Chairs ICE employees

Objective Five: Improve Approaches to Account for and Mitigate Methane Emissions from Coal Mining

Activity	Approach	Indicators for Evaluation	Responsible Party
Conduct exchanges on inventory approaches and programs for measurement, reporting, and verification (MRV) of methane	 Partner with country representatives interested in improving their accounting of methane emissions from coal mining to identify opportunities for improving inventory and accounting of CMM Conduct trainings on resources and approaches for effective MRV programs 	 Engagement of stakeholder in GMI Partner Countries in MRV exchanges Number of trainings conducted 	GMI Coal Mine Subcommittee members
Support development of effective regulatory programs for CMM/AMM mitigation	 Develop comprehensive guidance document or thematic white papers to outline overarching principles for legal and regulatory program design and implementation Develop tools and conduct training on regulatory design 	 Production of a single guidance document or white paper series Number of trainings conducted Number of Partners and member countries engaged in effort 	 GMI Coal Mines Subcommittee members UNECE GOE ICE employees

Ongoing or Planned Activities

The table below summarizes ongoing or planned activities (updated, May 2022).

Date	Activity	Anticipated Participants
Spring 2022	Release of online trainings on CMM basics and on pre-feasibility studies in active and abandoned mines. Translation of the trainings into languages of Subcommittee members	 GMI Coal Mines Subcommittee International and Chinese Experts
23 March 2022	GMI Coal Mines Subcommittee Meeting (virtual)	 GMI Coal Mines Subcommittee UNECE Group of Experts UNECE Member States Project Network
20-21 March 2022	UNECE Group of Experts Meeting – Geneva, Switzerland	 UNECE Group of Experts UNECE Member States GMI Coal Mines Subcommittee Project Network
Summer 2022- Summer 2024	Activities and exchanges on improving MRV programs for methane accounting	 GMI Coal Mines Subcommittee International Experts
23 – 27 October 2022	GHGT-16 – Lyon, France	 GMI Coal Mines Subcommittee International Experts
October 2022 (dates TBD)	Global Methane Forum – Washington, DC	 UNECE Group of Experts GMI Coal Mines Subcommittee Project Network
26-29 June 2023	26 th World Mining Congress – Brisbane, Australia	GMI Coal Mines SubcommitteeInternational experts

Summary

The Coal Mines Subcommittee will focus on activities that advance opportunities for CMM project development and address the key barriers to project development: lack of information, lack of technology and technical knowledge, lack of demonstration for project feasibility, and lack of financing. The Subcommittee will promote cooperation among the Partner Countries and the private sector Project Network, taking into account the needs and priorities of individual countries within the Initiative.

Updating and Adopting the Action Plan

As the priorities of the Coal Mines Subcommittee may change over time, the Subcommittee agreed that the Action Plan should be updated and adopted on an approximately 3-year cycle. Addressing changes in priorities allows the Coal Mines Subcommittee to redirect actions to reflect current conditions, including technical and policy changes.