

GLOBAL METHANE INITIATIVE COAL SUBCOMMITTEE STATEMENT OF PURPOSE

MISSION

The GMI Coal Subcommittee is dedicated to reducing 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 Subcommittee promotes collaboration between delegates from Partner Countries and Project Network members to build capacity, develop strategies and markets, and remove barriers to methane mitigation project development in order to improve worker safety, enhance mine productivity, increase revenues, and reduce greenhouse gas emissions.

FOCUS

The Coal Subcommittee primarily focuses on promoting the recovery and utilization of coal mine methane (CMM), ventilation air methane (VAM), and abandoned mine methane (AMM). As a secondary focus, the Subcommittee promotes CMM and AMM projects that involve mitigation-only of drained gas through flaring. From an environmental perspective, it is better to safely flare excess or stranded CMM rather than to vent it to the atmosphere, as it reduces the overall greenhouse gas emissions.

ROLES

Delegates work to achieve these goals by:

- Serving as the country point of contact for information about the Initiative;
- Preparing and updating country coal sector Methane Action Plans;
- Sharing country policies, incentives, standards, plans, and success stories through participation at GMI events and contributions to GMI tools and resources (including the GMI International CMM Projects Database and the CMM Technology Database, etc.);
- Conducting research, providing technical assistance, hosting workshops or meetings, technology transfer activities, and trainings;
- Developing fact sheets, tools, guides, training plans, country databases, and methane inventories or reduction estimates; and/or
- Funding the activities above in other Partner countries.

Project Network members assist in these efforts by:

- Providing funding opportunities,
- Participating at events,
- Sharing industry expertise and research,
- Representing similar organizations,



- Implementing methane reduction projects, and
- Publicizing success stories.

BACKGROUND INFORMATION

GLOBAL METHANE INITIATIVE BACKGROUND

Methane is the second most abundant greenhouse gas (after carbon dioxide). Methane's ability to trap heat in the atmosphere, which is called its "global warming potential," is more than 20 times greater than that of carbon dioxide. As such, methane is a significant contributor to global climate change.

The Global Methane Initiative (GMI) is a voluntary, multilateral partnership that aims to reduce global methane emissions and advance the abatement, recovery and use of methane as a valuable clean energy source in five sectors: agriculture, coal mines, municipal solid waste, municipal wastewater and oil and gas systems. GMI achieves its goals by creating an international network of Partner Countries and Project Network members, who represent the private sector, development banks, universities, and NGOs, in order to build capacity, develop strategies and markets, and remove barriers to project development for methane reduction in partner countries. GMI projects reduce greenhouse gas emissions in the near term and provide a number of important environmental and economic co-benefits.

COAL MINE METHANE EMISSIONS BACKGROUND

Methane is produced from underground and surface mines and as a result of post-mining activities including coal processing, storage, and transportation. Underground mines are the single largest source of coal mine methane emissions in most countries. At active underground mines, methane must be removed from underground operations for safety reasons. Large-scale ventilation systems remove the methane by moving massive quantities of methane through the mines. At some active and abandoned mines, methane is also produced from degasification systems (also known as gas drainage systems) that employ vertical and / or horizontal wells to recover methane.

There are a variety of profitable uses for coal mine methane (CMM), and the optimal use at any location depends on factors such as the quality of methane, the availability of end-use options, and project economics. The range of CMM projects includes natural gas pipeline injection, electric power production, co-firing in boilers, district heating, mine heating, coal drying, vehicle fuel, flaring, and manufacturing or industrial uses. Technologies have also emerged to oxidize low-concentration ventilation air methane (VAM) to produce thermal energy, including regenerative thermal oxidation, which is used in commercial methane destruction operations at operating mines in several countries.