Global Methane Initiative
Leading methane action since 2004

globalmethane.org

# GMI Support for Methane Mitigation

The Global Methane Initiative (GMI), with technical support and secretariat provided by the U.S. Environmental Protection Agency, as well as technical support from other partner countries, ***accelerates the mitigation, recovery, and use of methane from multiple sectors:*** biogas (agriculture/manure management, municipal solid waste and wastewater), coal mines, and oil & gas.

## Our Impact

Since 2004, GMI's deep understanding and dissemination of information on methane mitigation solutions has resulted in ➔➔➔➔

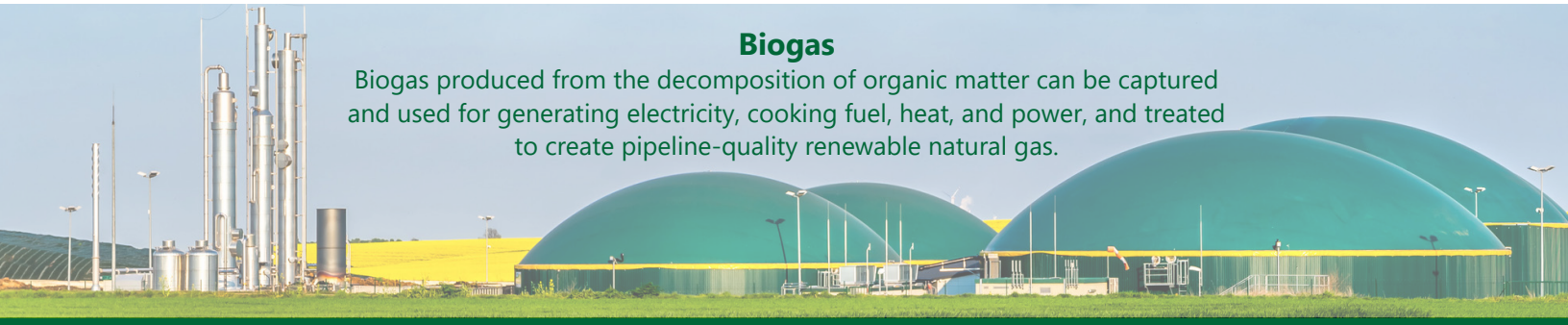
- ✓ Technical and outreach support to more than 50,000 people around the world.
- ✓ Implementation of more than 1,600 methane mitigation projects leading to 670 $MMTCO_2e$ abated.
- ✓ Identifying additional opportunities to reduce an additional 700+ $MMTCO_2e$ of emissions, equivalent to taking more than 150 million gasoline-powered passenger vehicles off the road for one year.

## Methane Mitigation Steps and Support

GMI provides cost-free technical, policy, and programmatic support to Partner Countries to mitigate methane emissions in the following ways:

| *Actions to Address Methane* | *GMI Support Provided* |
|---|---|
| **Quantify emissions reductions and co-benefits** | • National, sub-national, and project baseline emissions quantification<br>• Emissions reduction and co-benefit quantification tools<br>• Measurement, Reporting, and Verification Assistance |
| **Plan and implement methane mitigation policies and practices** | • National and sub-national strategic planning<br>• Mitigation action identification and prioritization<br>• Policy and regulation design and implementation |
| **Evaluate project-level technical and financial feasibility** | • Technical and financial feasibility analyses<br>• Co-benefits analyses<br>• Financial readiness assessments |
| **Build in-country technical expertise and institutional capacity** | • Training on tools and resources<br>• Workshops, webinars, and events for knowledge exchange<br>• Strategic communications and planning |

# Examples of GMI Sectoral Support for Methane Mitigation and Beneficial Use



## Biogas

Biogas produced from the decomposition of organic matter can be captured and used for generating electricity, cooking fuel, heat, and power, and treated to create pipeline-quality renewable natural gas.

## Agriculture

***Project Spotlight:*** In 2010, GMI conducted a study on the barriers to implementing anaerobic digestion (AD) systems in swine farms in the Philippines. The assessment involved coordinating with swine farm owners, banks, and AD service providers to evaluate business cases and project financing opportunities for agricultural AD projects. The assessment informed the Philippines' development of a national program to mitigate methane emissions from farms.

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*About the Barriers Study*

## Municipal Solid Waste

***Project Spotlight:*** In 2018, GMI, through engagement with the East Delhi Municipal Corporation, developed the ***Work Plan to Mitigate Short-Lived Climate Pollutants (SLCPs) from the Waste Sector in East Delhi.*** The plan provided East Delhi with a structured approach for reducing SLCPs by identifying specific actions and defining roles and responsibilities for all stakeholders involved.

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*About the Plan*

## Wastewater

***Project Spotlight:*** In 2019, GMI hosted a technical training workshop in Mexico City for municipal wastewater treatment facilities on methane capture and utilization techniques and technologies. The workshop presented case studies of wastewater facilities in Mexico, methane capture calculations, emissions reductions estimates, and techniques of interest for regional implementation.

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*About the Workshop*

## Coal Mines

Removing fugitive methane gas from underground coal mines and using it in profitable and practical ways can improve worker safety, enhance mine productivity, increase revenues, and reduce greenhouse gas emissions.

***Project Spotlight:*** In 2019, GMI conducted a pre-feasibility study for coal mine methane capture and utilization at the Casa Blanca Mine in Colombia. Through a detailed assessment of geological parameters, methane end-use options, and emissions reduction potential, the study identified projects that had the potential to reduce 340,000 tons of $CO_2e$ and a payback period of 3.5 or fewer years.

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*About the Pre-Feasibility Study*

## Oil & Gas

Methane emissions from oil and natural gas systems result from both normal operations and system disruptions. These emissions can be cost-effectively reduced by upgrading technologies or equipment, and by improving operations.

***Project Spotlight:*** In 2019, GMI developed the ***Best Practice Guidance for Effective Methane Management in the Oil and Gas Sector.*** The document provides oil and gas facility owners and operators and government policymakers with a principle-based framework for detecting and mitigating methane emissions along the full oil and gas value chain and includes case studies from around the world.

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*About the Best Practices*

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