

# 2024 Global Methane Forum

## Mobilizing Methane Action

18-21 March 2024, Geneva, Switzerland

# Biogas Joint Technical Sessions



# Welcome!



**Fiifi Boadi**

Ministry of Sanitation and Water Resources  
Ghana



**Matt Hamilton**

Environment and Climate Change Canada (ECCC)  
Canada



**Monica Shimamura**

U.S. Environmental Protection Agency  
United States

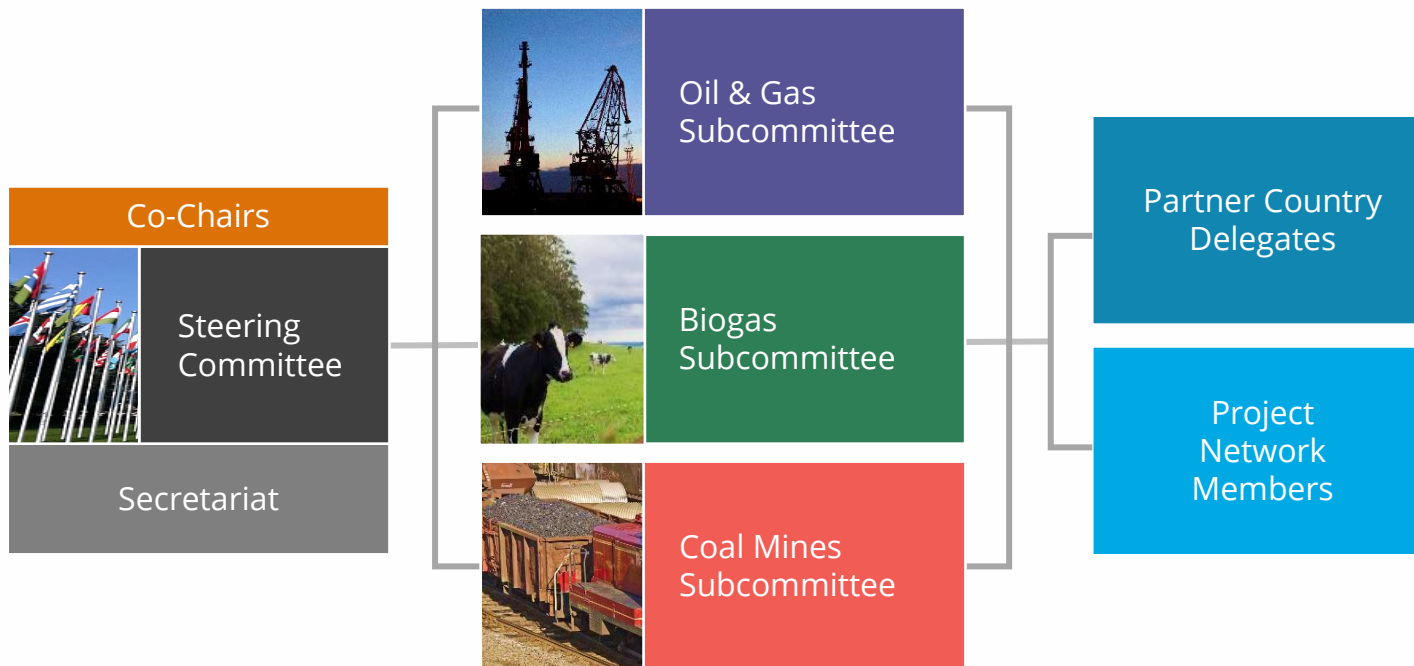
# Overview of GMI and the Biogas Subcommittee

Monica Shimamura

# Global Methane Initiative (GMI)

GMI is an international public-private partnership focused on reducing barriers to the recovery and use of methane as a valuable energy source from key sectors:

- Oil & Gas, Coal Mines, and Biogas, which includes Agriculture, Municipal Solid Waste and Wastewater



- 49 Partner Countries
- 1,000+ Project Network members
- Alliances with international organizations focused on methane recovery and use



CLIMATE & CLEAN AIR COALITION  
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS



UNECE



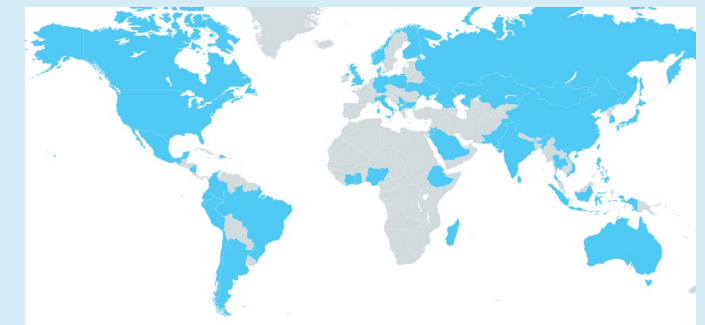
Global Methane Hub



UN environment programme



THE WORLD BANK  
IBRD • IDA



GMI Partner Countries represent approximately 75% of methane emissions from human activities.

# GMI Accomplishments Since 2004



Grown from 14 to 47 Partner Countries



More than \$650 million in leveraged funding for projects and training



More than 1,000 Project Network members



Conducted or developed nearly 2,000 assessments, pre-feasibility studies, feasibility studies, study tours, reports, guidances and site visits



Provided trainings for more than 50,000 people in methane mitigation

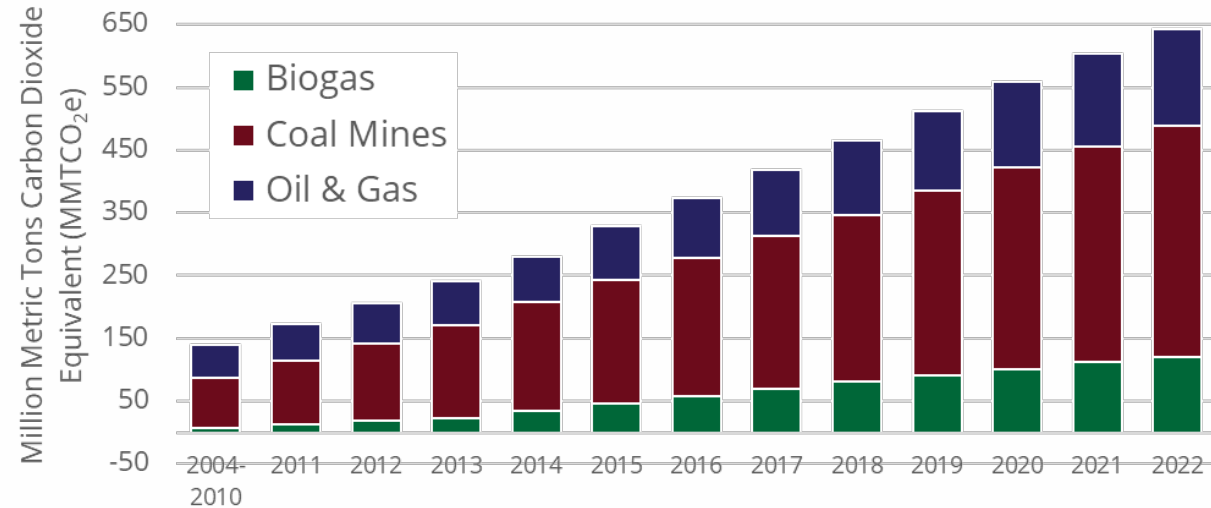


Developed more than 60 tools and resources for methane mitigation

Since 2004, GMI has reduced CH<sub>4</sub> by nearly

## 643 MMTCO<sub>2</sub>e

including approximately **40 MMTCO<sub>2</sub>e** achieved in 2022



643 MMTCO<sub>2</sub>e is approximately equivalent\* to the CO<sub>2</sub> emissions from any one of the following:



**274 Billion**  
liters of gasoline  
consumed



**327 Billion**  
kilograms of coal  
burned



**78 Trillion**  
smartphones  
charged

\* [epa.gov/energy/greenhouse-gas-equivalencies-calculator](https://epa.gov/energy/greenhouse-gas-equivalencies-calculator)

# GMI's Methane Mitigation Activities *Since 2004*

Nearly

**2,000**

## **Assessments**

identifying opportunities for emissions reductions

- Measurement studies
- Prefeasibility studies
- Publications/reports
- Study tours/tools/models
- Demonstration projects
- Policy analyses

More than

**400**

## **Capacity Building/ Information Sharing Activities**

fostering best practices

- Workshops
- Trainings
- Websites
- Outreach efforts

Approximately

**1,150**

## **Partnership Activities**

building relationships to foster action

- Site visits
- Conferences
- Webinars
- Informational meetings
- Steering Committee meetings
- Subcommittee meetings

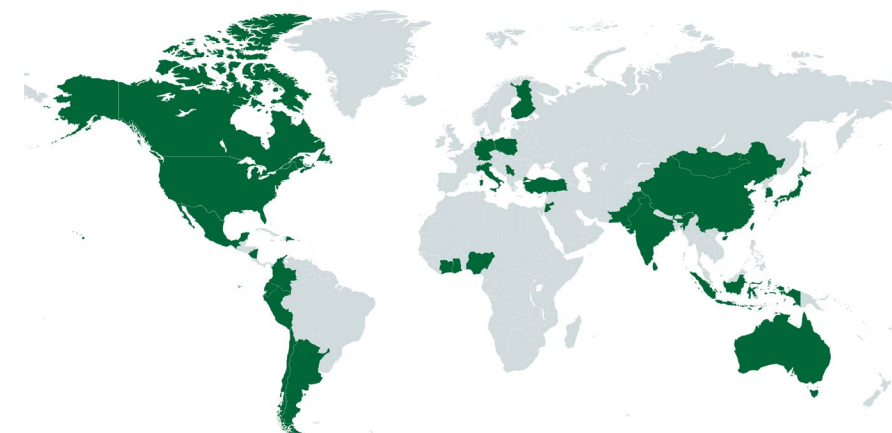
# GMI Biogas Subcommittee

## Goals

- Increase delegate engagement -- recruit knowledgeable and influential delegates representing more countries
- Support countries in achieving methane mitigation goals in agriculture, municipal waste, and wastewater
- Explore and secure opportunities to collaborate with key partners -- for example, the Climate and Clean Air Coalition and the World Biogas Association

## Engagement

- One annual Subcommittee meeting (typically in-person)
- Occasional virtual meetings based on interest of Subcommittee members
- Technical webinars to promote new tools or best practices



### Members of the Biogas Subcommittee

**61** delegates representing  
**29** Partner Countries

### How to Join

Partner governments may appoint up to 3 delegates to the Subcommittee

Delegates must be Ministry officials or government representatives

# Engage with GMI

## Submit a Contact Us Request

Let us know how we can help you:  
[globalmethane.org/contact-us/](https://globalmethane.org/contact-us/)

## Share Events or Resources

Recommend items to publish on the GMI website:  
[globalmethane.org/resources/recommend.aspx](https://globalmethane.org/resources/recommend.aspx)

## Join the GMI Mailing List

Receive updates from GMI by joining at:  
[eepurl.com/ggwT3T](https://eepurl.com/ggwT3T)

## Follow GMI



[www.linkedin.com/company/global-methane-initiative-gmi-/](https://www.linkedin.com/company/global-methane-initiative-gmi-/)



[twitter.com/globalmethane](https://twitter.com/globalmethane)



[www.facebook.com/globalmethane/](https://www.facebook.com/globalmethane/)



# GMI Biogas Tools and Resources

# Biogas Toolkit

- Highlights of Toolkit:
  - **Centralized location** for all U.S. EPA and GMI biogas tools
  - **Filter categories** and guided search to help users find exactly what they need
  - Intended for **U.S. and international audiences**
  - Usable by **all knowledge levels** (getting started to advanced)



**Filters**

**Project Phase**

- Getting Started
- Pre-Feasibility
- Feasibility Assessment
- Development and Construction
- Operations and Management


**Biogas Sector**


- Agriculture
- Solid Waste
- Wastewater


**Topic**

- Engineering and Technology
- Finance
- Business Planning
- Regulatory Compliance
- Environment and Social

Displaying 36 of 36 resources.

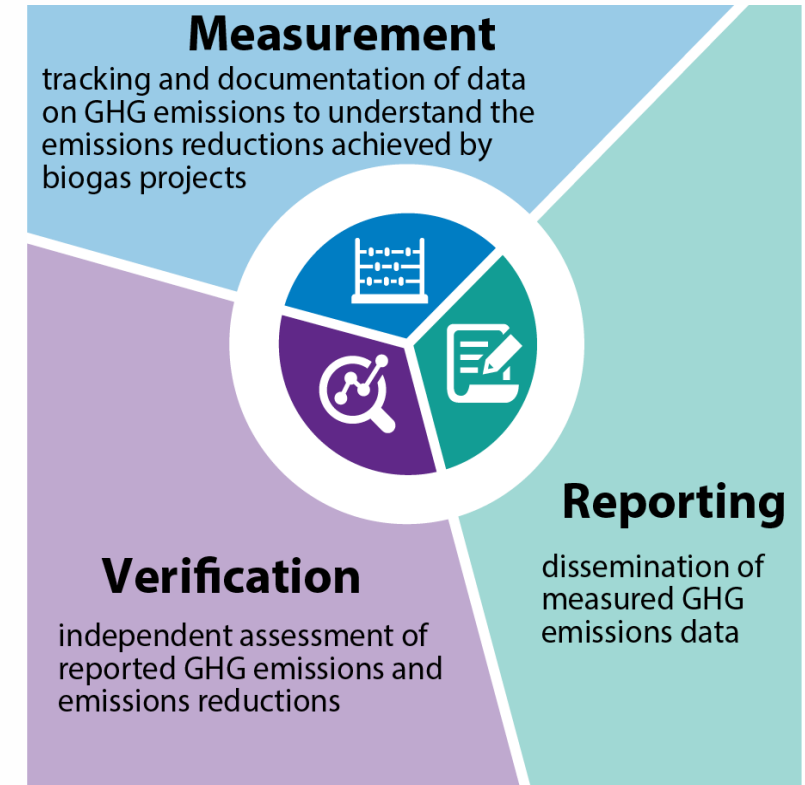
 **[10 Keys to Digester Success](#)**  
**CHECKLIST**  
Many factors are required to successfully implement and operate an anaerobic digestion/biogas system. This resource lists 10 key factors essential for a successful farm-based digester project.

 **[AgSTAR Operator Guidebook](#)**  
**DOCUMENT**  
This guidebook helps operators increase operational performance and efficiency of AD systems, and avoid common challenges.

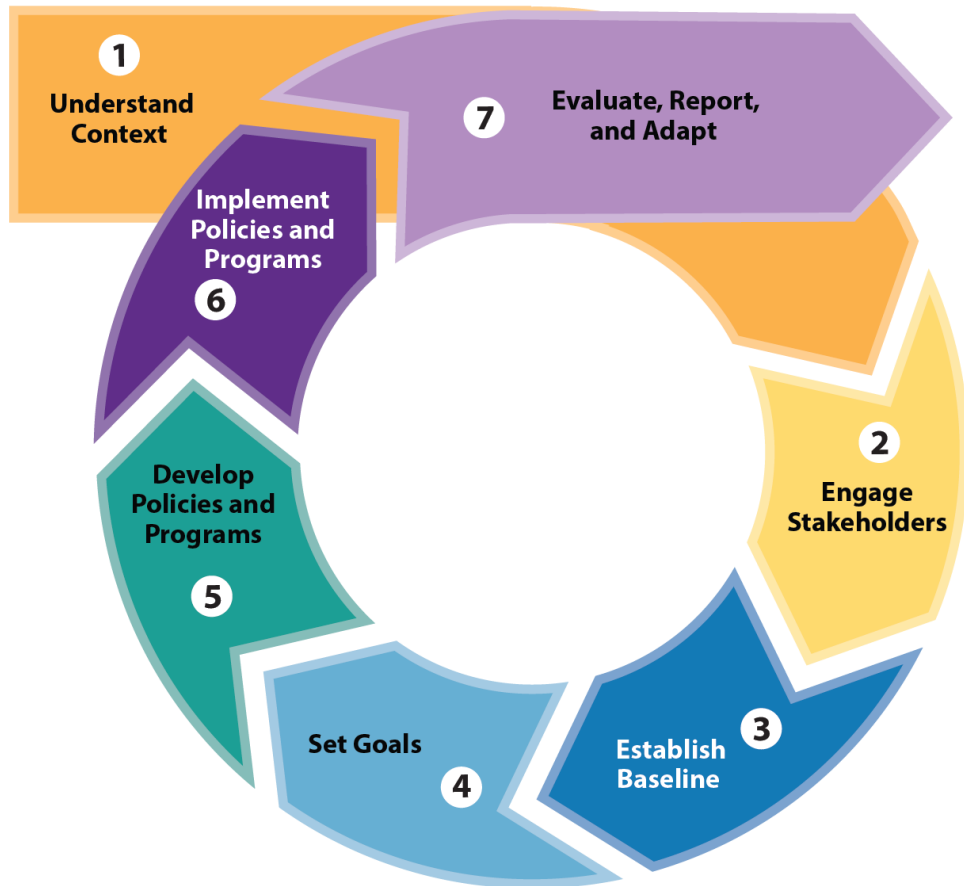
 **[Is An Anaerobic Digestion Project Appropriate?](#)**  
**DOCUMENT**  
*[Anaerobic Digester Project Development Handbook, Chapter 1](#)*  
This chapter of the AgSTAR Project Development Handbook outlines the factors to consider to successfully implement and operate an AD/biogas system, provides characteristics for farms that might indicate an AD/biogas system is appropriate, and provides limitations and conditions that would determine that AD/biogas is not applicable.

# Measuring, Reporting, and Verification (MRV) Resources

- Policy Maker's Handbook for Measurement, Reporting, and Verification in the Biogas Sector
  - An online platform with high-level guiding principles for conducting MRV for biogas projects.
- For more information, visit the GMI website: [globalmethane.org/biogas/index.aspx#tools](https://globalmethane.org/biogas/index.aspx#tools)



# New in 2024! GMI Policymaker's Framework for Addressing Methane Emissions



<https://globalmethane.org/pmf/>

- **What:** A framework to help countries accelerate progress toward their methane emission reduction goals, released in February 2024
- **How:** Provides a step-by-step process for developing and implementing policies, programs, and partnerships to reduce methane emissions  
*Each step includes:*
  - **A description** to help policymakers navigate each step,
  - **Best practice activities** that policymakers can consider,
  - **General and sector-specific resource links** that can provide additional guidance and support, and
  - **An expanding portfolio of case study examples** of policies and programs from around the world to help countries learn from others' experiences.
- **Who:** Primarily for national policymakers and ministries responsible for establishing national or subnational policies but could be useful to anyone involved in the process

# Other GMI Biogas Tools

- Solid Waste Emissions Estimation Tool (SWEET): [globalmethane.org/sweet](https://globalmethane.org/sweet)
- Landfill Gas Screen Tool (LFG-ST): [globalmethane.org/resources/details.aspx?resourceid=5215](https://globalmethane.org/resources/details.aspx?resourceid=5215)
- OrganEcs Version 3.1: [globalmethane.org/organecs](https://globalmethane.org/organecs)
- Anaerobic Digestion Screening Tool, Version 2.2: [globalmethane.org/resources/details.aspx?resourceid=5170](https://globalmethane.org/resources/details.aspx?resourceid=5170)



# 2024 Workshop Series – Mobilizing Methane Action at Open Dumpsites and Landfills

- Workshop #1 (January): [Global Opportunities and Strategies for Addressing Landfill Methane](#)
  - Recording and materials available
- Workshop #2 (March): [Methane Mitigation Project Phases, Practical Solutions, and GHG Emission Quantification](#)
  - Recording and materials coming soon
- Workshop #3 (April): will feature a brand new GMI resource, the **Waste Characterization Handbook** – stay tuned!

The Global Methane Initiative Biogas Subcommittee presents a four-part workshop series: *Mobilizing Methane Action at Open Dumpsites and Landfills*.

**Global opportunities and strategies for addressing landfill methane**



**TUESDAY, 23 January 2024**  
11:00 AM ET, 4:00 PM UTC

**Global Methane Initiative**  
Leading methane action since 2004

In partnership with

 Environment and Climate Change Canada / Environnement et Changement climatique Canada

 **ISWA**  
International Solid Waste Association

 **EPA** United States Environmental Protection Agency