

# Combating Methane Emissions: The Global Methane Initiative

UNFCCC Technical Experts Meeting

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# Why is methane (CH<sub>4</sub>) important?

## Methane Matters...



Short-lived climate pollutant, with atmospheric lifespan of **12 years**



**Most prevalent** manmade greenhouse gas after CO<sub>2</sub>

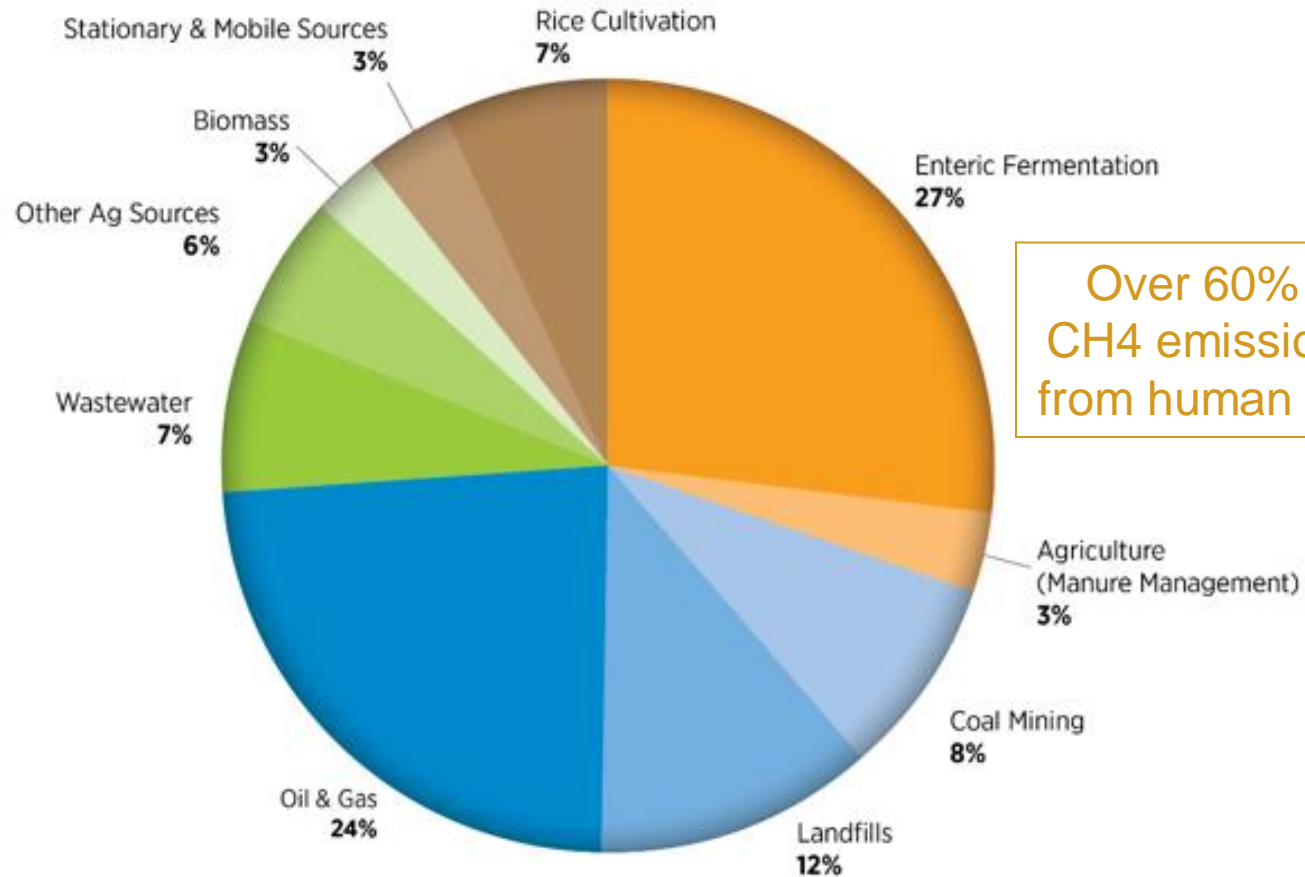


Traps **28 times** more heat in the atmosphere than CO<sub>2</sub><sup>1</sup>



Accounts for **32%** of climate forcing

# Why is methane (CH<sub>4</sub>) important?



Over 60% of total CH<sub>4</sub> emissions come from human activities.

Estimated Global Anthropogenic Methane Emissions by Source, 2015

# Co-Benefits of Methane Reduction



Reduce **greenhouse gases** that would otherwise be emitted to the atmosphere



Increase **energy security** by creating and utilizing a local, reliable energy source (e.g., biogas for cookstoves)



Enhance **economic growth** by capturing and selling methane directly or by generating and selling electricity



Improve **local environmental quality** by reducing air pollution and surface and/or groundwater contamination



Increase **worker safety** by minimizing explosive methane levels or fires



Improve **human health** by reducing respiratory impacts (e.g., asthma) associated with unhealthy ozone levels

# Global Methane Initiative (GMI)

GMI reduces global methane emissions and encourages recovery and use of methane as an energy source.



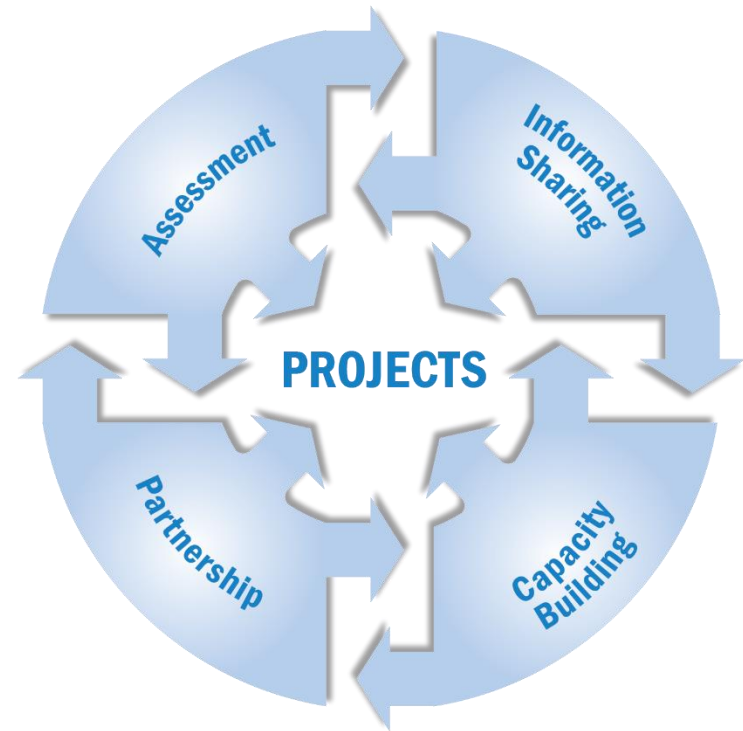
**GMI partners  
account for...**  
**nearly 70%**  
of total global  
manmade CH<sub>4</sub>  
emissions

**...which is equivalent to  
approximately 5,000 MMTCO<sub>2</sub>E**

# Global Methane Initiative (GMI)

**GMI is a voluntary, multilateral partnership that aims to reduce methane emissions and to advance the abatement, recovery and use of methane as a clean energy source.**

- Established in 2004
- 42 partner countries + EC
- Targets five sector-specific areas for methane reduction
  - Agriculture
  - Coal Mines
  - Municipal Solid Waste
  - Municipal Wastewater
  - Oil & Gas Systems
- Cumulative 300 MMTCO<sub>2</sub>e from GMI-supported projects



# Vancouver Expo – March 2013

- 450 attendees from 44 countries
- High-level plenary sessions
- Subcommittee programming
- Municipal leaders' forum
- Side meetings with CCAC
- Exhibitors showcasing technology



# Sihe Coal Mine - China

- Largest coal mine methane power generation project
- Methane recovered from the mine is used to produce electricity while heat from the exhaust gas is recovered to produce steam and hot water for mining operations



- Reduces methane emissions by over 40M tons of CO<sub>2</sub> equivalent emissions over 20 years





# ONGC

- Created a robust program to identify, quantify, and reduce fugitive methane emissions from its gas production operations
- Eliminated 185,000 metric tons of CO<sub>2</sub> equivalent
- Shares lessons learned across India and around the world



# Challenges & Opportunities

## ■ Challenges

- Limited Funding
- Projects dependent on value of gas or an active carbon marketplace
- Multiple un-coordinated bilateral and multi-lateral efforts

## ■ Opportunities

- In 2030 -- at or below \$0/tonsCO<sub>2</sub>e: about 1 billion tons CO<sub>2</sub>e across all sectors (2 billion at \$30/ton)
- Methane NAMAs?
- WB pilot auction facility?
- Post-2015 carbon financing mechanisms?



**2015: A Year for Transformation?**

# Thank you!

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Please visit [www.globalmethane.org](http://www.globalmethane.org) for more information on GMI

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# Appendix

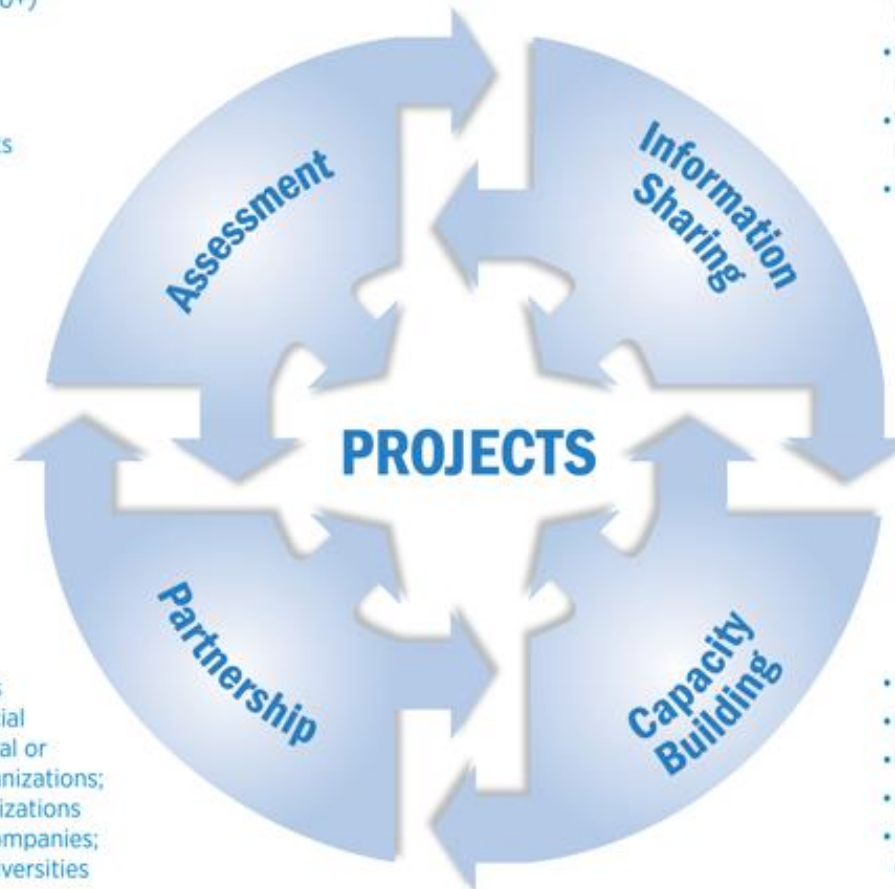
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# GMI Project Development Cycle

GMI reduces barriers to project development through site assessments, information sharing, partnership, and capacity building to support global methane emission reduction.

- Resource Assessments (110+)
- Feasibility Studies (210+)
- Study Tours and Scoping Missions (245+)
- Fugitive Emissions Reports (50+)

- Partner Countries (43)
- Project Network Members (1,300+) including: Financial Institutions; Local, Regional or Other Governmental Organizations; Non-governmental Organizations (NGOs); Private Sector Companies; and Research Entities/Universities



- Technical Sector Committee Meetings (70)
- Steering Committee Meetings (8)
- Workshops, Trainings and Demonstrations (240+)
- Partnership Expos (3)

- Tools Developed (55+)
- Policies Effected (10+)
- Institutions Strengthened (130)
- Funds Leveraged (\$530M)
- Partner Methane Action Plans (45+)