Combatting Methane Emissions: The Global Methane Initiative

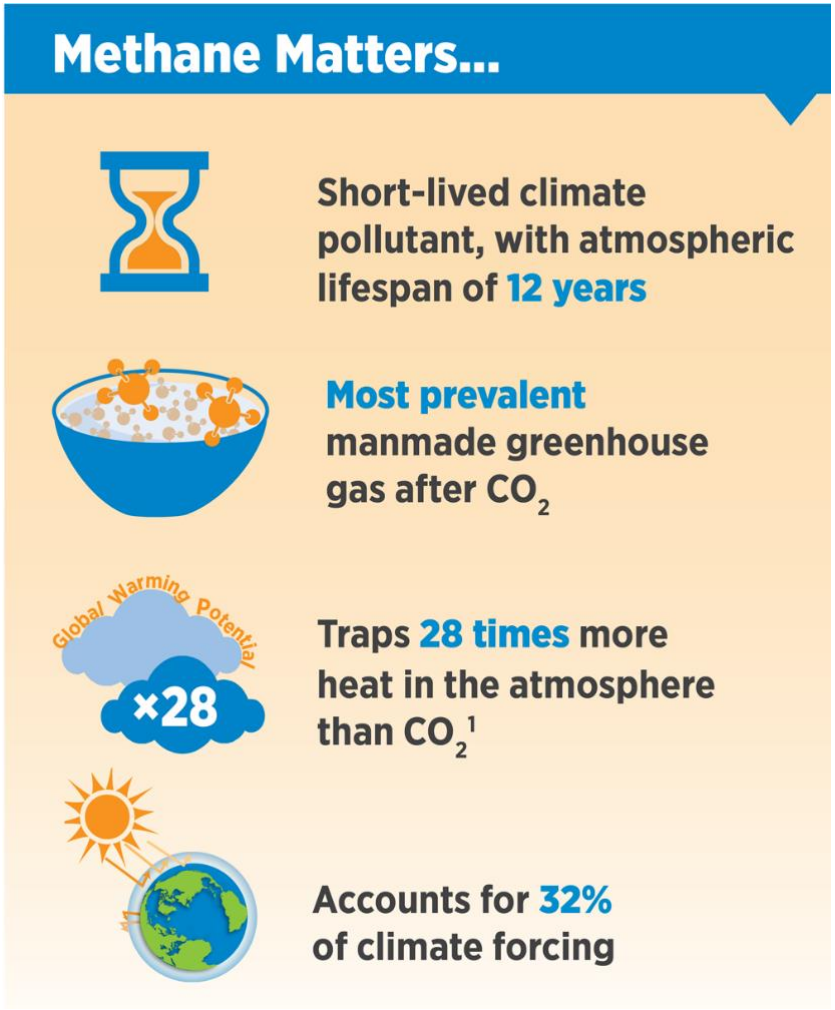
UNFCCC Technical Experts Meeting

October 22, 2014

Presented by Henry Ferland, Global Methane Initiative
Administrative Support Group

Global Methane Initiative

Why is methane (CH_4) important?



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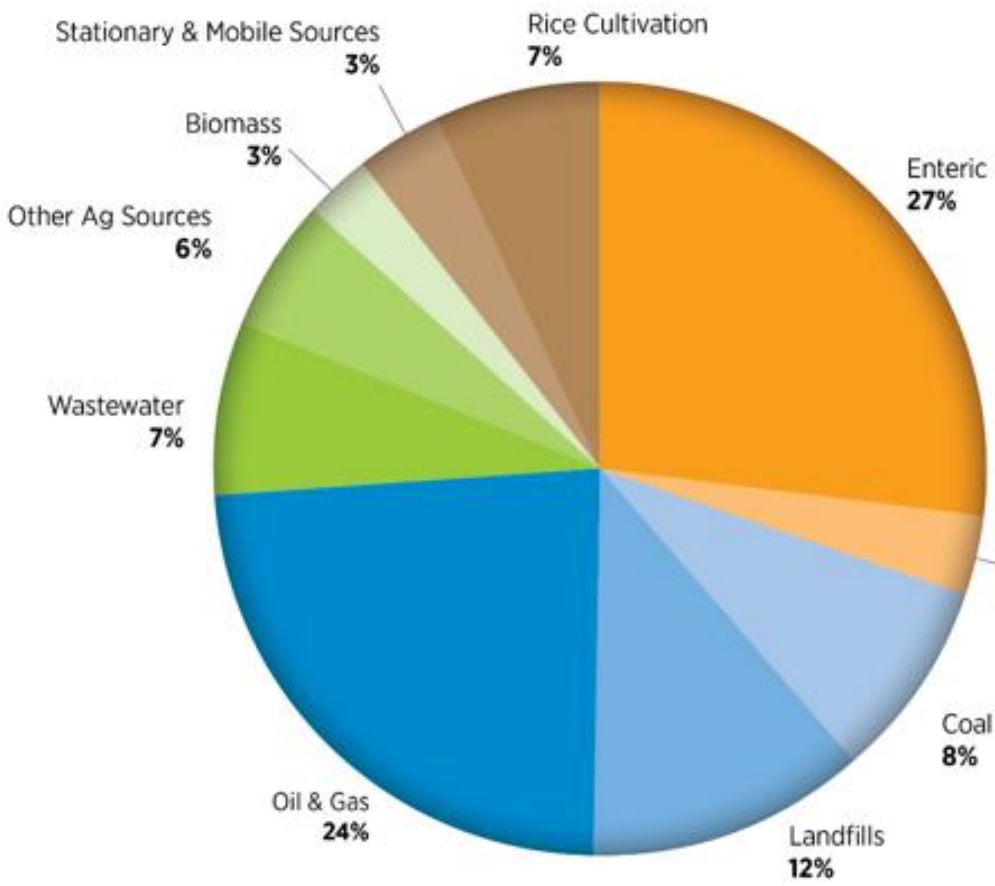

Over 60% of total CH4 emissions come from human activities.

Estimated Global Anthropogenic Methane Emissions by Source, 2015

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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

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Global Methane Initiative (GMI)

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

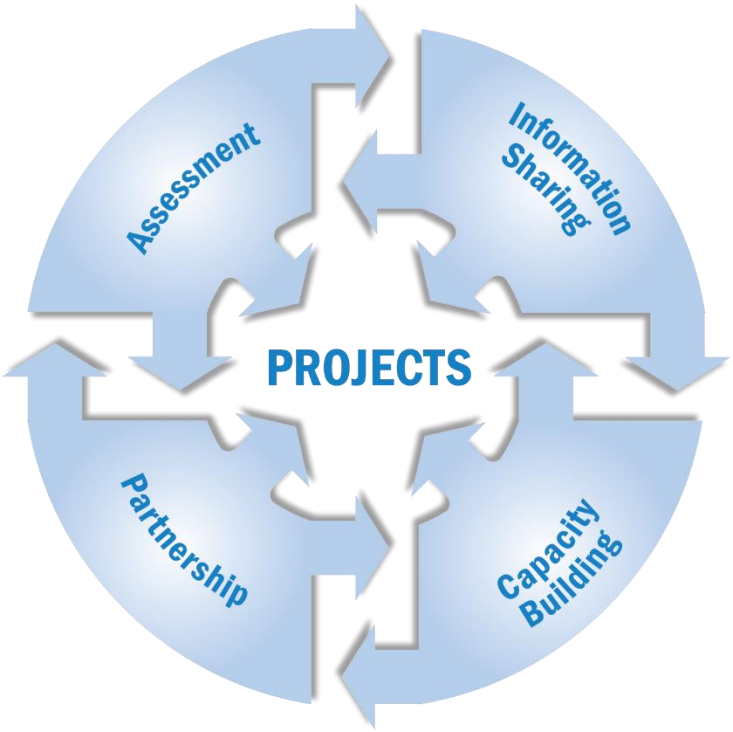
GMI partners account for...
nearly 70%
of total global manmade CH_4 emissions

...which is equivalent to approximately 5,000 MMTCO$_2$E

Global Methane Initiative

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 $MMTCO_2e$ from GMI-supported projects

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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_2 equivalent emissions over 20 years

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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_2 equivalent
- Shares lessons learned across India and around the world

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ONGC

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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/tonsCO2e: about 1 billion tons CO_2e across all sectors (2 billion at $30/ton)
  - Methane NAMAs?
  - WB pilot auction facility?
  - Post-2015 carbon financing mechanisms?

2015: A Year for Transformation?

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Thank you!

Please visit www.globalmethane.org for more information on GMI

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Appendix

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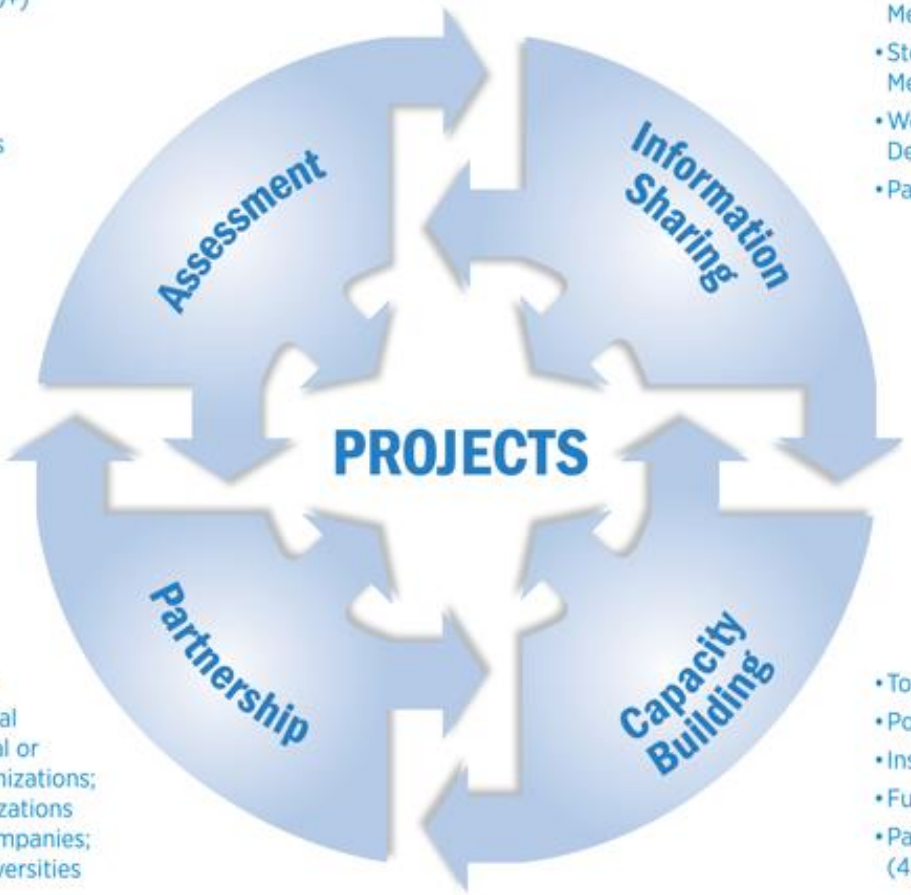
GMI Project Development Cycle

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+)



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

- 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

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