



Methane to Markets

Partnership Overview

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Morelia, Mexico
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Overview

- M2M Snapshot
- Why focus on methane?
- M2M Structure and Activities
- Agriculture Sector

Methane to Markets Partnership Overview

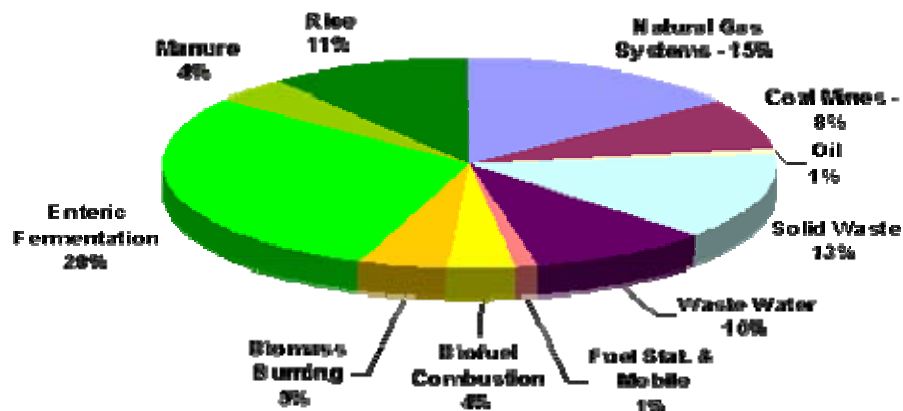
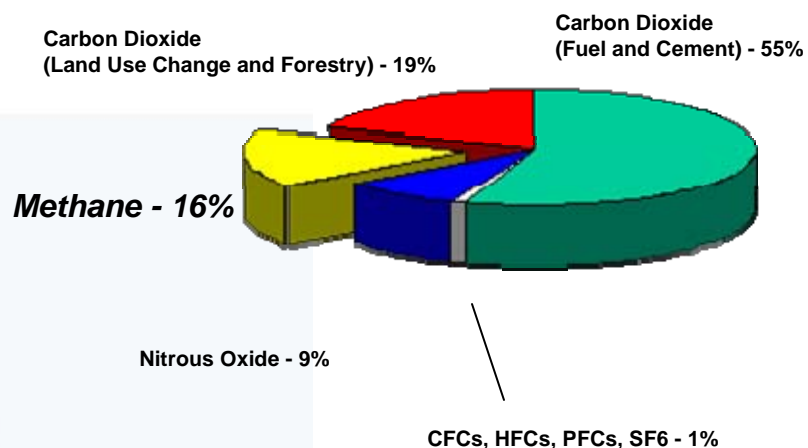
- Advances recovery and use of methane as a valuable clean energy source.
- Acts as a mechanism to bring together interested parties from governments and the private sector to facilitate methane project development and implementation around the world.
- Encourages development of **cost-effective** methane recovery and use opportunities

Why focus on Methane?

- A potent greenhouse gas (GHG) with 100-year global warming potential of 23; atmospheric lifetime of ~12 years
- The 2nd most important GHG accounting for ~18% of total climate forcing
- A primary constituent of natural gas and a valuable, clean-burning energy source

Global GHG Emissions in 2000

40,702 million tonnes carbon dioxide equivalent (MtCO₂e)



Significant Benefits of Methane Recovery and Use Projects

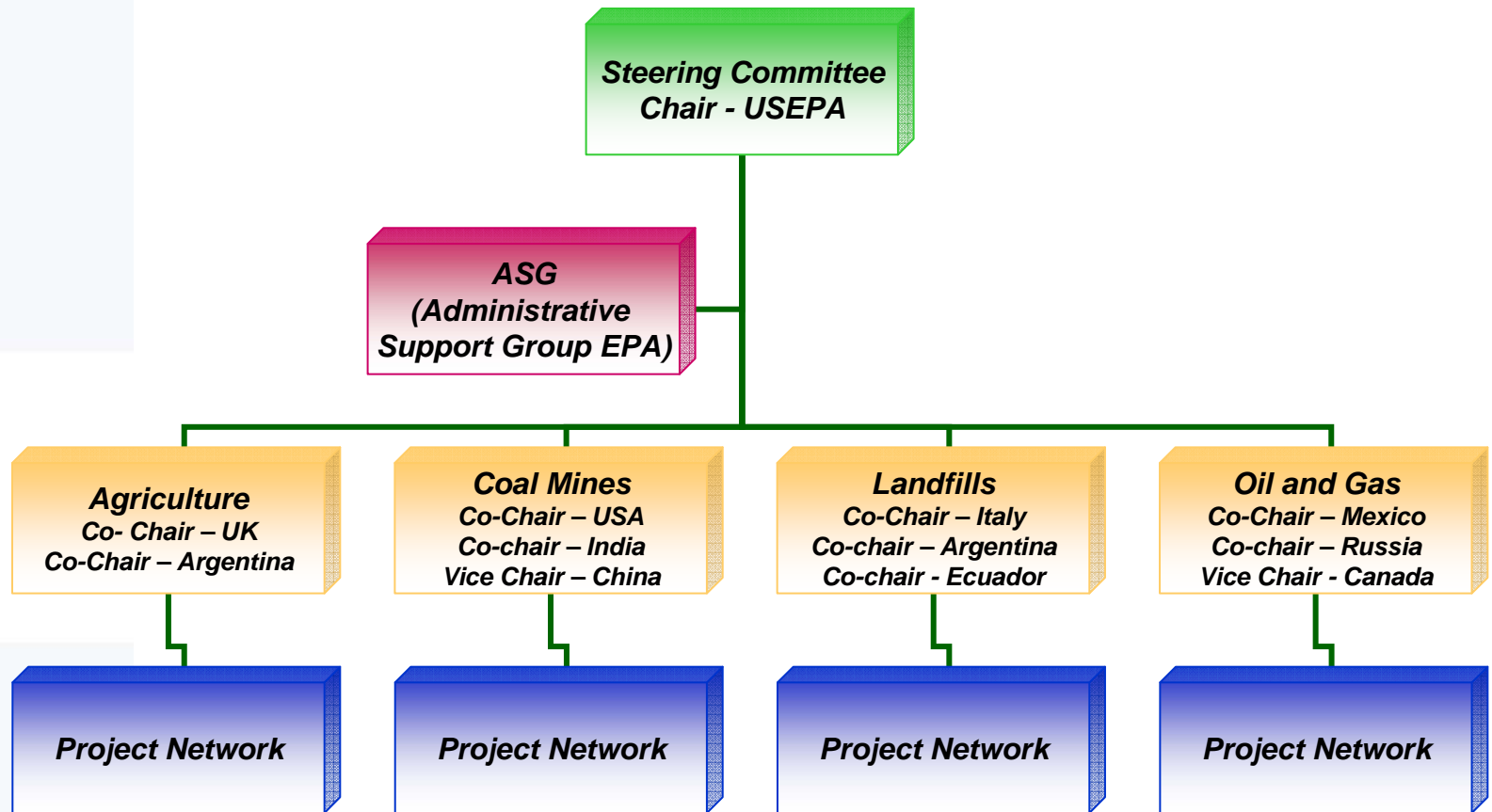
BENEFITS OF METHANE PROJECTS

- Reduced greenhouse gas emissions
- Increases energy efficiency at oil and gas facilities
- Reduced waste of a valuable fuel and important local energy source and
- Improved industrial safety and productivity
- Improved air quality, water quality and reduced odors
- Economic growth and energy security

BUT BARRIERS EXIST...

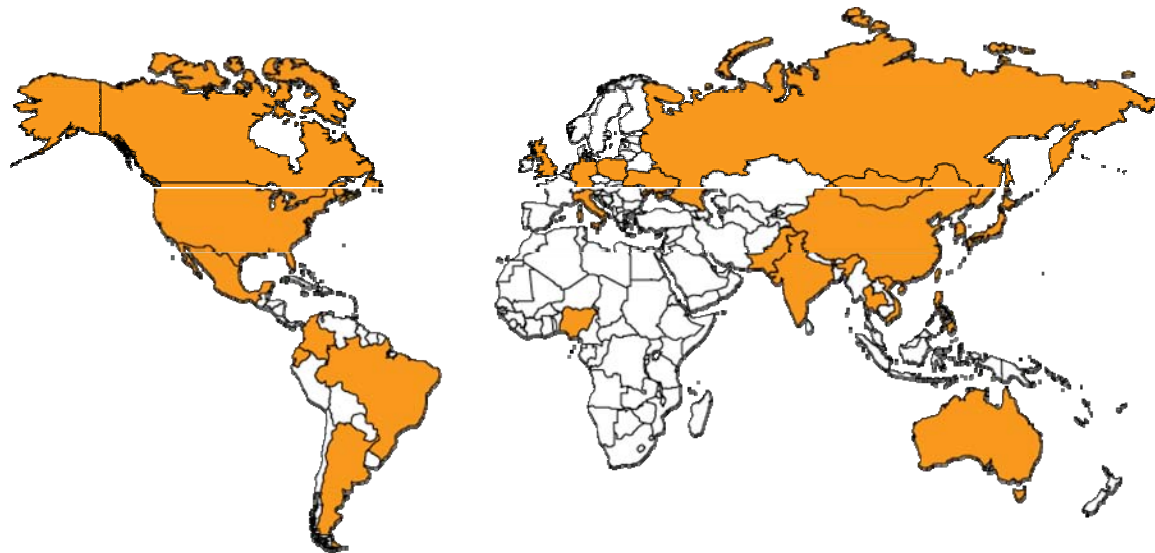
- Lack of awareness of emission levels and value of lost fuel
- Lack of information on and training in available technologies and management practices
- Traditional industry practices
- Regulatory and legal issues
- Limited methane markets and infrastructure
- Uncertain investment climate

M2M Organization and Structure



M2M Organization and Structure

- 25 Partner Countries Participate in the Partnership



M2M Organization and Structure

- Private companies, multilateral development banks, and other relevant organizations participate by joining the ***Project Network***
 - ***more than 740 organizations now participating (360 in the Ag sector)***

Methane to Markets Sectors

Coal Mines



Oil and Gas Systems



Landfills



Livestock Waste



Agriculture Sector

- Methane is produced and emitted during the anaerobic decomposition of organic material in livestock manure
- Globally, livestock manure contributes ~222 MTCe of methane emissions
- Three groups of animals account for >80% of total emissions (swine, non-dairy cattle, and dairy cattle)
- M2M Countries represent 65% of global emissions from the Manure Management sector



M2M Focus on Agriculture

- When M2M launched, agriculture was not included– a Taskforce was created to investigate whether it should be added as a 4th subcommittee
- Taskforce recommended including Agriculture at the November 2005 M2M Partnership meeting in Buenos Aires
 - UK and Argentina nominated as co-chairs
- First subcommittee meeting and M2M AD workshop hosted by Defra in November 2006 in Berkshire, UK
 - Workshop report and subcommittee meeting minutes online
 - Action Plan completed and updated
- Second subcommittee meeting and M2M AD workshop hosted by INTA in May 2007 in Buenos Aires, Argentina
 - Workshop report and subcommittee meeting minutes online
 - Action Plan updated

M2M Focus on Agriculture

- Third subcommittee meeting and M2M AD workshop held in conjunction with the M2M Partnership Expo in Beijing, China.
 - Workshop report and subcommittee meeting minutes online
 - Project opportunities highlighted at the Expo and online
 - Ag Subcommittee proposed the inclusion of agro-industrial food waste into the work of the Subcommittee

- Fourth subcommittee meeting and M2M AD workshop hosted by SEMARNAT in April 2008 in Morelia, Mexico.
 - The Subcommittee discussed:
 - The development of country specific action plans;
 - Increasing the attractiveness of the Project Network;
 - The possible creation of an AD system environmental performance protocol and a leakage rate estimation methodology;
 - The inclusion of agro-industrial waste into the work of the Subcommittee; and
 - Exploring agricultural emission reductions beyond anaerobic digestion.