



Methane to Markets

Partnership in Action

U.S. and Mexico Landfill Gas Collaboration

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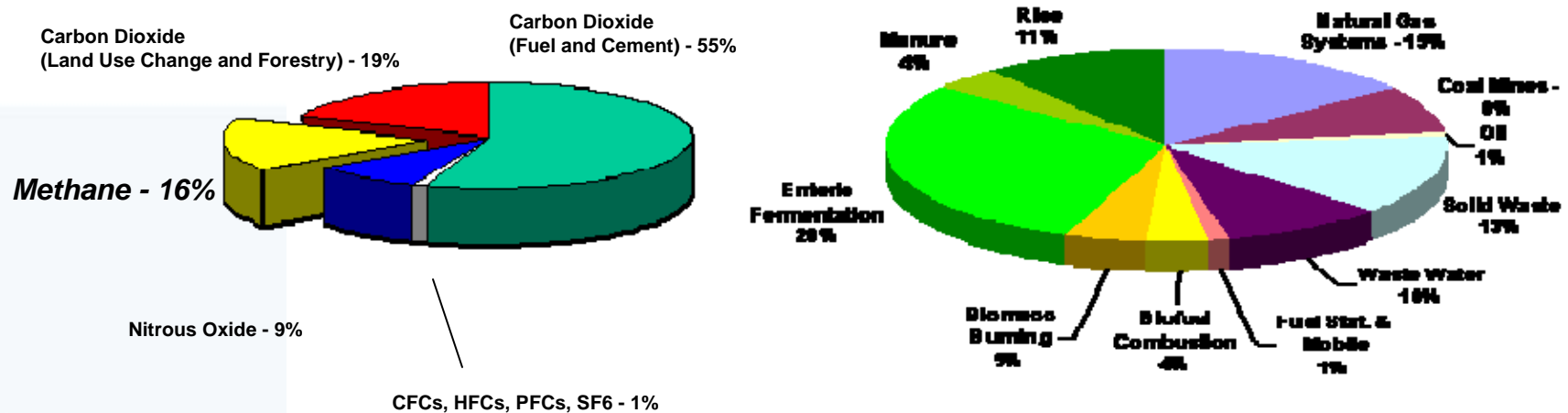
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Why focus on Methane?

- A potent greenhouse gas (GHG) with 100-year global warming potential of 21; 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

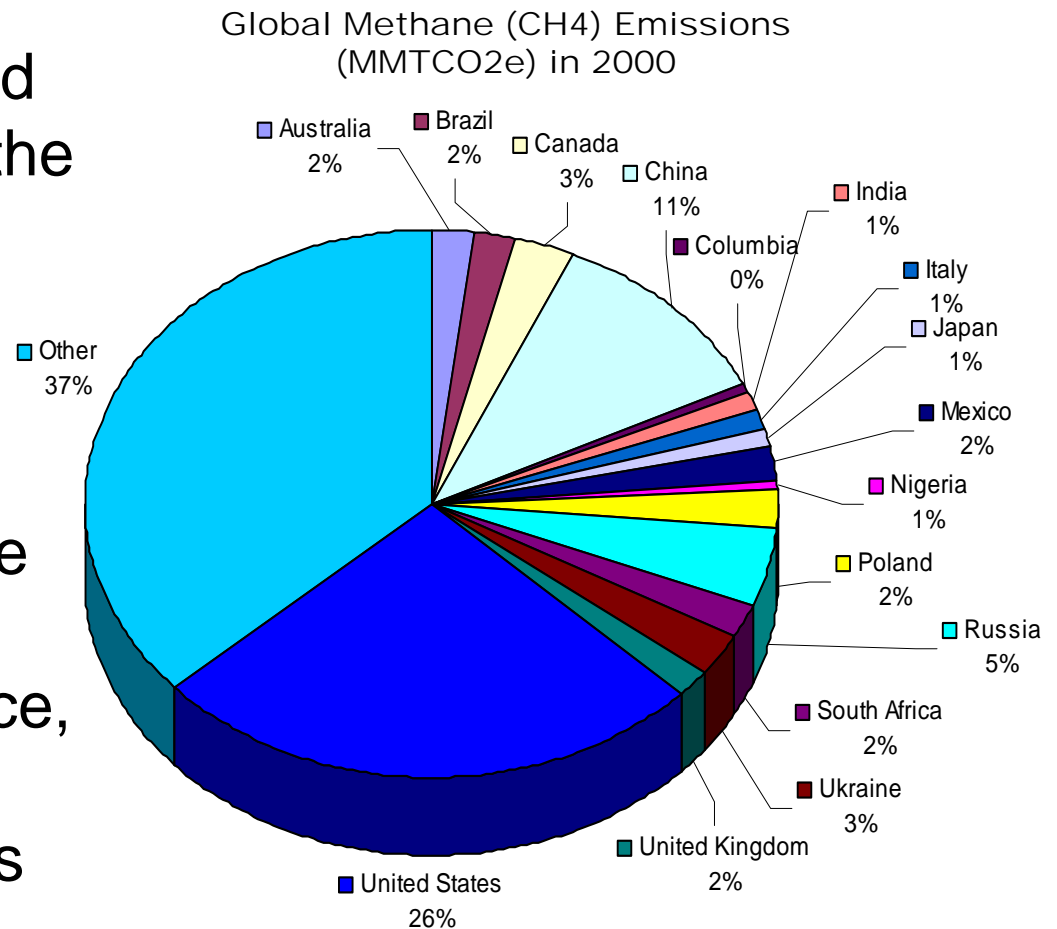
Global GHG Emissions in 2000

40,702 million tonnes carbon dioxide equivalent (MtCO₂e)



Global Landfill Methane Emissions

- Methane is produced and emitted during the anaerobic decomposition of organic material in landfills
- Globally, landfills are the 3rd largest anthropogenic source, accounting for 13 percent of emissions



Overview: Objectives and Benefits of the M2M Partnership

OBJECTIVES

- Advance the recovery and use of methane while:
 - Enhancing economic growth
 - Promoting energy security
 - Improving local air quality and public health.

BENEFITS

- Stabilization/Decline in Methane Concentrations will result in:
 - Sustainability
 - Energy security
 - Health and safety
 - Profitability

Methane to Markets Partnership

- Encourages development of **cost-effective** methane recovery and use opportunities in
 - coal mines
 - landfills
 - oil and gas systems and
 - agriculture (manure waste management)
- Private companies, multilateral development banks and other relevant organizations participate by joining the **Project Network – over 750 organizations now participating**
- **25 Partner Governments**

Argentina

Australia

Brazil

Canada

Colombia

China

European Comm.

Ecuador

Germany

India

Italy

Japan

Korea

Mexico

Mongolia

Nigeria

Pakistan

Philippines

Poland

Russia

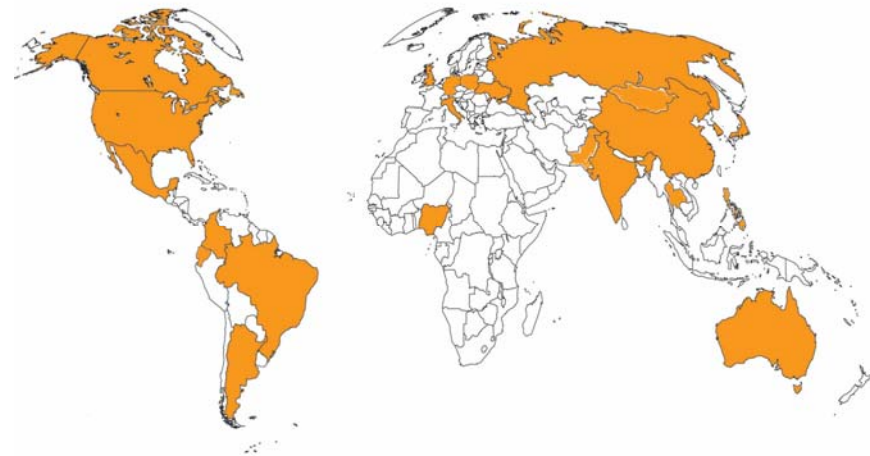
Thailand

Ukraine

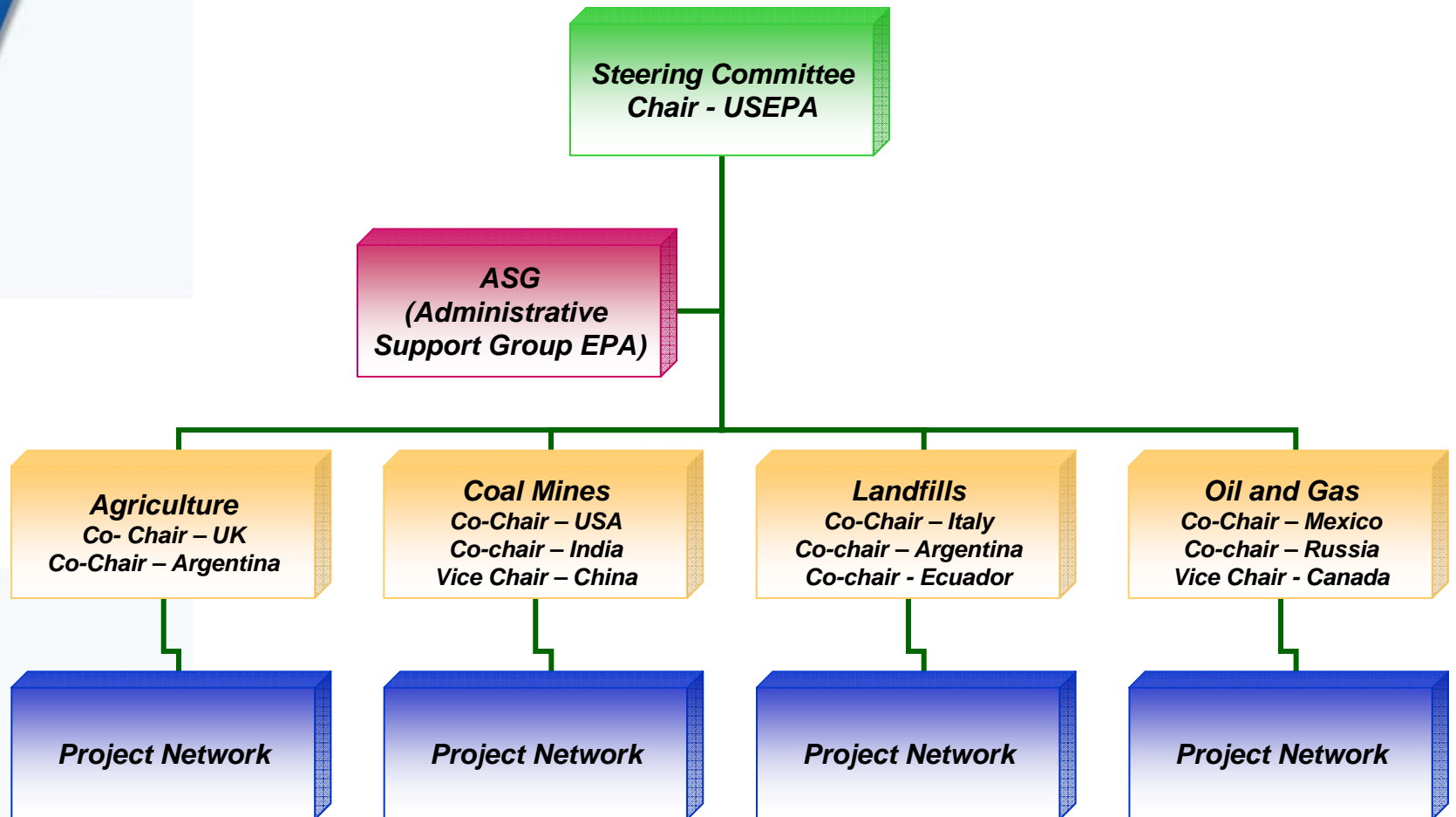
United Kingdom

United States

Vietnam



M2M Partnership Organization



The Project Network

- Project network members are private firms, development banks, NGOs or other governmental and non-governmental entities with an interest in methane recovery and use projects
 - Private sector and broad stakeholder involvement is central to the success of the Partnership
 - Provide technical input and expertise
 - Participate in all activities and meetings
 - Identify and implement activities and projects

- Currently about 900 organizations

- Organizations can join on-line at www.methanetomarkets.org

U.S. Involvement in M2M

- U.S. EPA is coordinating efforts across the U.S. government and staffs the Partnerships Administrative Support Group



- Key activities to advance project development
 - Identify and assess project opportunities
 - Pre-feasibility and Feasibility studies
 - Support technology transfer, training, and capacity building
 - Workshops and Conferences
 - Study tours
 - Developing Reports / Databases / Clearinghouses
 - Address barriers to project development and increase access to information
 - Financial/market, regulatory, technical
 - Technology demonstration and deployment

Mexico and U.S. Collaboration

- Mexico Biogas Model 1.0 and workshop in Monterrey
- USEPA, SEMARNAT, SEDESOL, NADBank, BECC, and USAID partnered to evaluate potential at landfills along the US/Mexico border
- USEPA, USAID, and SEMARNAT signed a letter of agreement to commit to supporting the goals of the M2M Partnership
- Pre-feasibility studies with pump tests conducted at Ensenada (USEPA) and Nuevo Laredo (USAID)
- Landfill operations and maintenance workshop held in Cancun
- Mexico Biogas Model 2.0



Pump Test- Ensenada



Contact Information

www.methanetomarkets.org

www.epa.gov/lmop

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