



Methane to Markets

Introduction to the Methane to Markets Partnership

Ashley M. King

Co-Director, Methane to Markets Partnership Secretariat

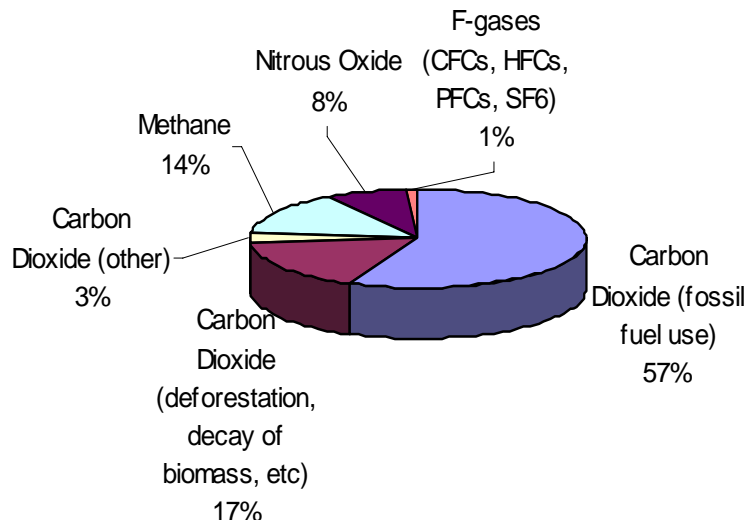
Today's Event

- Introduction to Methane to Markets
- Partner Government Experiences:
 - Poland
 - Mexico
 - United States
- Project Network Member Experiences:
 - Technology Providers- MEGTEC
 - Research/NGOs- Oil & Gas Institute, Poland
 - State & Local Gov- CETESB, Brazil
- Question & Answer

Methane as a Greenhouse Gas

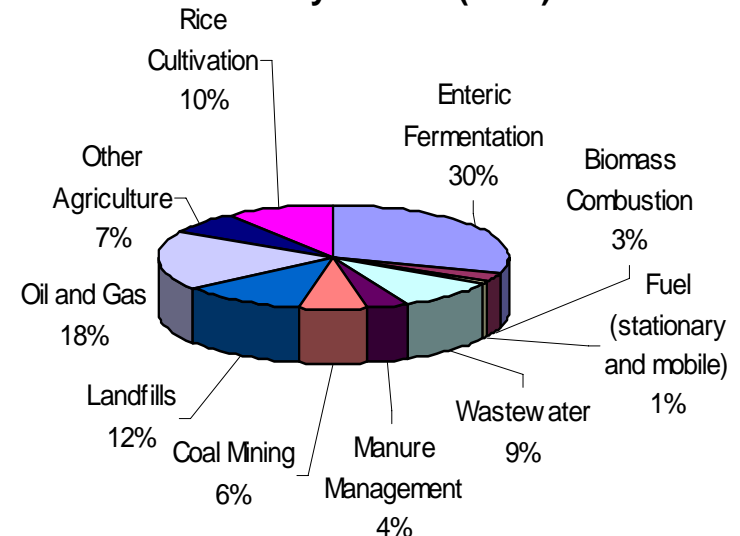
- The 2nd most important GHG, accounting for ~18% of total radiative (climate) forcing, or about one-third of that of CO₂. (IPCC)
- A potent greenhouse gas (GHG) with 100-year global warming potential (GWP) of 23 and atmospheric lifetime of ~12 years

Global Anthropogenic GHG Emissions by Gas (2004)



Source: IPCC Assessment Report 4 (2007)

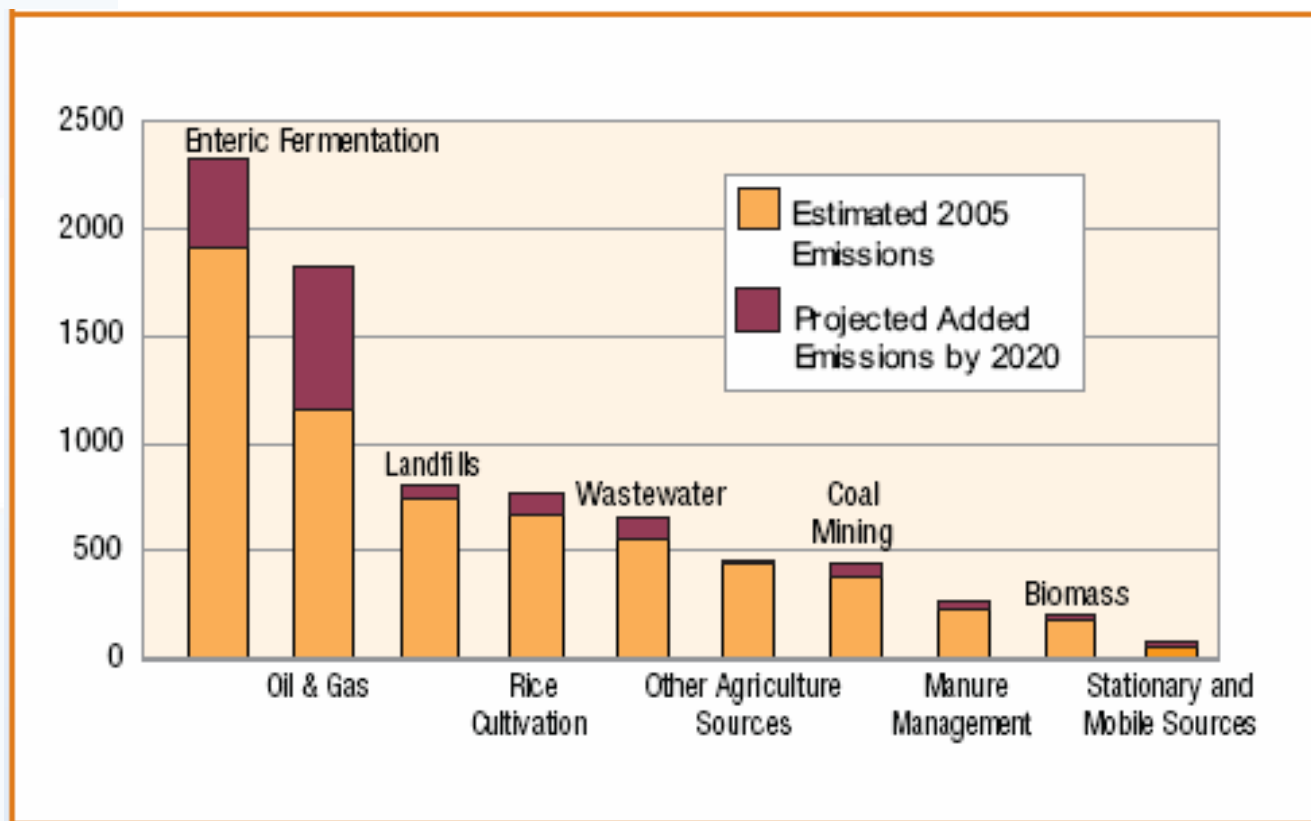
Estimated Global Anthropogenic Methane Emissions by Source (2005)



Source: U.S. EPA Report (2006)

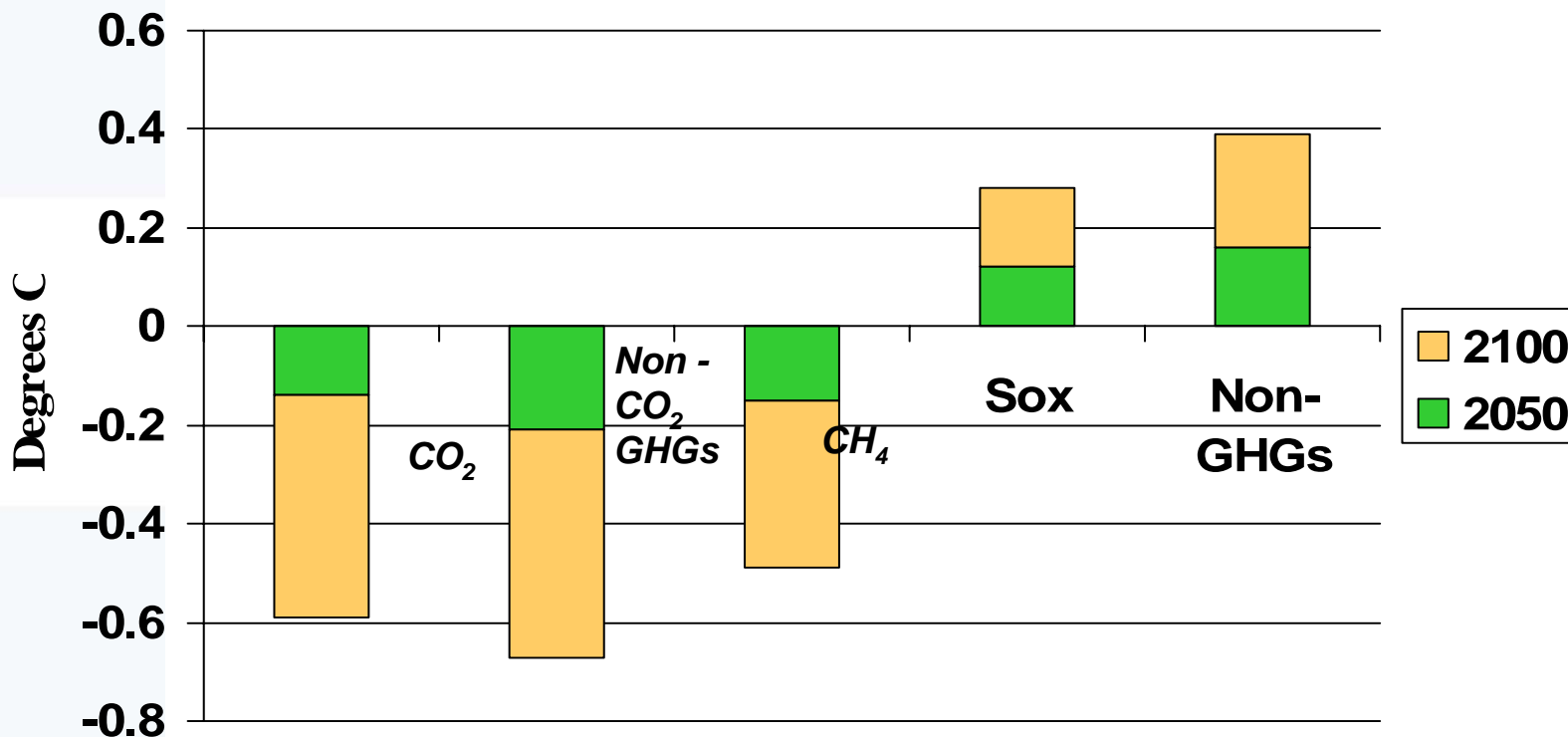
Projected Methane Increase to 2020

Global anthropogenic methane emissions are projected to increase by 23 percent to 7,904MMTCO₂E by 2020



CH₄ Reduction Offers Important Climate Benefits

Impact of a 50% reduction from BAU in 2050, maintained to 2100



Source: MIT, 2003

The Methane to Markets 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

- Public-private partnership started in 2004 with 14 Partner governments
- Encourages development of **cost-effective** methane recovery and use opportunities in



Coal Mines



Oil & Gas Systems



Landfills



Agriculture

Focus on Sectors with Large Low Cost Mitigation Potential

- Methane can be relatively inexpensive to reduce compared to CO₂ Based on the value of recovered gas.
- 500 MMTCO₂e could be reduced at or below a \$0 cost per ton of carbon.

Cost per MTCO ₂ E	\$0	\$15	\$30	\$45	\$60	Baseline (MMTCO ₂ E)
Agriculture	13%	21%	30%	34%	36%	269.3
Coal Mines	15%	80%	80%	80%	80%	449.5
Landfills	12%	41%	50%	57%	88%	816.9
Oil & Gas	10%	25%	33%	38%	54%	1,695.8

Source: *Global Mitigation of Non-CO₂ Greenhouse Gases: 1990–2020*
(EPA Report 430-R-06-005)

M2M Partner Governments

Account for more than 60% of total global anthropogenic methane emissions



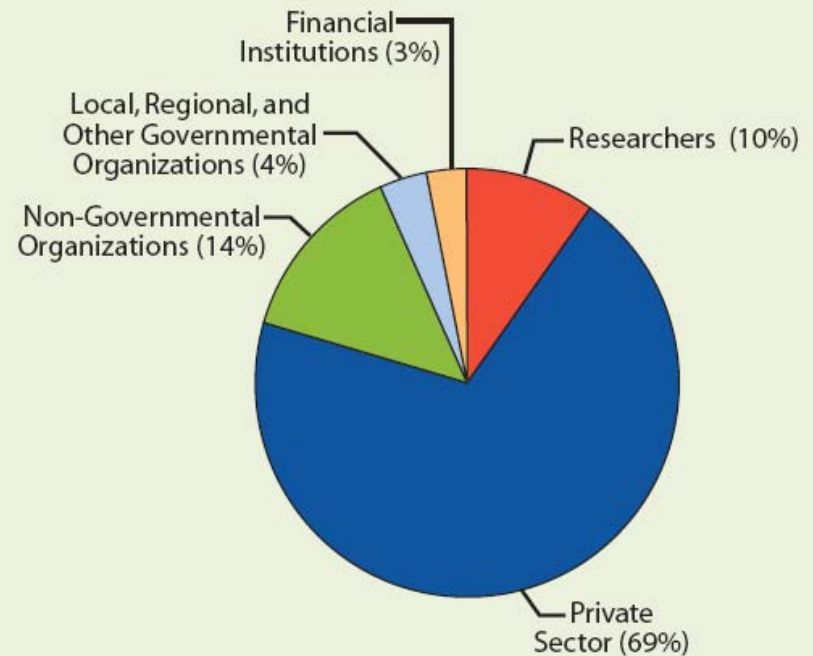
Argentina
Australia
Brazil
Canada
Colombia
China
European Comm.
Ecuador
Finland
Germany
India
Italy
Japan
Korea
Kazakhstan
Mexico

Mongolia
Nigeria
Pakistan
Philippines
Poland
Russia
Thailand
Ukraine
United Kingdom
United States
Vietnam

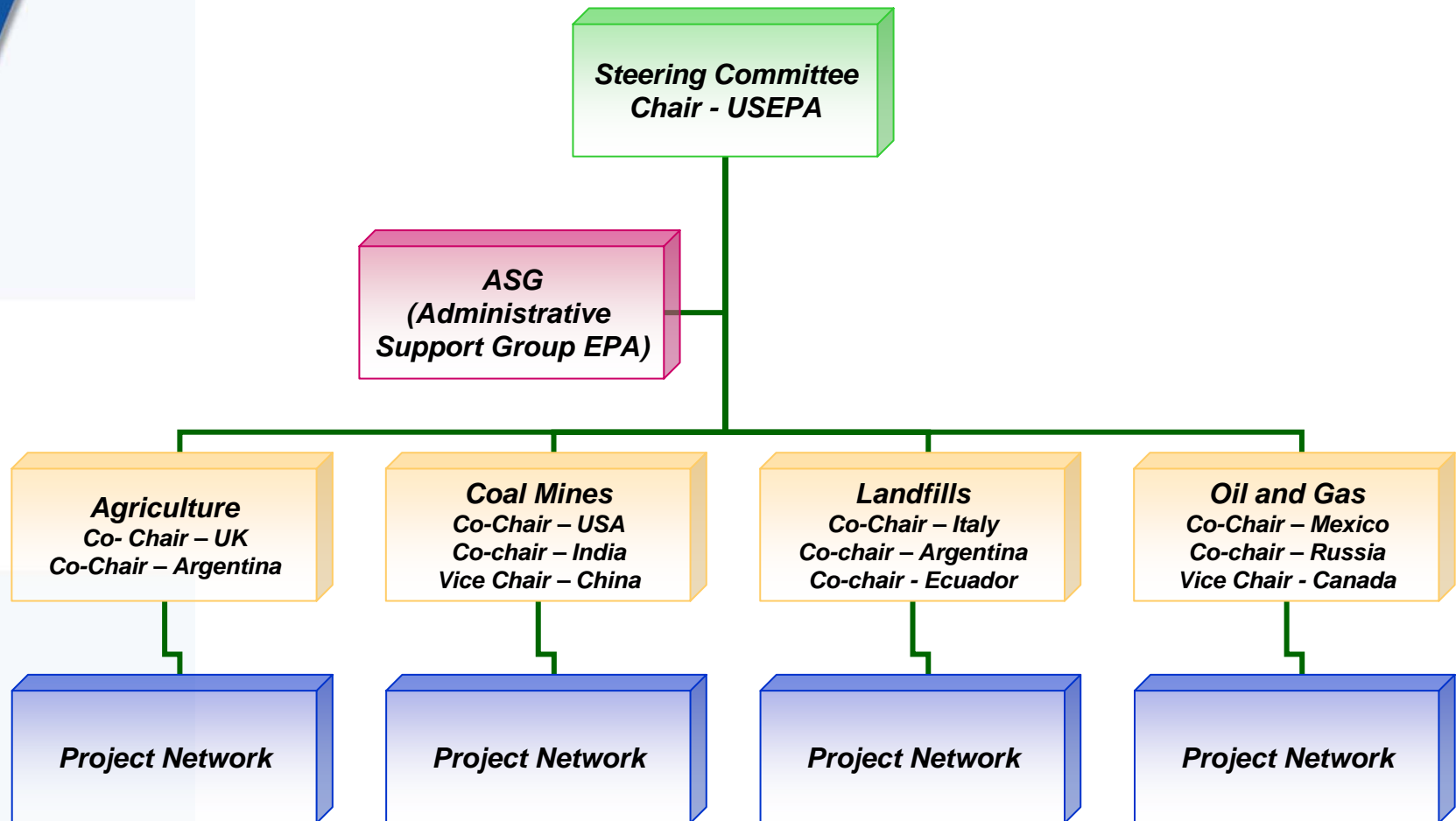
M2M Project Network

- Brings necessary actors together to implement reduction projects
- Over **800** organizations
- Project Network members can:
 - Expand business and increase profits
 - Distinguish themselves in the marketplace
 - Identify financial and technical support for potential projects
 - Build capacity
 - Fulfill strategic goals
 - Mitigate climate change

Project Network Members Represent a Diversity of Organizations



M2M Partnership Organization



Methane to Markets: Accomplishments to Date

- On track to achieve goal of delivering annual GHG reductions of 180 MMTCO₂ by 2015.
- Tracked the development of more than 140 methane emissions reduction projects in Partner countries.
- Held more than 40 meetings and workshops in 13 countries around the world.
- Organized the 2007 M2M Project Expo in Beijing, China
- Has served as a good complement to the Kyoto Mechanisms, providing technical assistance and capacity building necessary for long-term project success.



2007 Partnership Expo



Beijing, China

30 October – 1
November 2007

- Over 750 attendees from 34 countries
- High level participation
 - Minister Xie Zhenhua, Vice Chairman of NDRC opened the meeting
 - Ambassador Randt, spoke on behalf of the U.S.
 - Vice President of ADB, Bindu Lohani gave keynote speech
- International Methane Marketplace
 - 91 projects showcased
 - 39 private sector companies showcased technologies and services
 - 13 country booths
- If fully implemented these projects are estimated to yield annual methane emission reductions of approximately 11.5 million metric tons of carbon dioxide equivalent by 2015
- The Partnership has decided to organize second Expo to be held in India Winter/Spring 2010.

Upcoming Meetings

- **Steering Committee & Subcommittee Meetings**
 - January 27-29, 2009, Monterrey, Mexico
- **2nd M2M Project Expo**
 - Winter/Spring 2010, tentatively in India
- **All meeting info will be posted on:**
www.methanetomarkets.org/events/index.htm

For More Information

- Web site
 - www.methanetomarkets.org
- Administrative Support Group
 - asg@methanetomarkets.org
 - Tel: +1.202.343.9683
 - Fax: +1.202.343.2202
- Direct Contact information for ASG leads:

Ferland.Henry@epa.gov	King.Ashley@epa.gov
Tel: +1-202-343-9330	+1-202-343-9133