

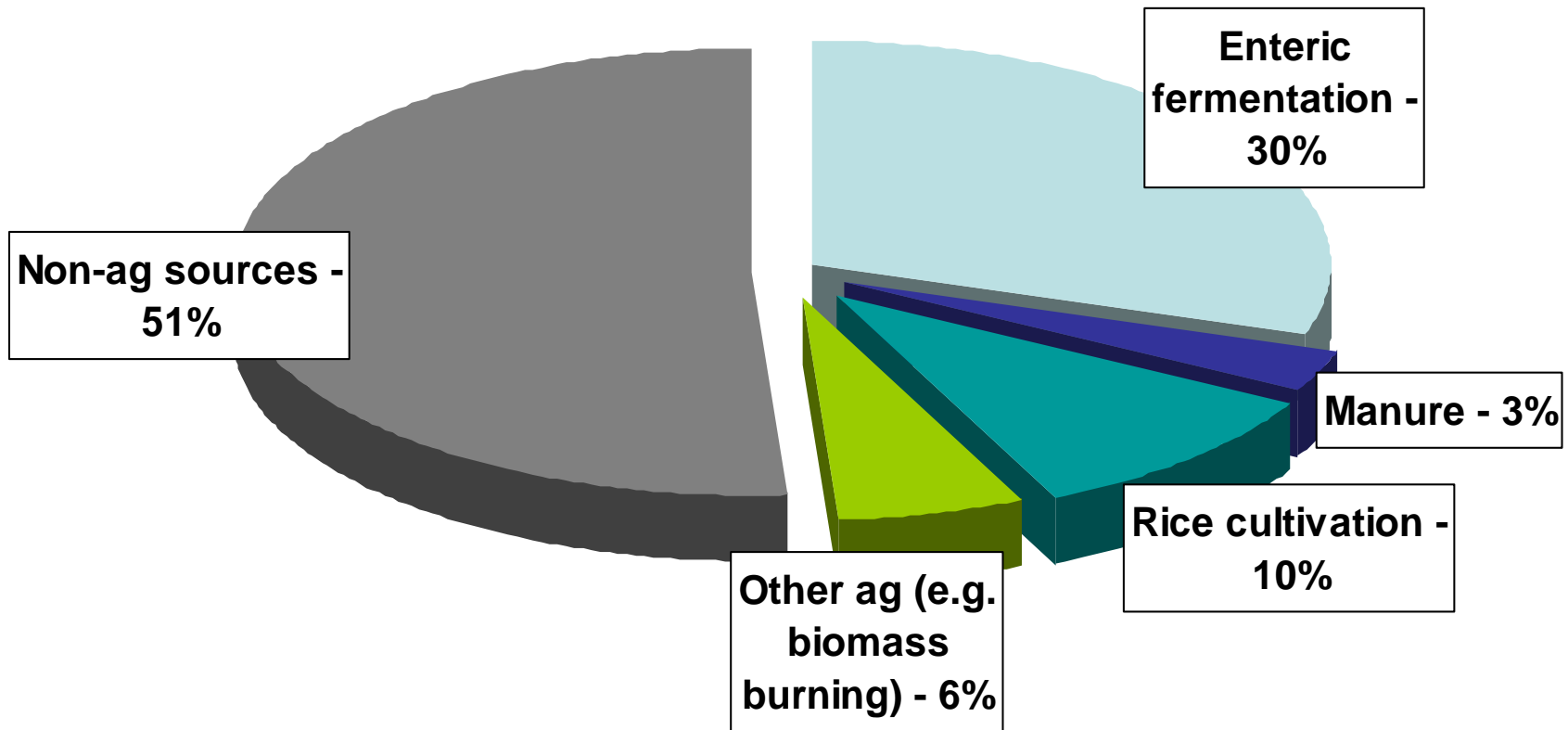
Promoting the Growth of Anaerobic Digestion in Agriculture: Lessons from National and International Experience

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Agriculture Sub-Committee Co-Chairs

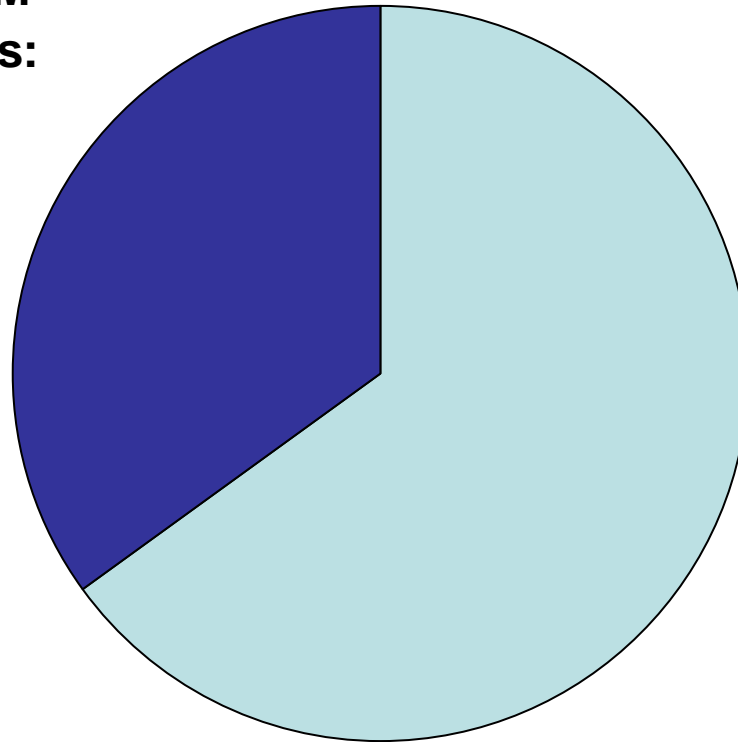
Global Methane Emissions - 2005



Data source: Global Anthropogenic Emissions of Non-CO₂ Greenhouse Gases 1990-2020 (June 2006); EPA Report 430-R-06-003

Global Manure Methane Emissions

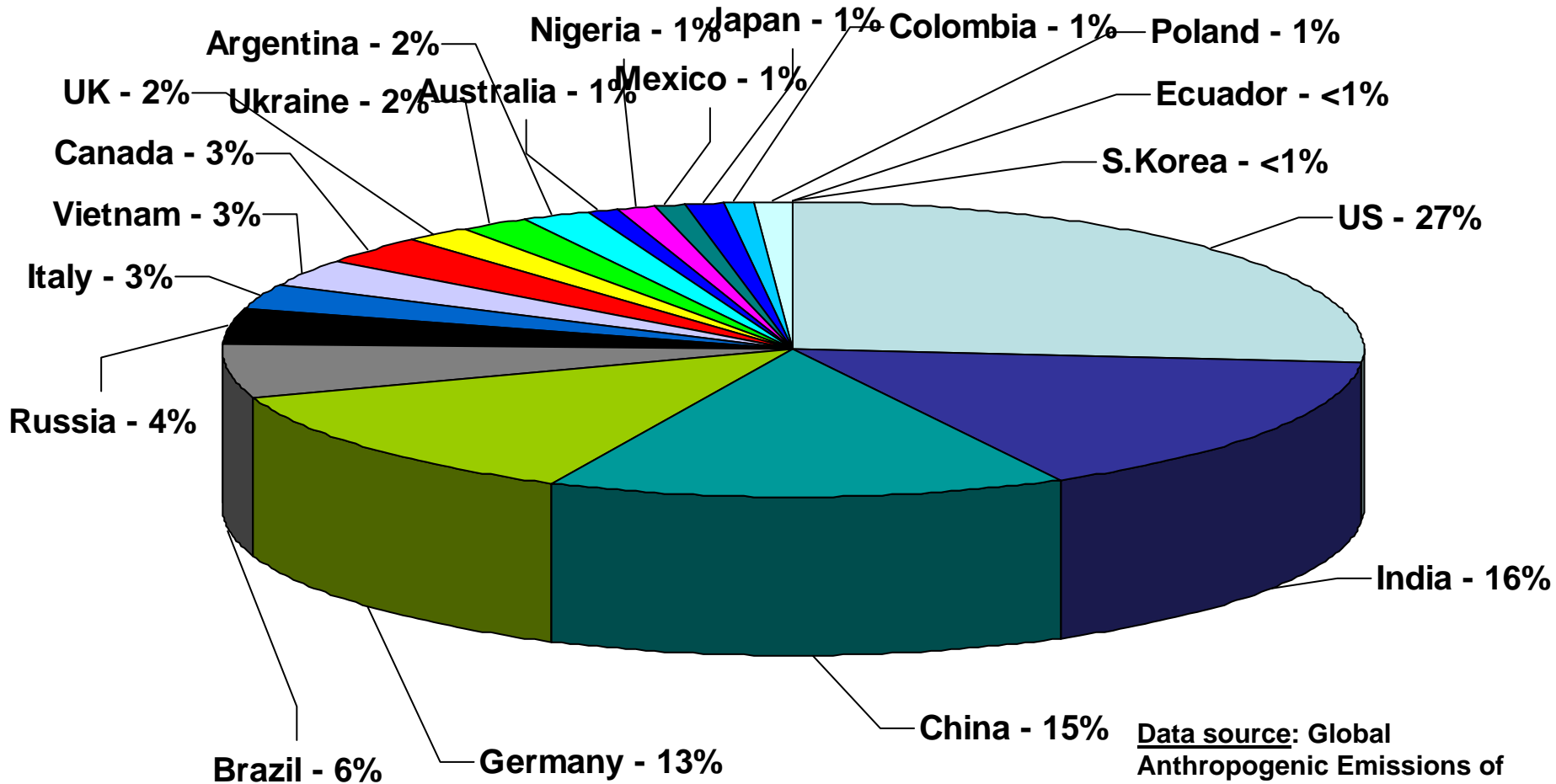
**Non-M2M
countries:
76.7
MTCe
(35%)**



**M2M
countries:
145.5
MTCe
(65%)**

Global manure methane emissions
= 222 MTCe

Manure Methane Emissions, 2005: National Contributions to M2M Total



Data source: Global Anthropogenic Emissions of Non-CO2 Greenhouse Gases 1990-2020 (June 2006); EPA Report 430-R-06-003

Agriculture Sub-Committee Action Plan: Focus on Key Barriers

- Awareness
- National capacity
- Technology
- Financial / economic
- Project identification and development
- Policy

Awareness

- Lack of awareness about:
 - Available technology
 - Project opportunities
- Need to raise awareness and stimulate markets, including beyond agriculture e.g. waste
- Lack of knowledge of benefits of AD for agriculture

National Capacity

- Proprietary nature of AD
- Lack of technology transfer
- Regional nature of AD projects, funding and technology design

Technology

- Technology concerns – e.g. availability and reliability
- Cost
- R&D needed to support technology development

Financial / Economic

- Upfront capital costs
- How to capture economic benefits
- Need to develop markets for products of AD: new sources of revenue?

Project Identification & Development

- Identifying project sites
- Working with owners, investors, planners etc

Policy

- Priorities vary nationally and regionally
- Incentives for farmers to use AD
- Regulatory barriers
- Accounting systems

M2M Agriculture Sub-Committee – Opportunities

- Sharing national experience of AD – e.g. China, Germany, UK, Argentina
- Sharing knowledge and R&D
- Identifying potential projects
- Engaging stakeholders e.g. energy companies, food companies
- Promoting case studies
- Promotional opportunities e.g. for training, collaboration, investment

UK Workshop, 29-30 November 2006

AD in Agriculture: Policies and Markets for Growth Recommendations (I)

- Increase awareness of decision makers about benefits from AD
- Standardise method of measuring carbon benefits of AD
- Provide clear messages of intent to AD developers
- Provide incentives for take-up of AD
- Facilitate easier access to finance for farmers
- Integrate environmental objectives into policy framework

UK Workshop, 29-30 November 2006

AD in Agriculture: Policies and Markets for Growth Recommendations (II)

- Facilitate the sharing of best practice between countries
- Introduce quality standards for AD products
- Increase knowledge of international market opportunities for AD
- Increase R&D on integration of carbohydrate crops into AD
- Increase public awareness and positive perception of AD

Argentina Workshop, 15-16 May 2007

Challenges & Strategies to Implement

AD in Agri-Systems

Conclusions

- Huge potential for AD in different agri-systems.
- Need to raise awareness with the investment sector and private sector - media coverage of biofuels has helped
- There is abundant international experience and channels that can help with the provision of technical assistance.
- Clean Development Mechanism (CDM) is an important route for financing AD projects.
- Need better information on the baselines of current production systems, and an adequate methodology to calculate emission reductions.

Future Issues for the Sub-Committee

- Better accounting for life-cycle benefits
- Food waste
- Slaughter house waste
- Other agricultural methane emissions