

- **Experience of methane production systems in agro and food processing industries**
Dr A G Rao, Indian Institute of Chemical Technology, Hyderabad
- **Offsetting food wastes emissions from landfills through biphasic digestion**
Ms K V Rajeshwari, The Energy and Resources Institute
- **Financial support for biogas projects in South Asia**
Mr Shirish Garud, Renewable Energy and Energy Efficiency Partnership, South Asia Secretariat

Steering Committee

- **Prof. Padma Vasudevan**, Indian Institute of Technology, Delhi (Chairperson)
- **Mr Kurt Roos**, United States Environmental Protection Agency
- **Mr K S Popli**, Indian Renewable Energy Development Agency
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- **Mr Amit Kumar**, The Energy and Resources Institute
- **Dr V V N Kishore**, TERI University
- **Dr N B Mazumdar**, The Energy and Resources Institute
- **Ms K V Rajeshwari**, The Energy and Resources Institute

About Methane to Markets

The Methane to Markets Partnership is an international initiative that advances cost-effective, near-term methane recovery and use as a clean energy source. The goal of the partnership is to reduce global methane emissions in order to enhance economic growth, strengthen energy security, improve air quality, improve industrial safety, and reduce emissions of greenhouse gases. The Partnership 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.

National governments, private sector entities, development banks, non-governmental organizations, financial and technical experts, and other interested parties are encouraged to join the partnership and collaborate to develop methane capture and use projects internationally.

About TERI

TERI, a not-for-profit research institute was established in 1974. The focus is mainly on energy, environment, and sustainable development with commitment towards efficient utilization of energy, sustainable use of natural resources, and reduction of all forms of waste. TERI has established regional centres in Bangalore, Goa, Guwahati, and Himalayas. It has also set up affiliate institutes in Washington, DC, and London and has a presence in Tokyo, Kuala Lumpur, and Dubai. The Institute has over 800 professionals involved in various activities such as providing environment-friendly solutions to rural energy problems, tackling global climate changes, enhancing forest conservation efforts among local communities, developing technological solutions for energy and resource efficiency, and many more.

For further details, please contact:

K V Rajeshwari, Fellow
TERI
Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110003
Tel: 011 24682100 or 4150 4900 (Extn. 2142)
Fax: 011 24682144 or 24682145
E mail: rajikv@teri.res.in

Methane to Markets Regional workshop on opportunities in livestock and food processing industry sector



3-4 March 2009

Venue

India Habitat Centre, Lodhi Road, New Delhi



Introduction

Rapid growth in the livestock, agro and food processing industry has resulted in the generation of a large quantity of wastes. This subsequently leads to significant methane emissions. In India, one of the major efforts in reducing the emissions has been through the utilization of these wastes for biogas production for thermal and power generation applications. In order to effectively curtail the methane emissions and exploit the enormous potential associated with these wastes, a focused interaction and knowledge sharing between stakeholders of various countries is required. This workshop will address various issues associated with the implementation of methane capture projects, thus benefiting the environment, and improving the energy scenario.

About the workshop and programme

'Methane to Markets' is an initiative of the USEPA (United States Environmental Protection Agency) for methane recovery and its use as a clean energy source. The partnership includes activities in four areas, namely landfill, agriculture, coal, and oil and gas. Under this programme, the agency is supporting projects related to methane capture and use in India, which is one of the partner countries of the Methane to Markets programme.

As part of this initiative, TERI (The Energy and Resources Institute), with the support of USEPA, is organizing a two-day regional workshop for the control of methane emissions from livestock, agro residues, and food processing industry wastes. The primary objective of the workshop is to identify areas of intervention for methane recovery and facilitate collaboration and cooperation between research and financial institutions, government bodies, entrepreneurs, and bilateral and multilateral agencies for the development of methane recovery projects. Some of the themes to be deliberated upon during this workshop are: (1) the current status of methane emissions from the livestock wastes and food processing industry; (2) biomethanation potential in the sector, along with the available technical and financial mechanisms; (3) the CDM (Clean Development Mechanism) opportunities and 4) barriers for the large-scale promotion of methane capture projects.

The workshop will have participants and speakers from South Asia, South East Asia, and developed countries. It will provide a common platform for experience-sharing and networking of various stakeholders.

The workshop will cover presentations and discussions by invited eminent speakers on the following topics.

- Technologies for methane production and capture
- Case studies and economics
- Application of methane for energy use

- Financial support and CDM benefits for methane recovery and use
- Carbon accounting and identifying market opportunities

The technical presentations will be followed by a poster session and a site visit to installations demonstrating biogas production and utilization systems.

Workshop dates: March 3-4, 2009

Abstract submission for poster session

Interested participants may submit extended abstracts (not exceeding 2 pages) on the following themes.

- Technologies for methane generation from animal wastes, agro residues, and food processing industries.
- End-use application and demonstration of the methane production system.
- Case studies on institutional and financial mechanisms for methane to markets.
- Estimation of methane emissions.

Abstracts must include the full title of the paper, and the names, affiliations, e-mail addresses, and full mailing addresses of all the authors.

**Deadline for abstract submission:
31 December 2008**

Acceptance of papers will be communicated to the lead author by 1 February 2009.

Who should attend?

- Technology providers
- Government bodies
- System manufacturers
- Consultants
- Entrepreneurs
- Industries
- Financial institutions
- Research, technical, and academic institutions
- Carbon trading firms
- State Gaushala Boards and Associations, animal farm owners
- Non governmental organizations

Registration details

Registration fee: Rs 1000

Registration fee should be paid by demand drafts drawn in favour of The Energy and Resources Institute, payable at New Delhi.

Please note that the number of participants is limited to 100. If you are interested in attending the workshop, please register by duly completing and submitting the registration leaflet.

Confirmed speakers and topics

- **Country support from the Methane to Markets partnership program**
Mr Kurt Roos, United States Environmental Protection Agency
- **Methane for transport applications**
Bo Mattiasson, Lund University, Sweden
- **Biogas from anaerobic digestion of farm wastes for thermal applications: experience in European countries**
Prof. Jukka Rintala, University of Jyväskylä, Finland
- **Demonstration of anaerobic digester for livestock wastes in Thailand**
Prof. C Viswanathan, Asian Institute of Technology, Bangkok
- **Nepal biogas project: a case of bundling of projects for CDM funding**
Mr Saroj Rai, Biogas sector partnership, Nepal
- **Biogas as automobile fuel: case study of Gaushalas in Rajasthan**
Dr V K Vijay, Indian Institute of Technology, Delhi
- **Cluster based approach for methane production in dairy and poultry farms in India**
Dr K Vijaya Lakshmi, Development Alternatives, New Delhi
- **Demonstration of biogas digester for dairy waste in India**
Dr Mahesh Patankar, International Institute for Energy Conservation, Mumbai
- **Biogas from organic wastes through decentralized systems**
Dr H N Chanakya, Indian Institute of Science, Bangalore
- **Electricity production from a dairy complex: a case study**
Mr M P Singh, Punjab Energy Development Agency, Chandigarh
- **Technologies for biogas upgradation and compression of purified biogas**
GE Jenbacher gas engine, Bangalore