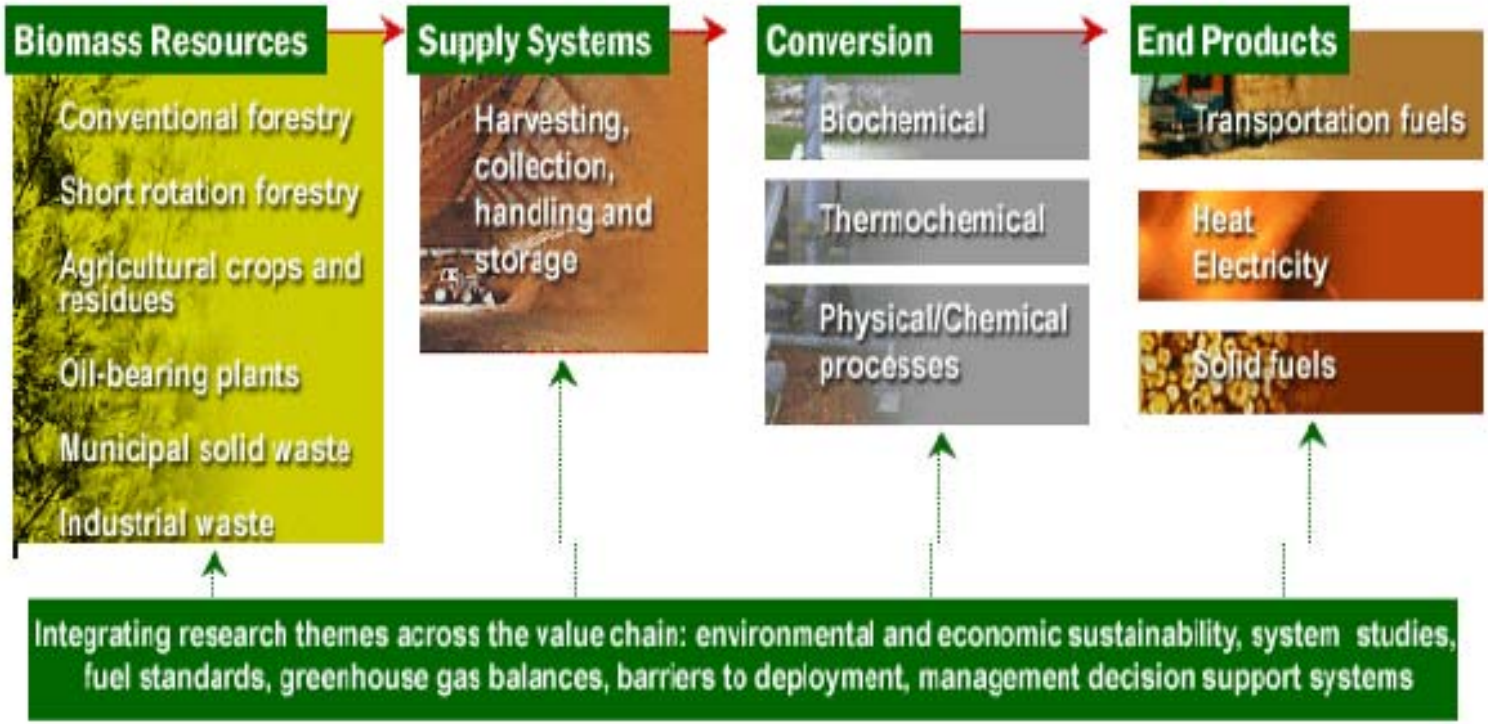
IEA Bioenergy

Task 37
Energy from Biogas

A Brief Summary

David Baxter

IEA Bioenergy



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IEA Bioenergy presently comprises 12 Tasks

Task 29: Socio-Economic Drivers in Implementing Bioenergy Projects
Task 32: Biomass Combustion and Co-Firing
Task 33: Thermal Gasification of Biomass
Task 34: Pyrolysis of Biomass
Task 36: Integrating Energy Recovery into Solid Waste Management
Task 37: Energy from Biogas
Task 38: Greenhouse Gas Balances of Biomass and Bioenergy Systems
Task 39: Commercialising Liquid Bio-Fuels from Biomass
Task 40: Sustainable International Bioenergy Trade – Securing Supply and Demand
Task 41: Joint Project with the Advanced Motor Fuels Implementing Agreement
Task 42: Biorefineries: Co-Production of Fuels, Chemical, Power and Materials from Biomass
Task 43: Biomass Feedstocks for Energy Markets

Member countries participating in Task 37:

Energy from Biogas

Austria	Peter Holubar / Bernard Drosz
Brazil	Guilherme Fleury Soares
Canada	Andrew McFarlan
Denmark	Teodorita Al-Seadi
European Commission	David Baxter (Task Leader)
Finland	Jukka Rintala / Annimari Lehtomaki
France	Olivier Theobald / Guillaume Bastide
Germany	Peter Weiland / Bernd Linke
Ireland	Jerry Murphy
Netherlands	Mathieu Dumont
Norway	Espen Govasmark
Sweden	Anneli Petersson
Switzerland	Arthur Wellinger / Nathalie Bachmann
Turkey	Selman Cagman / Volkan Çoban
United Kingdom	Clare Lukehurst / Oliver Harwood

Objectives

Technical

collection, verification, exchange and dissemination of information, promotion of new and improved technologies and products, stimulating interaction between industry, policy makers and research

Policy Support

assistance to local and national governments to understand biogas technologies and products and to adopt appropriate industry best practices and standards

Scope of Biogas Systems

- Agricultural
  slurries, residues, energy crops
  (mono-digestion or co-digestion)
- Organic fraction of municipal solid waste
  biowaste
- Waste water treatment/sewage sludge

- Electricity generation/CHP
- Injection in grid/compression for vehicle fuel

Key Issues

Sustainability

energy and cost balances for farm and non-farm biogas process pathways, emissions related to substrates, gas production, up-grading for direct energy production, heat and electricity, or injection into the natural gas grid

Quality

expert support to standards process; main focus on pipeline injection (CEN) and digestate use as bio-fertiliser

Task 37
Work Programme 2010-2012

Topics

Technical and Policy Support:

1. Substrates for biogas production
2. Optimisation of digestion processes
3. Biogas up-grading and pipeline injection
4. Digestate processing and quality
5. Emissions from biogas installations

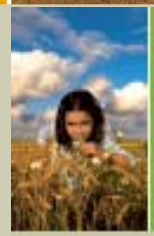
Publications

Biogas from Energy Crop Digestion

Rudolf BRAUN
Peter WEILAND
Arthur WELLINGER

Biogas upgrading technologies – developments and innovations

Anneli PETERSSON
Arthur WELLINGER



Utilisation of digestate from biogas plants as biofertiliser

Clare T. LUKEHURST
Peter FROST
Teodorita AL SEADI

ANIMAL BY-PRODUCTS AND ANAEROBIC DIGESTION

Requirements of the European Regulation (EC) No 1774/2002

SEPTEMBER 2003

Web Address: www.iea-biogas.net

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Work in progress

1. Extension of energy crop report to include additional feedstocks (detailed description of grass digestion)
2. Pre-treatments of feedstocks, including ligno-cellulosic biomass
3. AD process monitoring techniques
4. Economics of small-scale biogas production
5. Success stories in biogas up-grading
6. Standards and quality assurance of digestate
7. Emissions monitoring and control
8. Dissemination through contacts with local/national authorities and industry

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All input welcome

All opportunities for dissemination welcome

Thank you for your attention

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