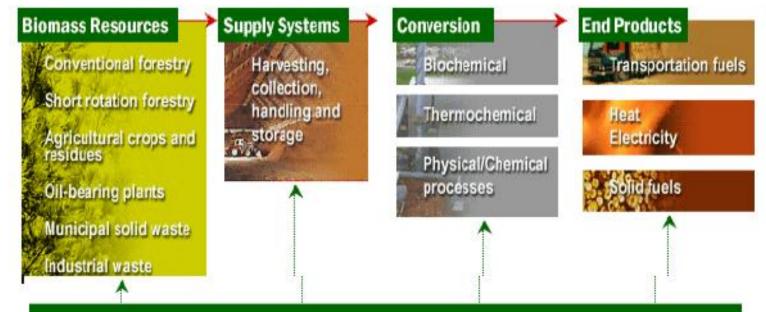




# Task 37 Energy from Biogas An Overview

**David Baxter** 

#### **IEA Bioenergy**



Integrating research themes across the value chain: environmental and economic sustainability, system studies, fuel standards, greenhouse gas balances, barriers to deployment, management decision support systems

#### www.ieabioenergy.com



#### 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<sup>.</sup> 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 Brazil Denmark European Commission Finland France Germany Ireland Korea **Netherlands** Norway Sweden Switzerland United Kingdom

Bernard Drosg / Günther Bochmann Cícero Jayme Bley Jr. Teodorita Al-Seadi David Baxter (Task Leader) Jukka Rintala / Outi Pakarinen Olivier Théobald / Guillaume Bastide **Bernd** Linke Jerry Murphy Ho Kang Mathieu Dumont **Roald Sørheim** Tobias Persson / Mattias Svensson Nathalie Bachmann Clare Lukehurst

IEA Bioenergy Task 37

### Task 37 Work Programme 2013-2015



### Scope of Task 37 Studies

- Agricultural slurries, crops & crop residues
- Organic fraction of municipal solid waste
- Waste water treatment/sewage sludge

• Heat, electricity generation & CHP

IEA Bioenergy Task 37

 Up-grading to biomethane - Injection into grid/compression for vehicle fuel



## Work in progress

- 1. Pre-treatments of feedstocks, including ligno-cellulosic biomass
- 2. AD process monitoring techniques/process optimisation
- 3. AD of sewage sludge
- 4. Economics of small-scale biogas production
- 5. Digestate up-grading techniques
- 6. Biogas in Smart Grids
- 7. Biomethane as a vehicle fuel
- 8. Emissions monitoring and control
- 9. Success Stories (focus on successful projects)
- 10.Dissemination through contacts with local/national authorities and industry



#### Web Address: www.iea-biogas.net

Quality management of digestate from biogas plants used as fertiliser

Teodorita AL SEADI Clare LUKEHURST



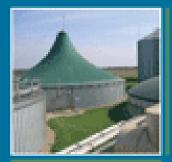


IEA Bioenergy Task 37

### The Biogas Handbook Science, production And applications

### 2013

http://www.woodheadpublishing.com/ en/book.aspx?bookID=2576 WOODHEAD PUBLISHING SERIES IN ENERGY



The biogas handbook Science, production and applications

Edited by Arthur Wellinger, Jerry Murphy and David Baxter

IEA Bioenergy







### All input welcome

## All opportunities for dissemination welcome

## Thank you for your attention

Web Address: www.iea-biogas.net