



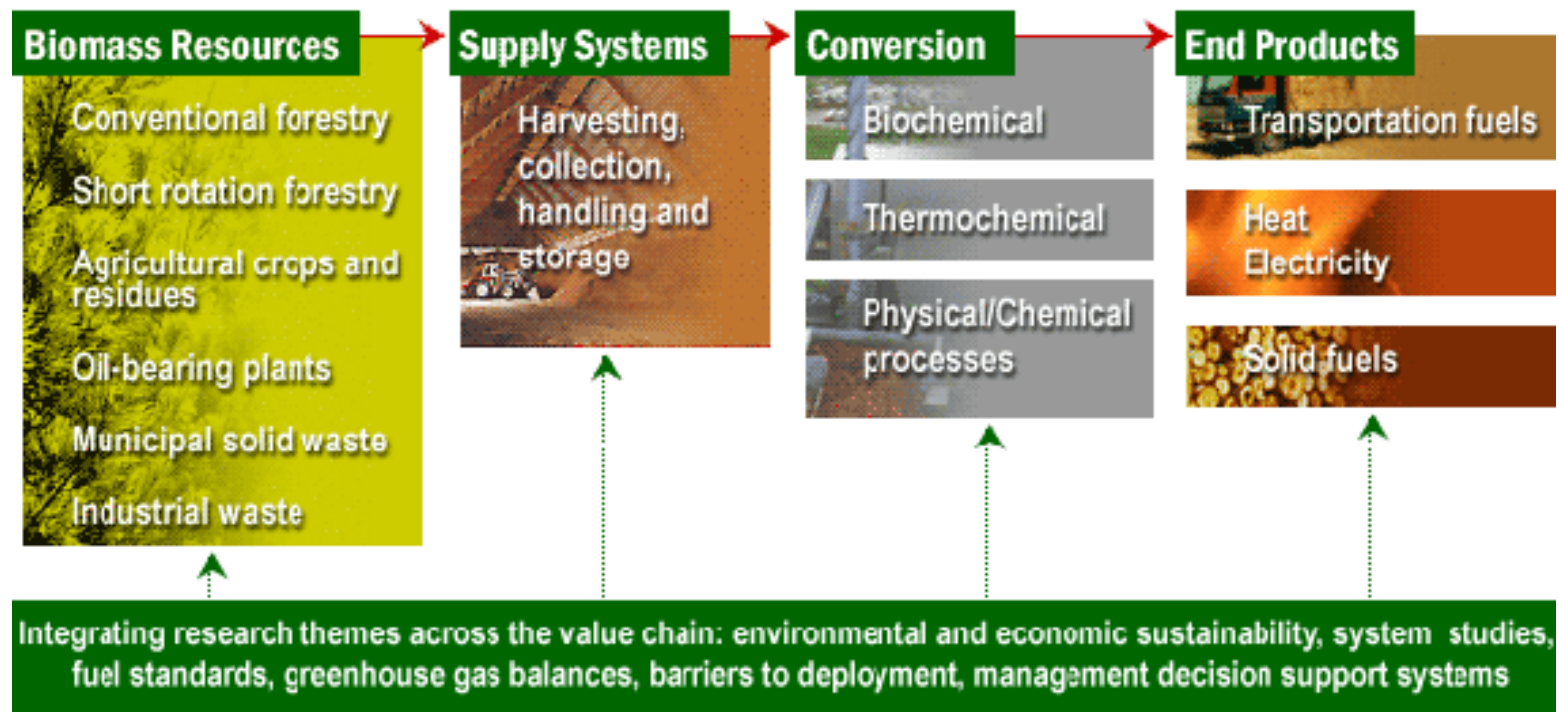
IEA Bioenergy

Task 37

Energy from Biogas

An Overview

David Baxter



www.ieabioenergy.com

The logo features the text "IEA Bioenergy" in white serif font on a blue rectangular background. This background is centered over a horizontal strip of a photograph showing a pile of brown, dried leaves and organic matter.

IEA Bioenergy

IEA Bioenergy presently comprises 10 Tasks

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: Climate Change Impacts of Biomass and Bioenergy Systems

Task 39: Commercialisation of Conventional and Advanced Liquid Biofuels
from Biomass

Task 40: Sustainable Bioenergy Markets and International Trade: Securing
Supply and Demand

Task 42: Biorefineries: Sustainable Processing of Biomass into a Spectrum of
Marketable Biobased Products and Bioenergy

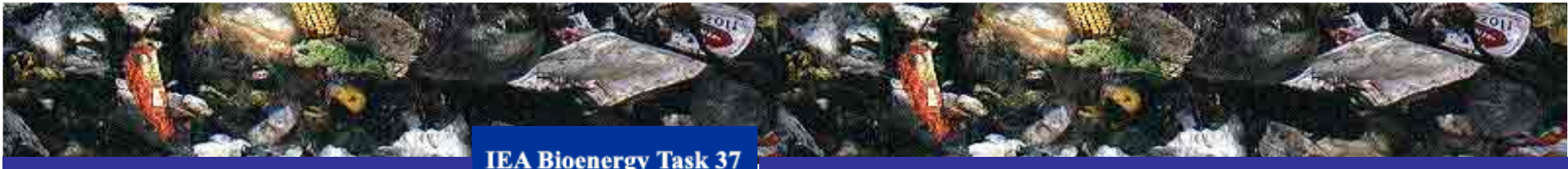
Task 43: Biomass Feedstocks for Energy Markets



IEA Bioenergy Task 37

Member countries participating in Task 37

Austria	Bernard Drosig / Günther Bochmann
Brazil	Cícero Jayme Bley Jr.
Denmark	Teodorita Al-Seadi
European Commission	David Baxter (Task Leader)
Finland	Jukka Rintala / Outi Pakarinen
France	Olivier Théobald / Guillaume Bastide
Germany	Bernd Linke
Ireland	Jerry Murphy
Korea	Ho Kang
Netherlands	Mathieu Dumont
Norway	Roald Sørheim
Sweden	Tobias Persson / Mattias Svensson
Switzerland	Nathalie Bachmann
United Kingdom	Clare Lukehurst / Charles Banks



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

Work in progress

1. Pre-treatments of feedstocks
2. AD process monitoring techniques/process optimisation
3. Economics of small-scale biogas production
4. Source separation of food waste
5. Digestate up-grading techniques
6. AD of algae
7. Biogas in up-grading (grid injection)
8. Biomethane use as a vehicle fuel
9. Emissions monitoring and control (LCA)
10. AD of sewage sludge
11. Success Stories (successful biogas implementation)



IEA Bioenergy Task 37

Publications

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



Biogas from Crop Digestion

Jerry MURPHY
Rudolf BRAUN
Peter WEILAND
Arthur WELLINGER



Web Address: www.iea-biogas.net

Quality management of digestate from biogas plants used as fertiliser

Teodorita AL SEADI
Clare LUKEHURST



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BIOGAS IN SOCIETY
A Success Story from
IEA BIOENERGY TASK 37
"Energy from Biogas"

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IEA Bioenergy Task 37

BIOGAS IN SOCIETY
A Success Story from
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IEA Bioenergy Task 37

BIOGAS IN SOCIETY
A Success Story from
IEA BIOENERGY TASK 37
"Energy from Biogas"

NUTRIENT RECOVERY FROM DIGESTATE AND BIOGAS UTILISATION BY UP-GRADING AND GRID INJECTION

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BIOGAS IN SOCIETY
A Success Story from
IEA BIOENERGY TASK 37
"Energy from Biogas"

PIONEERING BIOGAS FARMING IN CENTRAL FINLAND

BRUCK AN DER LEITHA (AUSTRIA)

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BIOGAS IN SOCIETY
A Case Story from
IEA BIOENERGY TASK 37
"Energy from Biogas"

MEMBRANE UP-GRADING OF BIOGAS TO BIOMETHANE FOR GRID INJECTION

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BIOGAS IN SOCIETY
A Case Story from
IEA BIOENERGY TASK 37
"Energy from Biogas"

BIO-ENERGY IN FAMILY FARMING A NEW SUSTAINABLE PERSPECTIVE FOR THE RURAL SECTOR IN BRAZIL

THE FIRST ORGANIC BIOGAS PLANT IN DENMARK

Web Address: www.iea-biogas.net

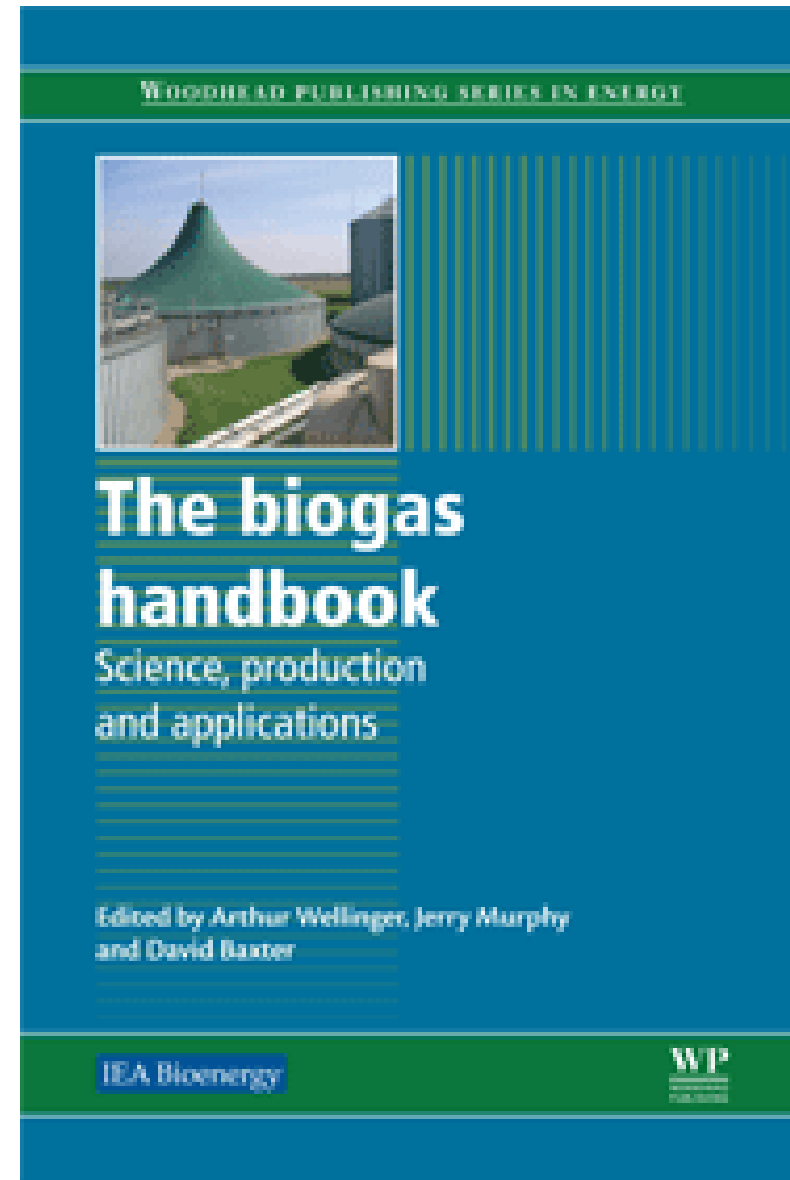
DEMONSTRATION PROJECT AT BORDING ORGANIC FARM

PUBLISHED: SEPTEMBER 2013

The Biogas Handbook Science, production And applications

2013

[http://www.woodheadpublishing.com/
en/book.aspx?bookID=2576](http://www.woodheadpublishing.com/en/book.aspx?bookID=2576)





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All input welcome

All opportunities for dissemination welcome

Thank you for your attention

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