

An integrated network on thermal biomass conversion for power, heat and transport fuels

# ThermalNet

**Supported by**

Intelligent Energy – Europe  
Programme of the European Community

and IEA Bioenergy for PyNe

# Structure

**ThermalNet**

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**CombNet (Combustion Network)**

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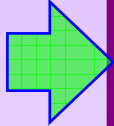
**GasNet (Gasification Network)**

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**PyNe (Pyrolysis Network)**

# ThermalNet activities

An integrated matrix of 3 conversion technologies and 12 tasks

	PyNe	GasNet	CombNet	
<b>IEA Bioenergy</b> 				
<b>Technology, applications, policy, strategy</b>	Experts	Experts	Experts	Co-ordinator
<b>Technical issues</b>	Experts	Experts	Experts	Task leaders
<b>Non-technical issues</b>	Experts	Experts	Experts	Task leaders
	Pyrolysis	Gasification	Combustion	

# Tasks

TECHNICAL ISSUES	NON-TECHNICAL ISSUES
Characterisation & analysis	Barriers (T&NTB)
Co-processing & co-firing	Education and training
Feedstocks	Economics
Fouling, corrosion, erosion	Environment health & safety
Gas treatment	
Science and modelling	
Transport fuels	
Biorefinery	

# ThermalNet

	PyNe	GasNet	CombNet	
<b>TECHNOLOGY</b>				
Technology, applications, policy and strategy	T Bridgwater	H Hofbauer	S van Loo	
<b>TECHNICAL TASKS</b>				
Characterisation & analysis	Experts	Experts	Experts	A Oasmaa
Co-processing and co-firing	Experts	Experts	Experts	G Brem
Feedstocks and standards	Experts	Experts	Experts	M Doran
Fouling, corrosion, erosion	Experts	Experts	Experts	W Livingston
Gas treatment	Experts	Experts	Experts	R Padban
Science and modelling	Experts	Experts	Experts	C Di Blasi
Transport fuels	Experts	Experts		H Boerrigter
Biorefinery (IEA)	Experts			D Elliott
<b>NON-TECHNICAL TASKS</b>				
Barriers	Experts	Experts	Experts	P Thornley
Economics	Experts	Experts	Experts	M Lauer
Education and training	Experts	Experts	Experts	D Chiaramonti
Environment, health & safety	Experts	Experts	Experts	P Girard#

# New Experts

## WELCOME TO:

- Janina Ilmurzynska – Institute of Power Engineering, Warsaw, Poland
- Pavel Kolat – Technical University of Ostrava, Czech Republic
- Wieslaw Rybak – PWR, Wroclaw, Poland
- Jozef Viglasky – Technical University of Slovenia, Slovenia
- Wojciech Nowak – Czestochowa University of Technology, Poland (*APOLOGIES*)

# Aims

- To support more effective implementation of thermal biomass conversion technologies by addressing technical, non-technical and commercialisation issues of the whole bioenergy chain.

# Expected results

- A comprehensive trans-European forum that covers all the issues necessary to establish a successful European thermal bio-energy industry will be established, in which the matrix of 3 technologies and 12 tasks provide a high level of interaction between common issues.
- Every effort will be made to ensure that the emerging bioenergy industry sector can contribute to and benefit from the Network.
- The forum will disseminate its activities and outputs through the medium of technology focussed newsletters, websites, reports and conference proceedings.

# Outputs

- Website – [www.thermalnet.co.uk](http://www.thermalnet.co.uk)
- Newsletter – One newsletter, twice a year, with news on:
  - General topics,
  - Combustion,
  - Gasification
  - Pyrolysis
- Technical reports
- Conferences, workshops, seminars
- Interactions with EubioNetII, Bioenergy NoE, IEA Bioenergy tasks, and other networks and organisations

# Programme for Lille

## Monday 3 April 2006

12.30	Lunch
14.00	<b>Welcome</b> Conference, Newsletter, Website, Task Reports, Next Meeting
14.10	<b>Combustion, Gasification and Pyrolysis</b> Review of Work Packages
15.30	Break
16.00	<b>Workshop: Characterisation and Analysis</b> Anja Oasmaa & Dietrich Meier
18.00-22.00	ThermalNet <b>Steering Committee</b> Meeting and Dinner
20.00	Delegates Dinner - own arrangements

## Tuesday 4 April 2006

09.00	<b>Workshop: Modelling</b> Columba Di Blasi and Invited Speakers			
10.30	Break			
11.00	Modelling workshop continued			
12.30	Lunch			
14.00	<b>Summary of modelling workshop</b>			
14.10	<b>Workshop: Gas Treatment</b> Thomas Kaberger and Invited Speakers			
15.30	Break			
16.00	<b><i>Informal Task Meetings</i></b>			
to 18.00	<b>Short Meeting with new experts</b>	<b><i>Barriers</i></b> P Thornley & W Prins	<b><i>Education &amp; Training</i></b> D Chiaramonti	<b><i>Economics &amp; Transport Fuels</i></b> M Lauer & H Boerrigter
19.30	<b>ThermalNet Group Dinner at hotel</b>			

<b>Wednesday 5 April 2006</b>	
09.00	<b>Workshop: Economics and MCDA</b> - Max Lauer
11.00	Break
11.30	<b>Workshop: Co-processing</b> - Gerrit Brem
13.00	Review of WP plans and goals Close of ThermalNet Meeting
13.00	Lunch
14.00- 18.00	<b>Technology:</b> Pytec – S Schöll; BTG – W Prins; D Honsbein <b>Workshop: Pyrolysis Technical Barriers</b> – P Thornley+W Prins <b>Lignin Pyrolysis Round Robin</b> – D Meier + D Elliott
19.30	<b>PyNe Dinner</b>
<b>Thursday 6 April 2006</b>	
09.00- 12.00	<b>Biorefineries</b> - Doug Elliott <b>TEA for biorefineries</b> – Max Lauer
12.00	Lunch

# Domestic aspects

- Vegetarians
- Monday dinner on own EXCEPT Steering Committee – meet at 18.00 in here with dinner together afterwards
- Hotel bills must be settled before you leave

## PyNe meeting

Crowne Plaza Hotel, Lille, France. Monday 3 April– Thursday 6 April 2006

### Wednesday 5 April 2006

14.00-  
18.00

**Pyrolysis Technology 1** – T Bridgwater

BTG – Wolter Prins

Pytec – Stefan Schöll

**Workshop Pyrolysis Technical Barriers** – P Thornley + W Prins

**Lignin Pyrolysis Round Robin** – D Meier + D Elliott

19.30

**PyNe Dinner**

### Thursday 6 April 2006

09.00-  
12.00

**Pyrolysis Technology 2** – T Bridgwater

Rodim chemicals – Dagmar Honsbein

FZK – Andreas Hornung

**Biorefineries** - Doug Elliott

Review

**TEA for biorefineries** – Max Lauer

Discussion

**Study tours: USA + Canada; Europe**

**Review and closure**