

Biomass cogeneration in Europe BIOCOGEN

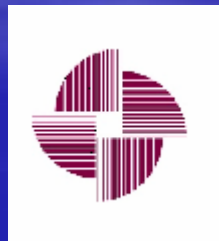
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BIOCOGEN framework

European imperatives:

- White Paper target of 6 Mtoe of biomass fuels used in cofiring by 2010
- 5th Framework strategic priority of 26Mtoe of biomass used in CHP by 2010
- 5th Framework target of Euro 1500 / kW_e installed and Euro 0.05 / kWh_e generated
- The promotion of electricity from renewable energy sources. *Directive 2001/77/EC*
- CHP Directive: Aims to contribute to: fair competition in a liberalized market, environmental and climate protection, and security of energy supply.
- A Sustainable Europe for a Better World: a European Union Strategy for Sustainable Development. European Commission Communication COM(2001)264



Partners

EU & eastern European

Austria: Joanneum Research

Bulgaria: Ecolinks

UK: TV Energy Ltd.

Denmark: EnergiGruppen Jylland a/s

Finland: Technical Research Centre

France: Institut Technique Europeen du Bois-Energie

Slovenia: Forestry Institute

Sweden: Sveriges Lantbruksuniversitet

Turkey: TUBITAK- Marmara Research Centre



BIOCOGEN

Funded by DG Research.

- 24 month duration (1/12/2001- 30/11/2003).
- Six work packages (incl. project management) with different lead partners.
- Desk-based reviews & surveys, networking & events, reporting & dissemination.
- Wide interpretation of biomass (incl. MSW, sewage).



Work Packages

- 1 Management
- 2 Ongoing Activities
- 3 Markets
- 4 Plants & Stakeholders
- 5 Performance & Good Practice
- 6 Dissemination



WP2: Ongoing activities

- **Aim:** To present an overview of biomass CHP activities; to present details for selected plants.
- **Lead:** Joanneum Research, Austria
- **Tasks:** Review in each partner country and the non participants from www.iea.org and other national sources; survey of 5 plants in each participating country; international review and networking (eg with IEA)



Biocogen existing biomass cogeneration

	Waste treatment	Sewage treatment	Agro-industry	Wood industry	Pulp & paper	District heating
Austria				*		*
Belgium						
Bulgaria						
Denmark	*		*			*
Finland				*	*	*
France		*	*		*	
Germany						*
Greece	*	*				
Ireland						
Netherlands						*
Portugal				*		
Sweden				*		*
Slovenia		*		*		
Spain					*	*
Turkey	*	*				
UK	*	*		*		

WP3: Markets

- **Aims:** To present an assessment of the market (current & future demand, barriers); to propose priority measures for expansion of biomass CHP.
- **Lead:** ITEBE, France
- **Tasks:** Analysis of markets; assessment of barriers to market entry & growth; identification of national and EU priority measures



Work focuses on:

- Cogeneration market forecasts
- Overview of current biomass cogeneration applications
- The role of biomass fuels in future cogeneration markets - possible trends & drivers



WP4: Plant & stakeholders

- **Aim:** To deliver a comprehensive map of EU biomass CHP plant; to present views of stakeholders.
- **Lead:** VTT, Finland
- **Tasks:** Survey and mapping of existing biomass CHP plants; survey of main stakeholders in biomass CHP.



WP5: Performance & good practice

- **Aim:** To recommend indicators for assessing biomass CHP performance (economic, technical, environmental, social); to present examples of current good practice.
- **Lead:** TV Energy, UK
- **Tasks:** Compile indicators by analysis of information from preceding WPs and literature review; identify examples of good practice.



WP6: Dissemination

- **Aim:** To disseminate the project outputs to target audiences.
- **Lead:** CRES, Greece
- **Tasks:** Web-site; visits; events.



Outputs (1)

- Review of biomass CHP activities: country reports; an overview per country and per type of fuel (WP2).
- Key technical details for 5 operational biomass plants in each participating country (WP2).
- Survey of the market for biomass CHP (current & likely future demand); assessment of barriers (WP3).
- Summary of recommended national and EU measures for promoting biomass CHP (WP3).



Outputs (2)

- Map of operational and proposed biomass CHP plant (WP4)
- Synthesis of views of main stakeholders in biomass CHP (WP4)
- Examples of current good practice (WP5)
- Recommended indicators for assessing biomass CHP performance (WP5)



Outputs (3)

- Strengthened links between EU and Eastern Europe (all)
- Web site for dissemination of outputs (WP6)

