



SIEMENS

# CHAPNET



## CHAPNET & Work Package 5 CHP Component Integration

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## What is CHAPNET ?

- The first Thematic Network dedicated to CHP
- Focusing on Medium and Long Term R&D
- Allows the CHP industry to plan for future needs of customers, networks etc.
- Will help European CHP business retain its global leadership
- Will facilitate co-operation across Europe through EC-funded, national and industrial programmes



## The Facts

- Project Start Date 1 January 2002
- Project End Date 31 December 2004
- 100% Funded by EC
- 7 Partners
- 24 Members
- 9 Work Packages
- COGEN Europe overall co-ordinators



# Work Packages

- WP1 Network Management
- WP2 CHP RTD Strategy
- WP3 Exploitation & Dissemination
- WP4 RTD Cluster on Gas Engine CHP
- WP5 RTD Cluster on CHP Component Integration
- WP6 RTD Cluster on Micro-CHP
- WP7 RTD Cluster on Cooling and Trigeneration
- WP8 Cluster on pre-normative research and standards
- WP9 Cluster on Education and Training



## Partners

- COGEN Europe
- Wartsila
- Demag Delaval Industrial Turbomachinery
- EA Technology
- FVB District Energy
- National Technical University of Athens
- Energoprojekt Consulting



## Summary of Outputs

- Co-ordination and collaboration for 3 years in medium and long-term RTD on CHP
- A strategy for CHP development in the long-term
- Recommendations for further RTD needs
- 2 workshops per year for each technology cluster
- 2 workshops and reports on pre-normative research
- 3 workshops and reports over the 3 years for Education and Training cluster
- Project web site
- Documentation on the State of the Art for RTD on CHP



# WP5 CHP Component Integration

- Objective
  - To cluster medium to long term RTD activities on Component Integration and Systems for CHP
    - Everyone who is active in CHP Research, Development and Demonstration
      - EU Programmes
      - National Programmes
      - Industrial Activities
      - Universities
    - EU and Accession Countries
    - Non-EU nations



## WP5 CHP Component Integration

- 3 workshops held, 1 newsletter produced
  - Lincoln
  - Brussels
  - Düsseldorf
  - 16 to 20 participants
  - 8 to 10 presenters
    - Industry
    - Universities
    - Co-ordinators of other EU networks
  - Improving current technologies
  - Introducing new technologies





## WP5 CHP Component Integration

- Workshops have fostered interesting discussions !
  - 3 Main recurring themes:
    - Most efficient design not necessarily most economic solution !
    - Fuel flexibility to maximise economic benefits
      - Non-standard fuels, i.e. gasification of biomass and wastes
        - » Avoid disposal costs
        - » Benefit from ‘green energy’ financial incentives
    - Deregulated market raises issues
      - Difficulty launching new technologies with associated technical and commercial risks
      - Possible need to link plant operating schemes into Energy (and Emissions ?) Trading systems



## WP5 CHP Component Integration

- Future Workshops
  - Continue to discover current ‘State of the Art’ for main component technologies and areas of research
  - Continue to look at new and emerging technologies
    - Fuel Cell / Gas Turbine hybrids
    - Gasification
  - Updates from other Research programmes & Thematic Networks
  - Improve links with non-EU based networks & organisations



# WP5 CHP Component Integration

Suggested Topics and  
Volunteers for future Workshop  
presentations welcome !



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Logos of various organizations and the project name:

- European Union flag
- COGEN Europe
- WARTSILA
- SIEMENS
- CHAPNET (large stylized text)
- EQ technology
- FVB
- TUA
- Logo of the host institution

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Logos of various organizations and the project name CHAPNET. The logos include the European Union flag, COGEN Europe, WARTSILA, SIEMENS, CHAPNET (in large green letters), EQ technology, FVB, and TUA.

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