# CFD aided design and other design tools for industrial biomass combustion plants

Jaap Koppejan

**Biomass Combustion and Cofiring** 



Procede Biomass BV PO Box 328, 7500 AH, Enschede The Netherlands <u>www.procede.nl</u>

Task 32 Workshop, 6 June 2013, Copenhagen

## IEA Bioenergy Task 32: Biomass Combustion and Co-firing

• Experts from 12 countries:

Austria, Belgium, Denmark, Germany, Ireland, Japan, Netherlands, Norway, South Africa, Sweden, Switzerland, United Kingdom

#### • Working together in:

- Cooperative projects
- Meetings, Workshops, Conferences, Excursions
- Cooperation with other Networks
- Reports etc. can be found on our website: <u>www.ieabioenergytask32.com</u>

IEA Workshop on Biomass CHP, 10-11 Oct 2010

## Some recent products

- Status overview of torrefaction technologies
- Health and safety aspects of solid biofuels
- Review of small particle
  removal technologies
- Handbook of Pellet production and utilisation
- Handbook of Biomass
  Combustion and Cofiring
- Paper on options for increased ash utilisation



Task 32 Workshop, 6 June 2013, Copenhagen

Biomass Combustion and Cofiring

EABidener

## Why a workshop on CFD tools?

- Significant quality improvement of CFD tools over the last decade for design of industrial combustion systems
- Mainly applied for larger utility boiler installations.
- Potential also exists for of smaller scale boilers, avoiding the need of a 'try and error' approach for boiler design and reducing development expenses.
- This expert workshop aims to share practical experiences and address the current opportunities and limitations of CFD based boiler design, for industrial and utility boilers and cofiring applications.

Biomass Combustion and Cofiring **IEABIO energy Task 32** 

Task 32 Workshop, 6 June 2013, Copenhagen