

DELTA:  
past, present  
and future of  
biomass activities.

By Ton Jacobs



### Four main activities

- Waste (# 1 Benelux; 3.2 Mtons/year)
- Water (# 2 NI > 2,5 million people)
- Energy production, trade and sales (# 4 NI)
- Multimedia (internet, TV)

### Key figures 2011

- Turnover € 2,2 billion
- Nett result € 91 million
- Employees 4,500
- S&P BBB+

## Diversified production park

- Gas 1,190 MWe (50%)
  - Nuclear 450 MWe (70%)
  - Coal + biomass 420 MWe (70%)
  - Waste 250 MWe (100%)
  - Wind 100 MWe (100%)
  - Small scale CHP 60 MWe (100%)
  - Dedicated biomass 37 MWe (50%)
- 
- Total: 1500 MWe 'own' capacity

## BMC Moerdijk

- Poultry litter fired
- 2008: investment 135 M€
- 37 MWe
- 420,000 ton/year
- 8,5 MJ/kg
- negative fuelprice
- Occasionally woodchips



## EPZ Borssele

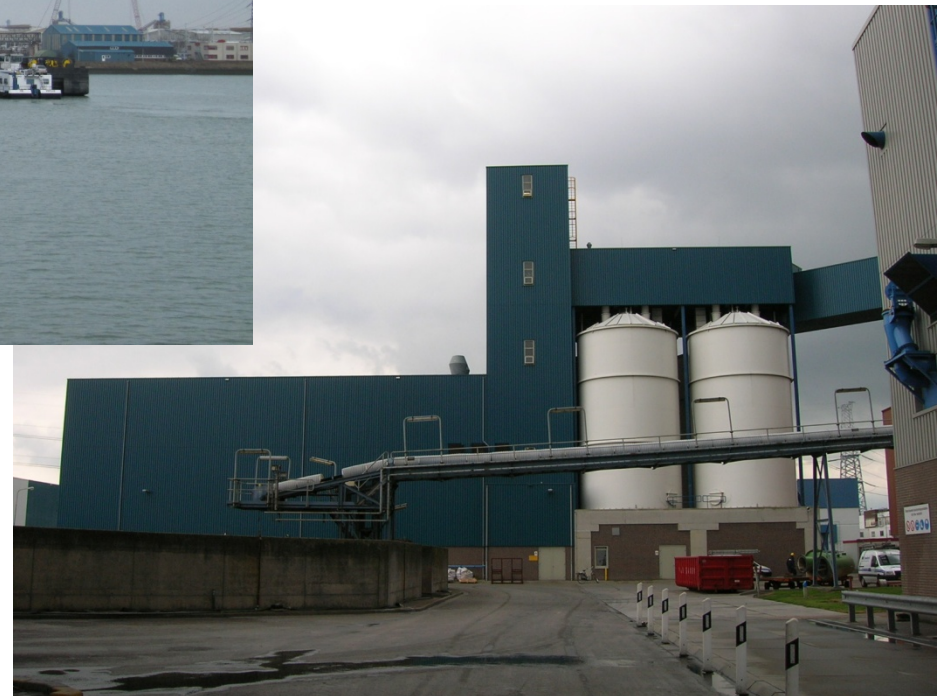
- 420 MWe baseload
- Oil/gas > 1975
- Coal > 1987
- Co-firing since 2001



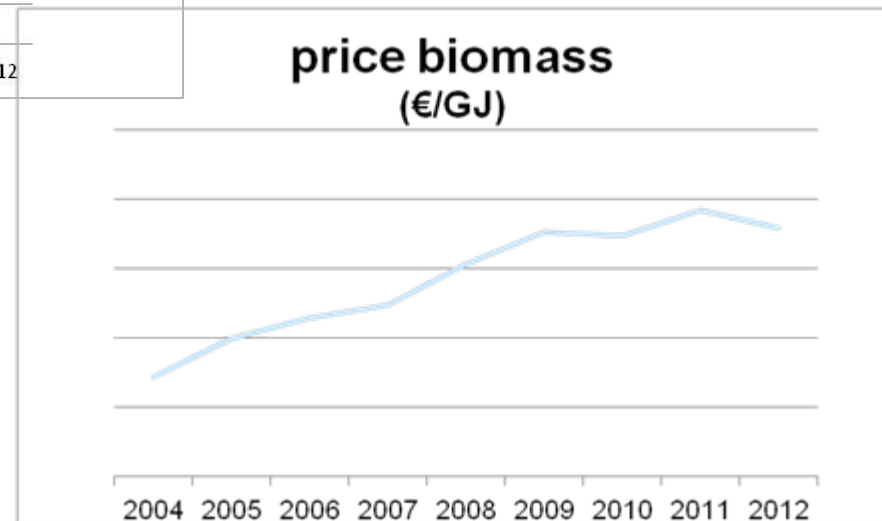
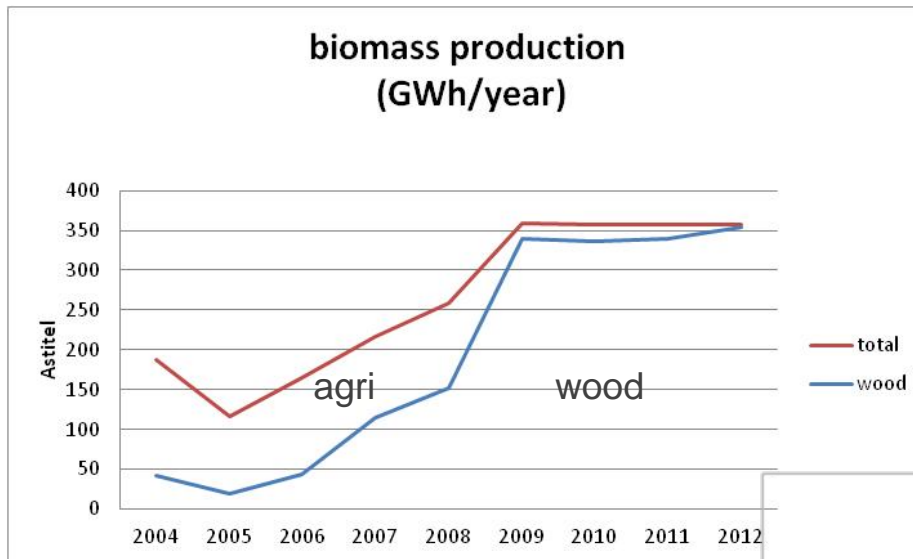
# Biomass based production



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## CO-firing at EPZ





### Future of co- firing;

- Our future need: 0 or 1,5 million ton/year
- Close plant or revamp to 100% biomass
- Depending on governmental policy
- Lobby is in progress
- Revamp (planned stop): Q3/4-2014

### Biomass:

- White woodpellets (torrified?)
- Quality I1 – I2 (lower spec on fines/durability)
- Sustainable origin (NTA8080 or equivalent)
- Hedging strategies:
  - currency
  - transport
  - outage
- Vertical integration?

Thank you!

