

# **Biomass instead of oil**

Port of Rotterdam: in  
the midst of large scale  
developments

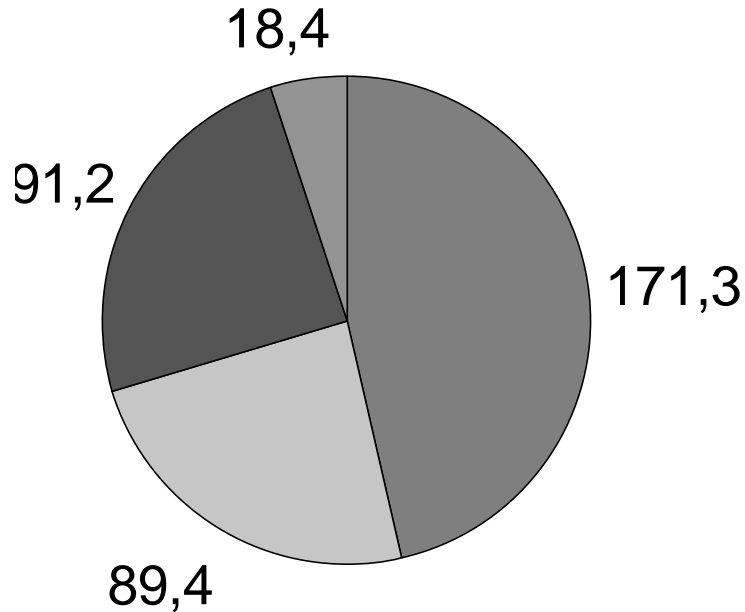
Wijnand Schonewille

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# Revenues of the Port of Rotterdam

- ◆ Annual turnover: € 440 million
- ◆ Port dues: 54% (tonnage related)
- ◆ Rent, ground lease, pier charges: 42%
- ◆ Other proceeds
- ◆ Invested in the port approx. € 200 million / a

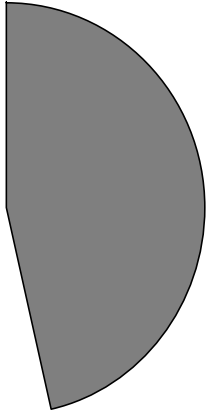
# Cargo throughput (incoming and outgoing; 2005)



- liquid bulk goods
- dry bulk goods
- containers
- general cargo

Total throughput: 370 million ton

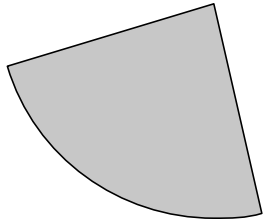
# Importance of crude oil for the Port



Throughput 171,3 million ton liquid bulk, of which

- ◆ 60% crude oil; 102,1 million ton
- ◆ 25% mineral oil products; 42,2 million ton
- ◆ 50% of crude oil is processed in the Rijnmond-area

# Importance of coal for the Port



Throughput 89,4 million ton dry bulk, of which  
30% coal; 26,4 million ton



# What if biobased becomes reality?

“Change favours only the prepared mind.”

(Louis Pasteur)

# The core-business of a port

It's not about the biomass that has to be transshipped, it's about the virtue of a port

It's about improving your virtue

# Biomass transshipment in Rotterdam

- ◆ Rotterdam: transshipment of biomass in 2005
  - ◆ (bio)ethanol: 1,1 million ton
  - ◆ liq. biomass: ca. 300.000 ton (vegetable oils)
  - ◆ approx. 100.000 ton biodiesel
  - ◆ woody biomass: < 500.000 ton
- ◆ difficult to differentiate the biobased economy

# Trade is the basis of a Biobased Economy

- ◆ Imbalanced supply and demand needs trade
  - ◆ Biobased growth is restricted by limiting trade
    - ◆ secure sustainability but don't limit trade!
- ◆ Security of supply is a prerequisite for a Biobased Economy
  - ◆ Secure availability and don't limit trade!
- ◆ Biobased commodities are at the basis of a robust biobased trade

# Trade: focus on the strategic virtue of a deepsea port

- ◆ Biomass trade will tie up with proven systems
  - ◆ Look for analogies

Virtue: storage, logistics, inspection, production

# Deepsea ports: proven systems

- ◆ Logistics: fit in with existing logistic chains
  - ◆ Ports have physical limitations; draft and capacity
  - ◆ Ports have geographical limitations: hinterland-connections
- ◆ Quality: certification, standards, inspection
  - ◆ Good standards and certification need good inspection
  - ◆ Good inspection needs expertise

# Deepsea ports: proven systems

- ◆ Storage: commercial & strategic stocks
  - ◆ Independent tankstorage - capacity 8 million m<sup>3</sup>
  - ◆ Captive tankstorage - capacity 6,7 million m<sup>3</sup>
  - ◆ Trend towards more storage and transshipment
- ◆ Production industry: connect and co-operate
  - ◆ 12 biodiesel production initiatives; Biopetrol + Vopak
  - ◆ 4 ethanol production initiatives; BER + HES-beheer

# Biomass instead of oil: what do we do?

- ◆ Invest in new assets
- ◆ Resolve investments on trends: market and technology
- ◆ Co-operation in research and development:
  - ◆ Wageningen University and Research centre
  - ◆ Utrecht University
- ◆ Communicate:
  - ◆ advocate biobased products in the port community
  - ◆ welcome biobased activities in the port

# **Biomass instead of oil**

**Concluding remark: biomass will be made available in analogy with proven trade and logistic systems**

**Deapsea ports are to play an important role**

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