Water accounting

Applications in the Netherlands

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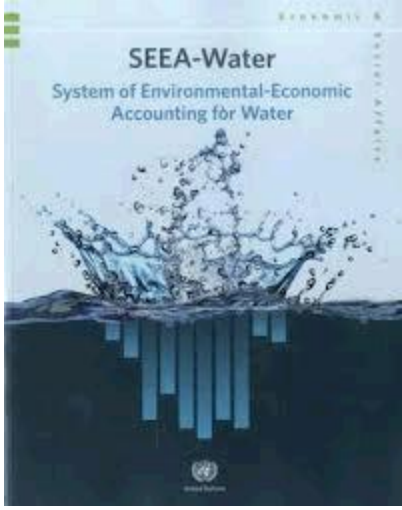
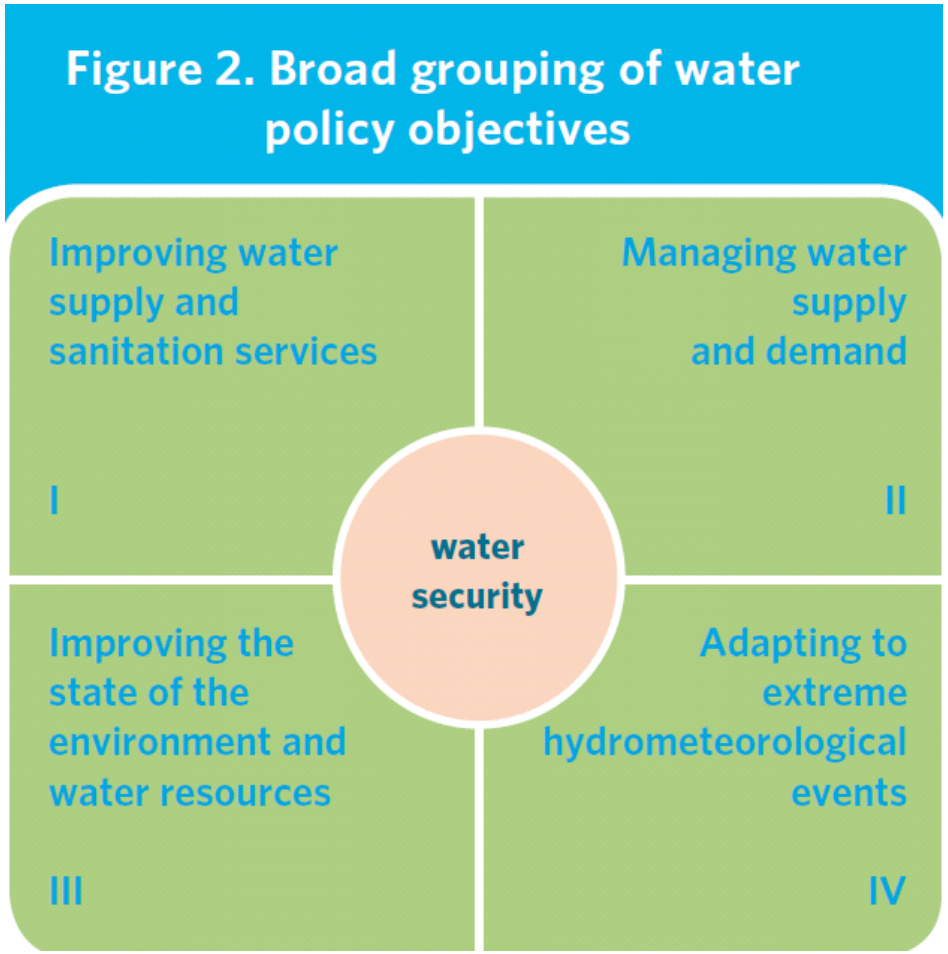
What is water accounting (SEEA-W) ?



- Conceptual framework for organizing water information to study the interaction between economy and the environment
- Integrated system
- Coherent with System of National Accounts (SNA)
- Interim Statistical standard (2007)
- SEEA-Water is a subsystem of the System of environmental economic accounting (SEEA)
- Key indicators (net domestic water use, water intensities etc.)

Water policy objectives



Overview of the SEEA-W accounting system

1. **Physical water supply and use tables**

   → information of volumes of water exchanges between economy and environment and within econony

   → Improving water efficiency

2. **Emission accounts**

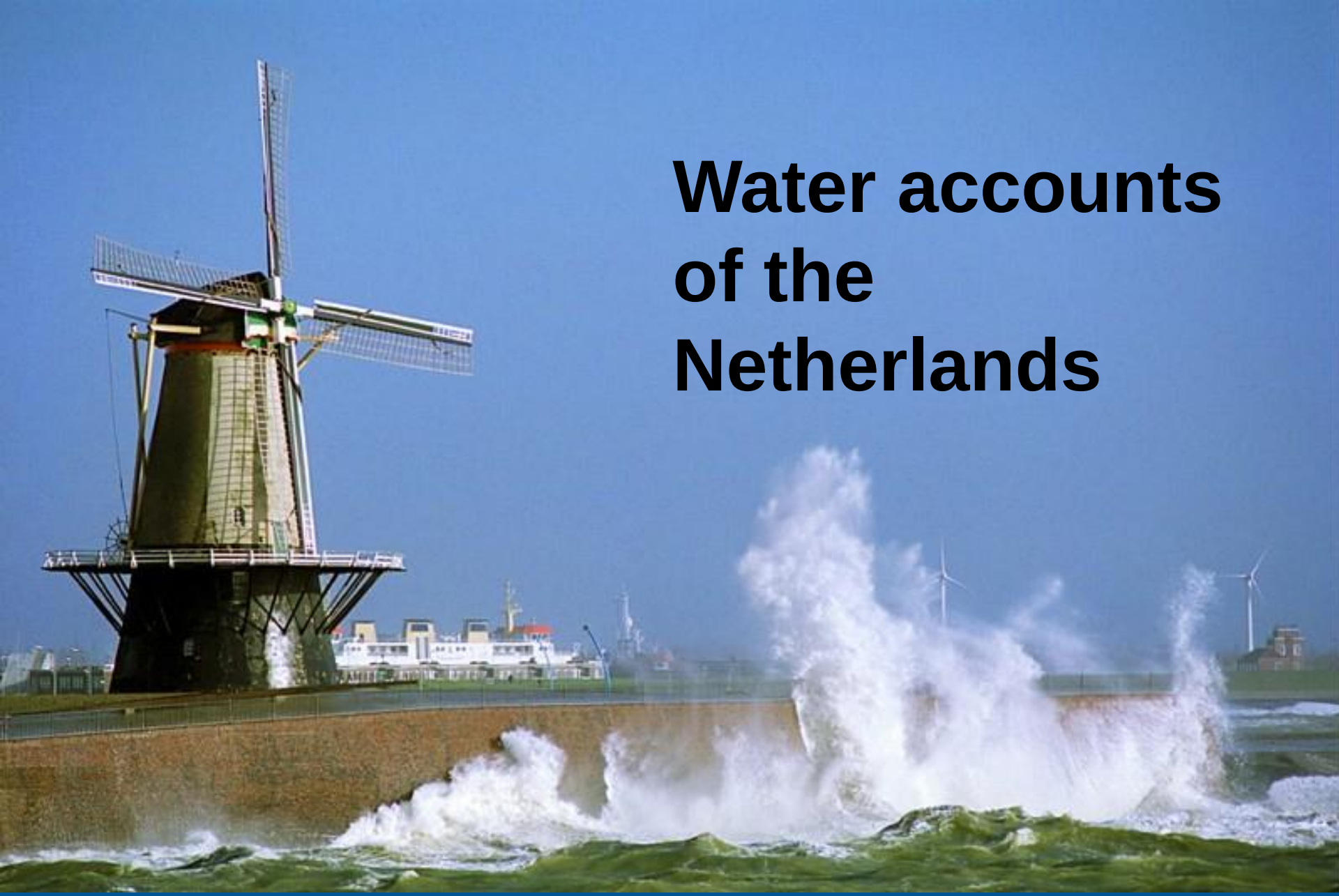
   → Information on amounts of pollutants added to waste water as result of economic activities

3. **Hybrid and economic accounts**

   → Information on the economy of water in monetary terms

4. **Asset accounts**

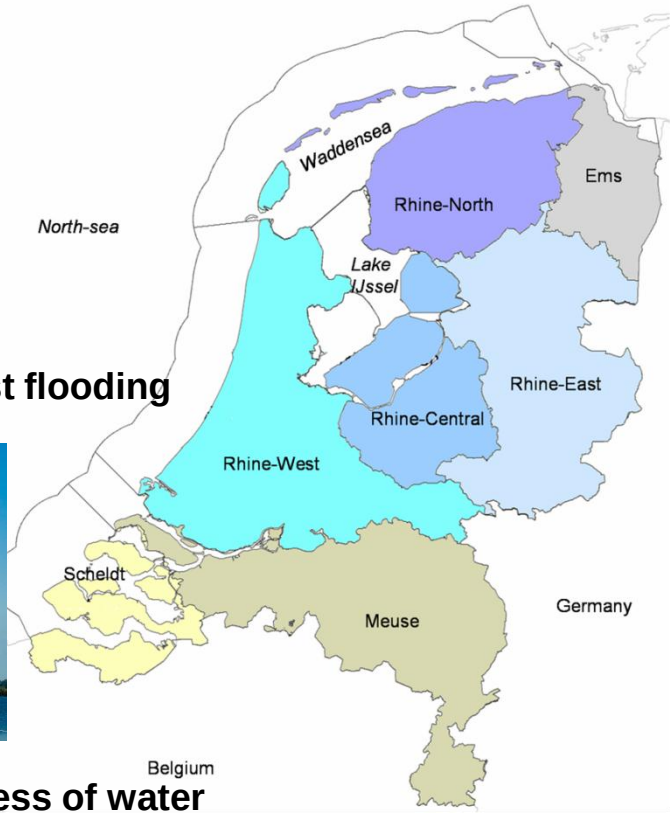
   → Information on physical stocks of water



Water accounts of the Netherlands

Water issues in the Netherlands

Safety, protection against flooding



Water management: water resources and water use

Water management: excess of water

Water pollution

Water quality

Policy demands

- **Main users:** Ministry of infrastructure and environment, water boards, watercompanies, Eurostat, other etc.
- **Water Framework Directive**
  - Description of the economic importance / interests related to the use of water
  - Important as potential ground for derogation (disproportionate costs; socio-economic reasons)
- **Marine Strategy Framework Directive**
  - Initial Assessment asks for ‘Economic analysis of marine waters’
- **Climate change policies** → expenditure for climate change mitigation / adaptation
- **Indicators for green growth**

Dutch water accounts - overview

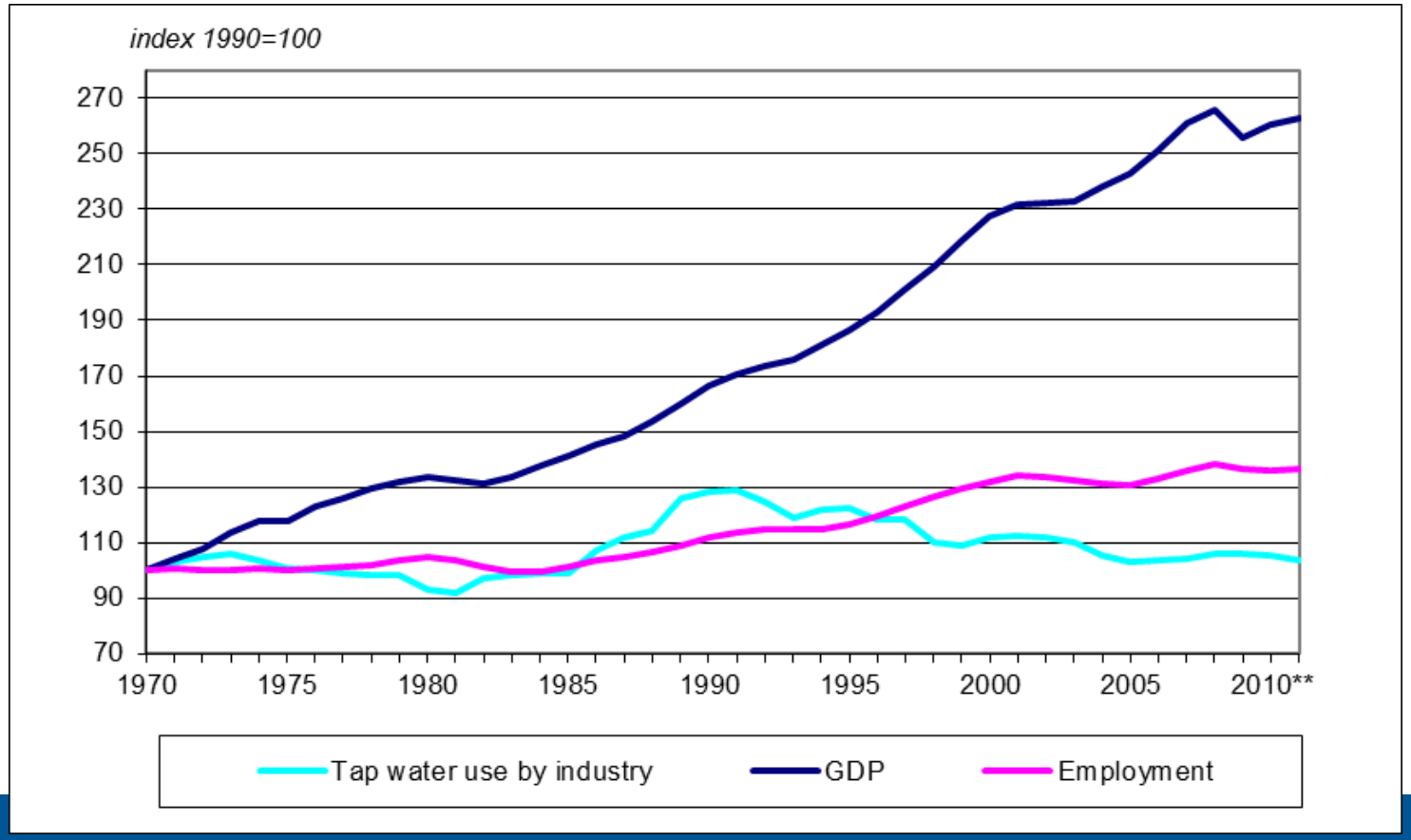
1. **Physical water flow accounts** (m^3)
2. **Emission accounts,** based on emission registration (kg), national and regional data
3. **Economic accounts for river basins,** based on the national and regional accounts (euro's, employment)
4. **NAMWA matrix (National accounting Matrix including water accounts),** including water related monetary data (taxes, subsidies etc.)

New : Water balance

Water quality accounts

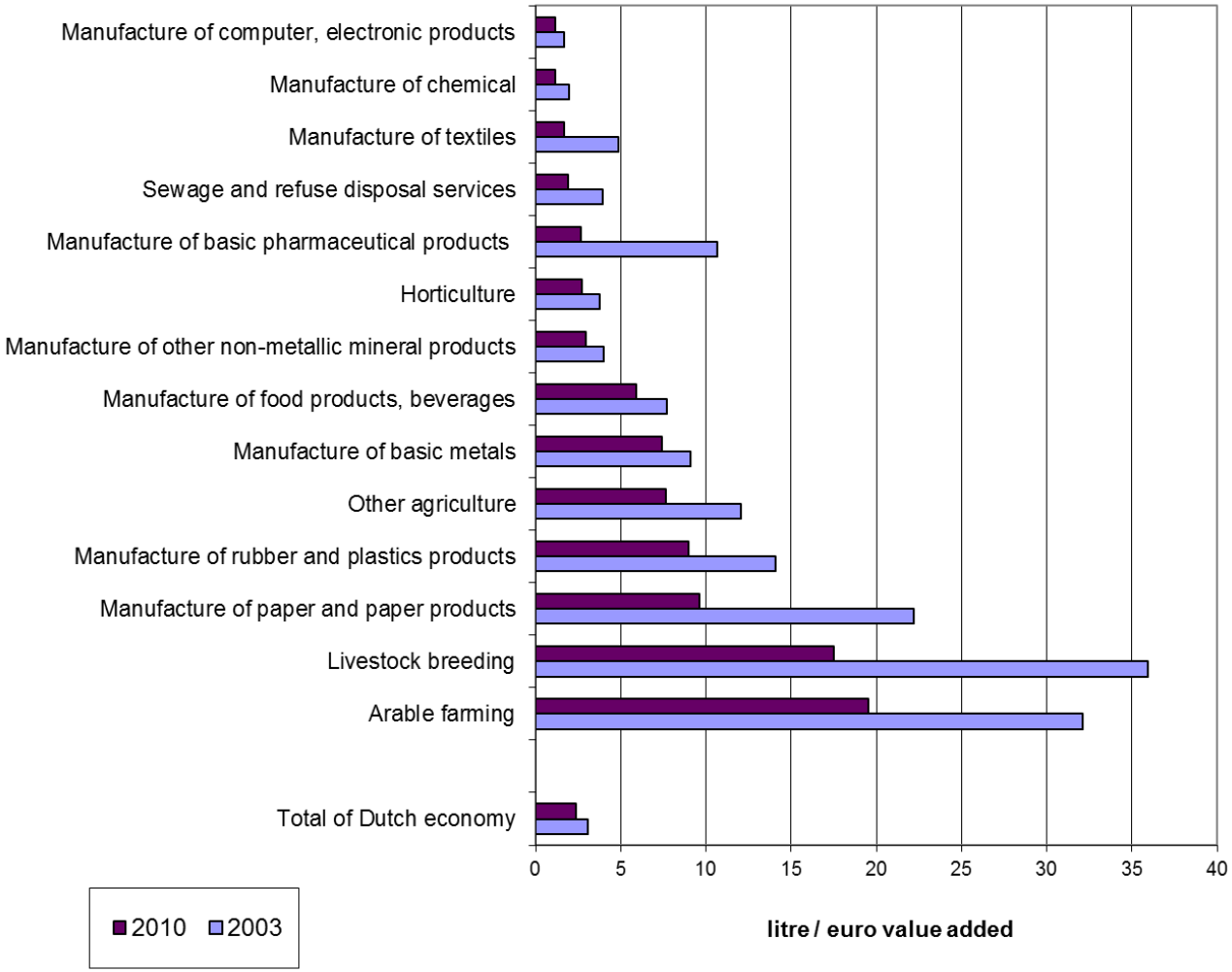
Is there decoupling between water use and economic growth ?

Volume change GDP, employment and tap water used for production



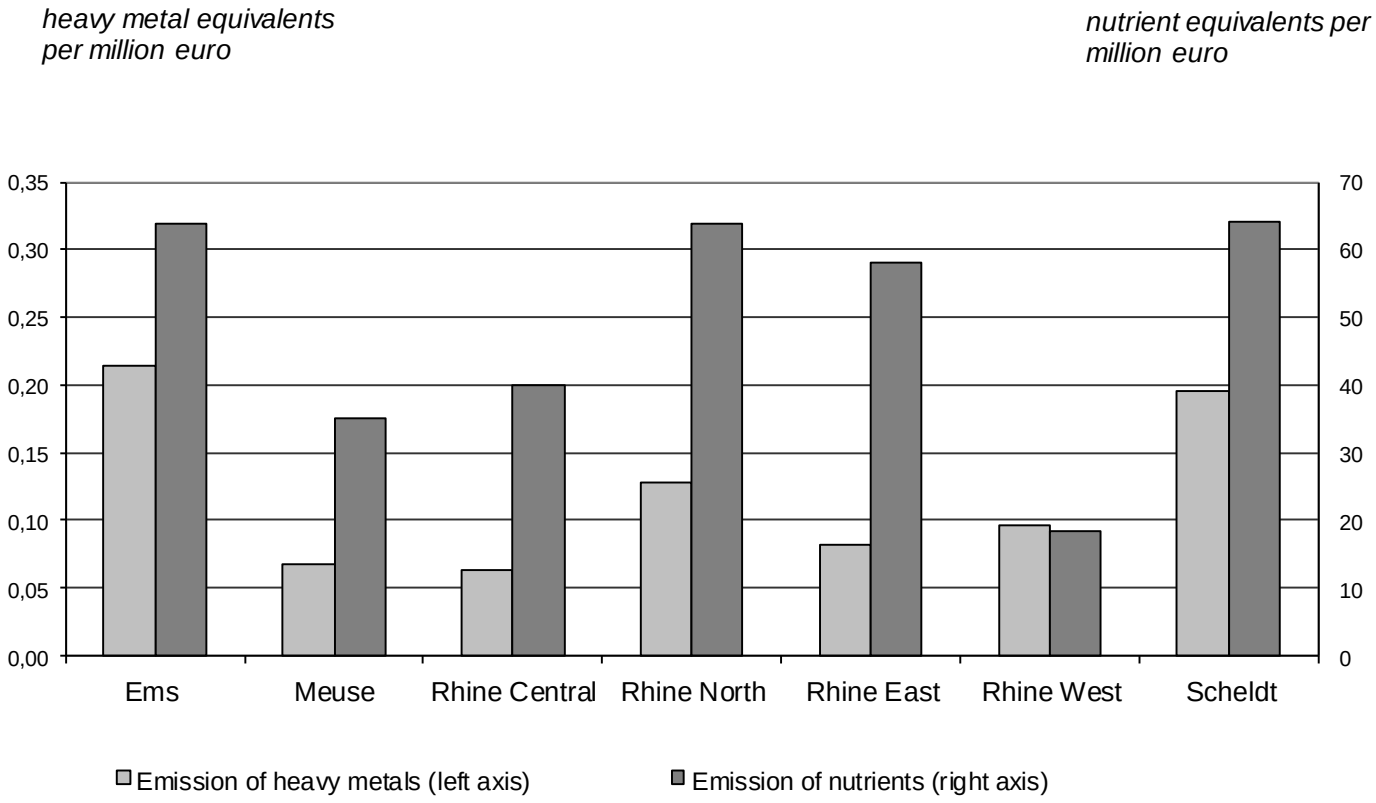
What are the most important users of water ?
Is their water efficiency improving ?

Industries with the highest use intensities for groundwater



Are there regional differences in emission intensity ?

Emission-intensity per river basin (only producers)

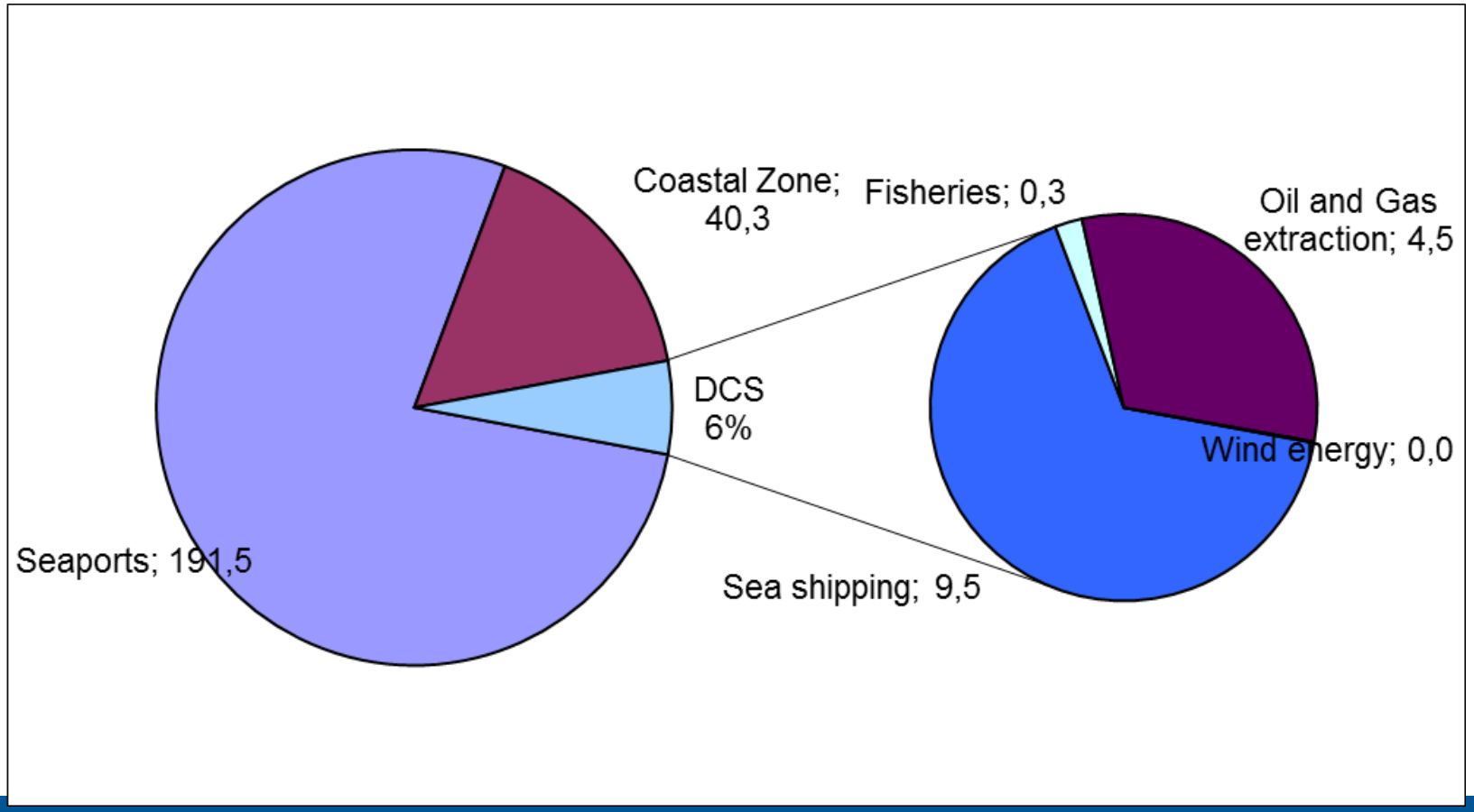


Economic figures of the North Sea for the Netherlands

- **Main user:** Ministry of infrastructure and the environment: European Marine Strategy Framework Directive (EU)
- **Objective:** to determine the potential impact on the Dutch economy of protective policy measures in the Marine environment.
- Calculation of economic figures of activities:
  1. Direct activities on the “Dutch part” of the North Sea, the Dutch Continental Shelf (DCS): fisheries, shipping, oil and gas extraction, wind farms etc.
  2. Activities in seaports and in the coastal area.

Distribution of the employment (1000 fte)

Total employment: 246,000 fte (4.2 % of total)



Thank you for your attention!

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