

Water accounts of the Netherlands



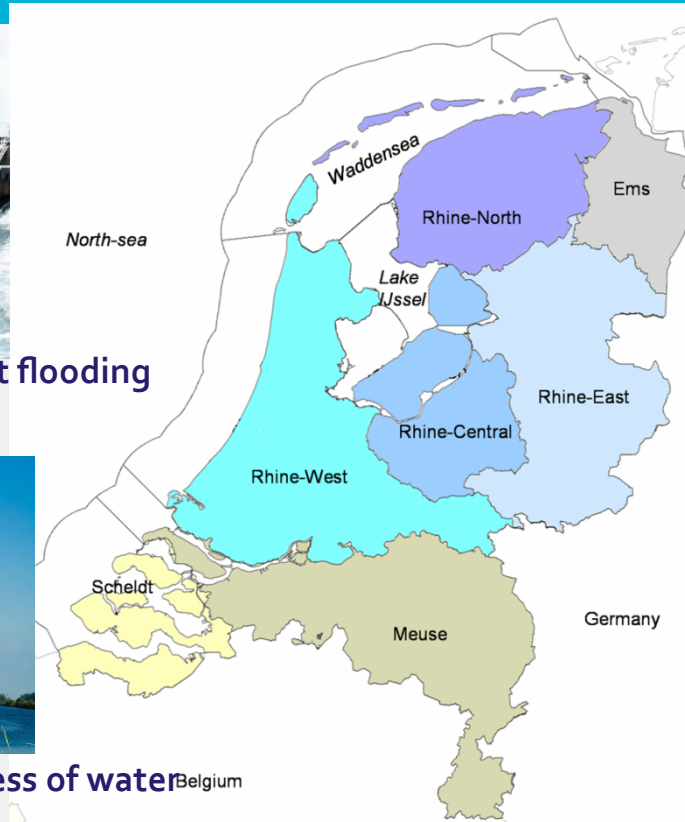
Water issues in the Netherlands



Safety, protection against flooding



Water management: excess of water



Water management: water resources and water use



Water pollution



Water quality



Water economic benefits

Policy demands

- **Main users:** Ministry of infrastructure and environment, Ministry of economic affairs water boards, water companies and Eurostat.
- **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

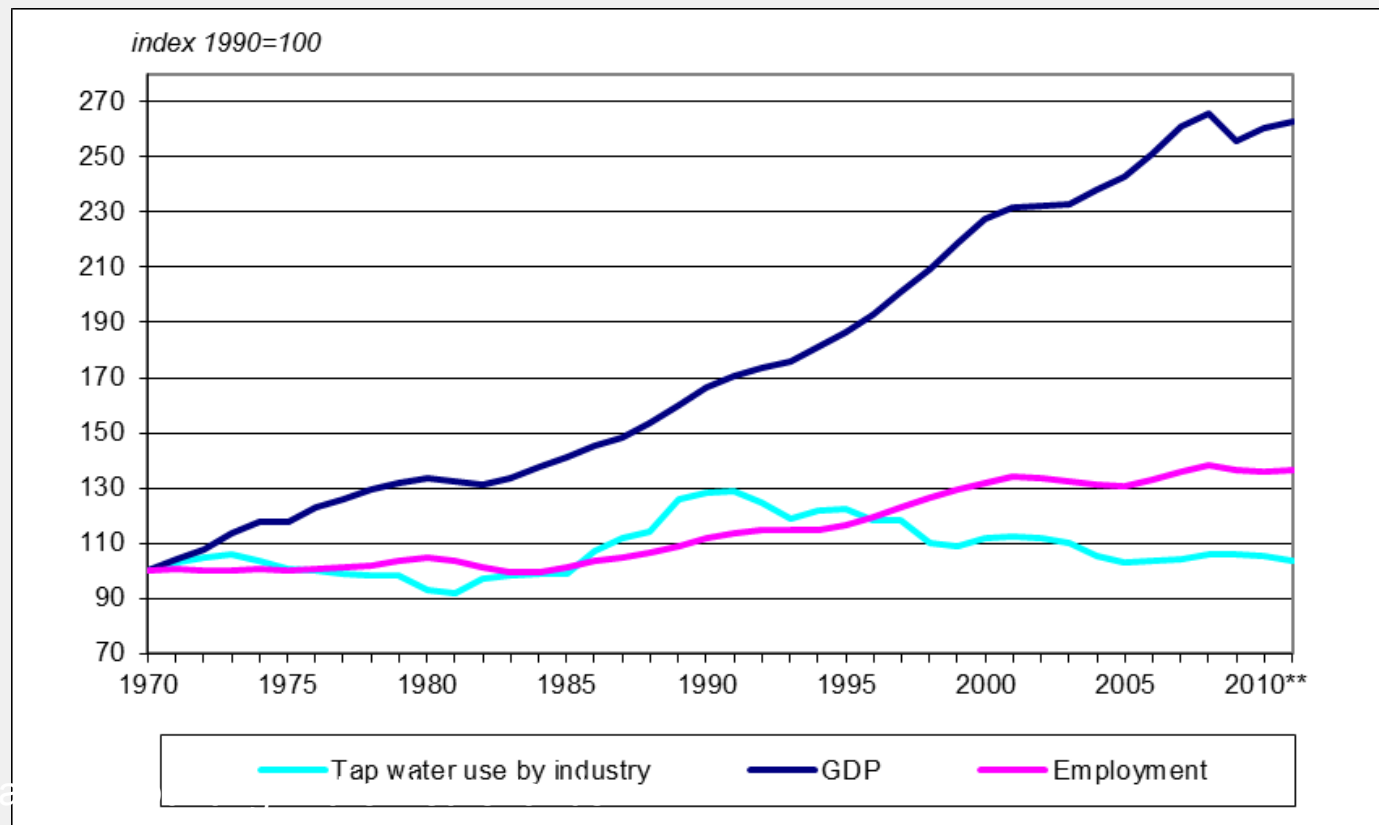
1. **Physical water flow accounts** (m³)
2. **Emission accounts**, based on emission registration (kg), national and regional data
3. **Economic accounts**, based on the national and regional accounts (euro's, employment)
4. **NAMWA matrix (National accounting Matrix including water accounts)**, including water related monetary data (taxes, subsidies etc.)

Water use examples



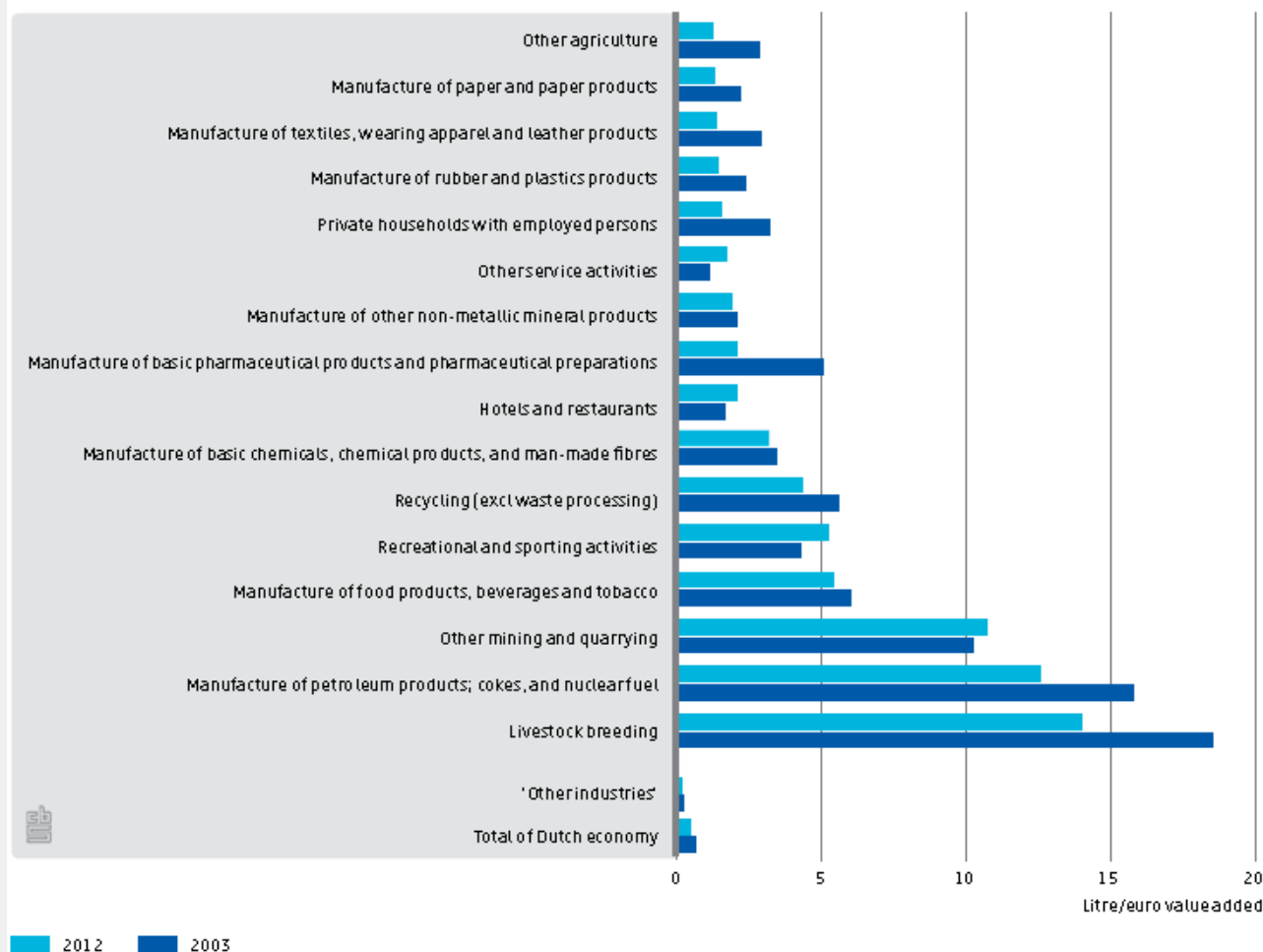
Decoupling between water use and economic growth .

Volume change GDP, employment and tap water used for production



Water efficiency of most important water users

2.3.4 Industries with the highest tap water (drinking water) use intensities



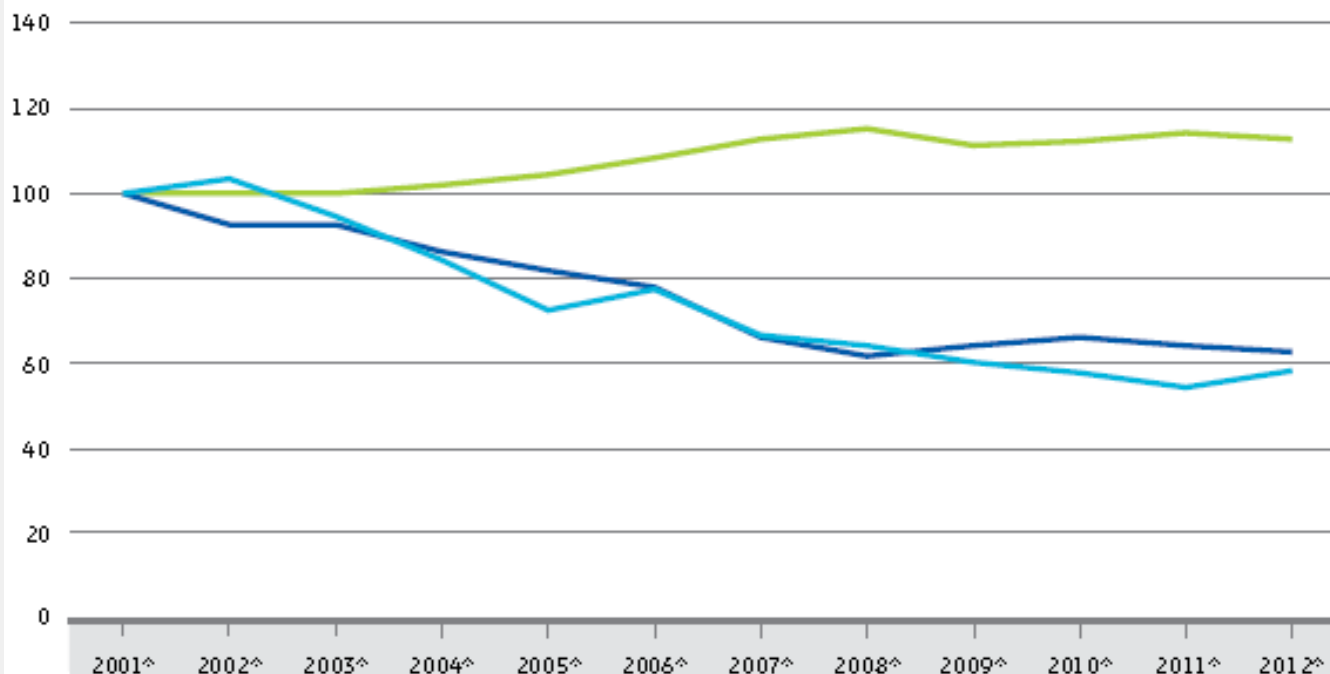
Water emissions and water quality: examples



Decoupling between emissions in water and economic growth

3.1.1 Emissions to water and GDP

Index (2001=100)



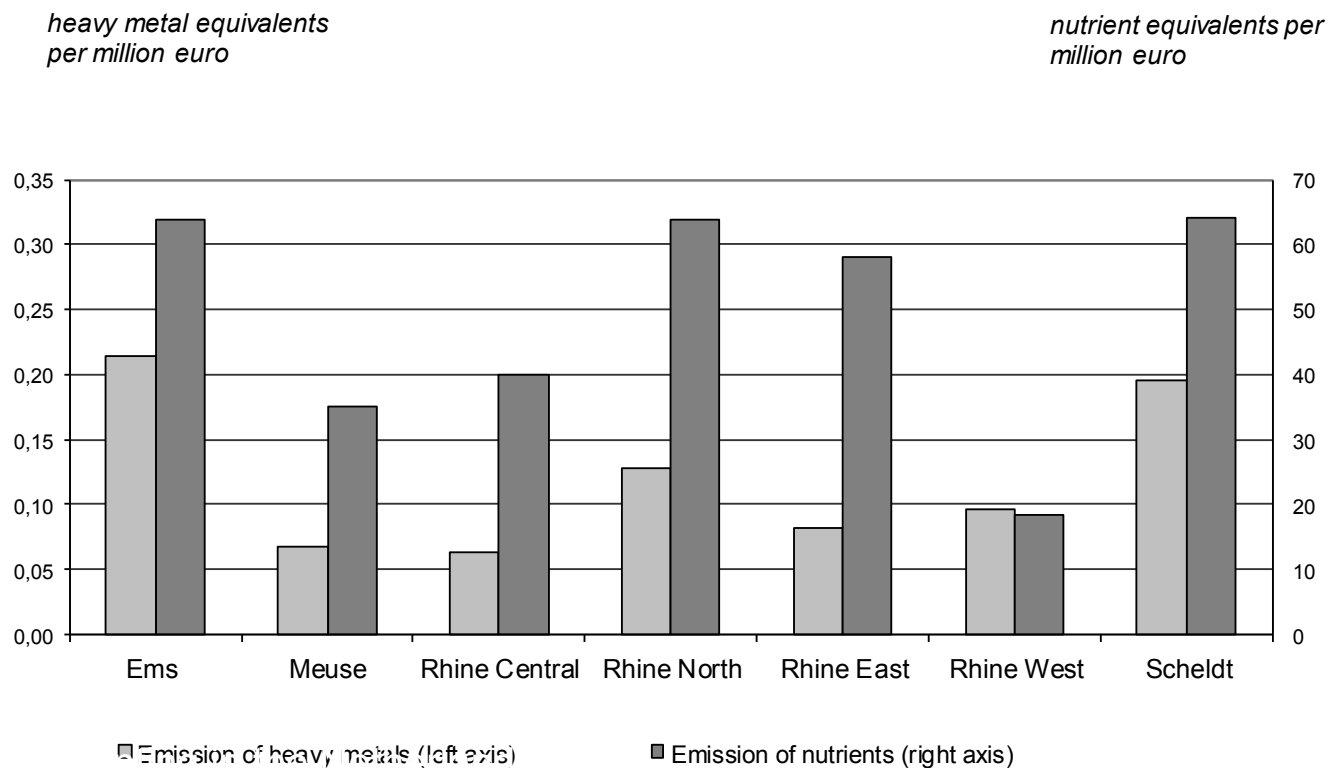
■ Nutrient equivalents
■ Heavy metal equivalents

■ GDP (price level 2010)



Regional differences in emission intensity

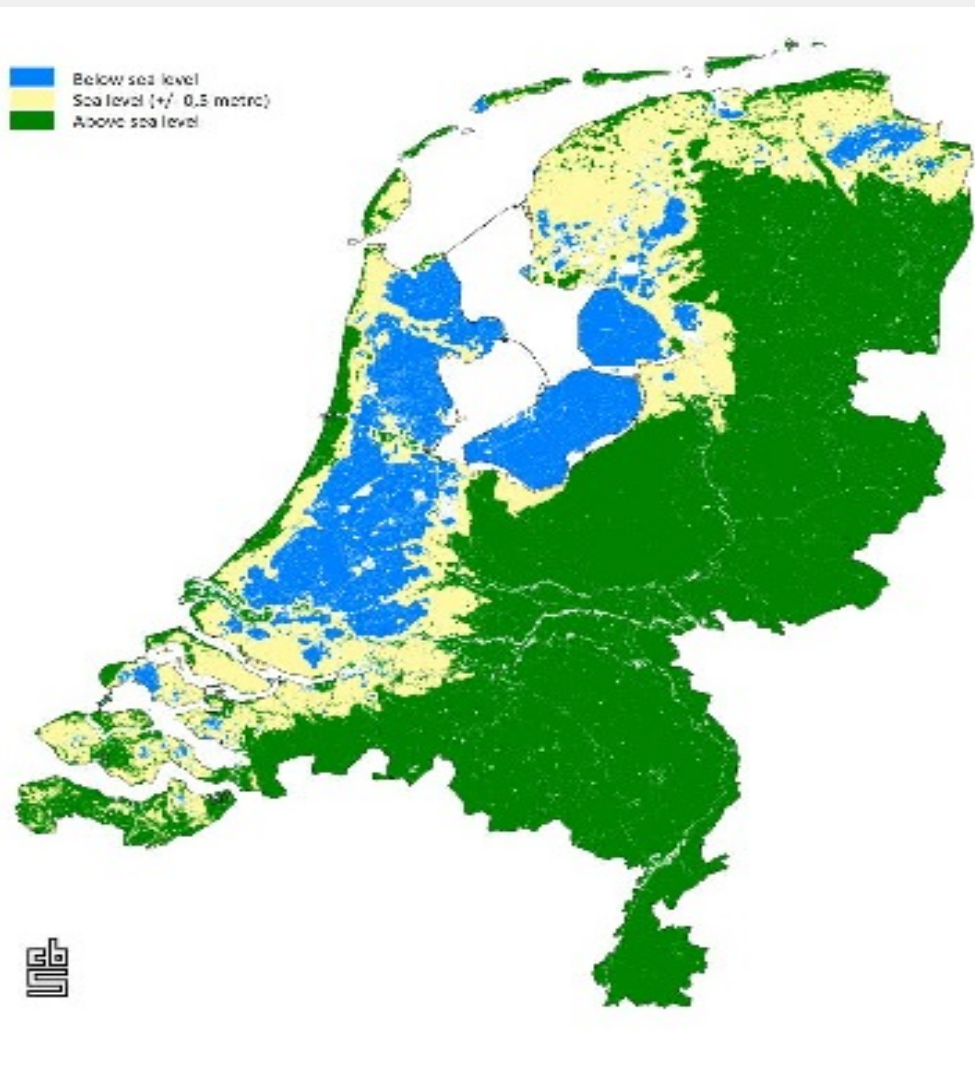
Emission-intensity per river basin (only producers)



Water economic accounts example



Economy in flood prone areas



	Employment		Value added	
	Flood prone area	Percentage of total	Flood prone area	Percentage of total
<i>Economic sector</i>	<i>x 1000 empl.</i>	<i>%</i>	<i>bil euro</i>	<i>%</i>
Agriculture	43	47%	5	50%
Industry	220	27%	18	26%
Energy and water	11	39%	4	39%
Construction	143	38%	11	39%
Trade	379	35%	27	36%
Transprot	120	32%	11	32%
Services	452	34%	48	34%
Government	249	31%	18	31%
Other	309	30%	19	29%
Total economy	1 926	33%	161	32%

Thank you for your attention!