

# Inland navigation and a shift to sustainable transport

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## ▶ Introduction

### CE Delft

- Independent policy research & consultancy
- Environment and economics
- Clients: EC, OECD, EEA, Ministries, NGO's, branche organisations, industry

### Huib van Essen

- Manager Transport CE Delft
- Expert in environmental, climate and pricing policy for transport
- Project manager DG TREN project *IMPACT*: internalisation of external cost
- Task manager in ongoing DG Env project *EU Transport GHG routes to 2050*
- Project manager VNF project *Internalisation of external costs on the Paris-Amsterdam corridor*

## ► Overview of contribution

- Context: long term climate policy transport sector
- Potential role of inland navigation
- Key actions with respect to inland navigation



## ▶ Long term climate policy transport sector

- Decarbonization of transport sector is key policy goal
- Transport's GHG emissions should be reduced by at least 80-90% compared to BaU and possibly more, to meet the overall long term goals
- Broad range of very ambitious reduction options required: both technical, structural and demand reduction
- Policy: no silver bullet exists - all government levels need to take action:
  - Vehicle and energy regulation
  - Fuel, infrastructure and other pricing policy; abolishment of subsidies
  - Spatial, infrastructure, speed and traffic management policy
- Urgent need to take action because of long lead times and risks of policies achieving less than expected

## ▶ Potential role inland navigation

- **Modal comparisons depend heavily on vehicle capacity and utilisation**
  - CO2 emissions:
    - Clear advantage for large ships
    - Small ships: load factors decisive
  - Pollutant emissions: road transport comparable or cleaner
  - Significant GHG reduction potential IWT
  - Fuel efficiency and carbon-intensity road likely to improve
- **No agreement on overall potential GHG reduction of freight modal shift**
  - Estimates range from 4 to 23% CO2 reduction potential; most of the estimates being at the lower end
  - Risk of rebound effects and unintended shifts

## ▶ Key actions with respect to inland navigation

### Policy actions to decarbonize inland navigation:

- Energy efficiency improvements IWT and decarbonization of fuels
- Vessel/engine regulations & economic instruments to give incentives
- Early action needed for reducing GHG intensity IWT in order not to lose lead position and competitive advantage; learn from pollutants

### Policy actions to improve co-modality

- Focus on true reduction potentials: most GHG-efficient transport is used in each specific case
- Highest potential outside urban areas: main trunk flows
- Main policies: spatial, infrastructure & pricing policy (including Eurovignette Directive)
- Avoid rebound effects, e.g. by pricing measures
- Main co-benefits in area of noise and road congestion

▶ **Thank you for your attention!**

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