

*Outlook for zero-emission inland  
transport*

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**Waterborne Technology Platform**





WATERBORNE

# Zero-Emission Waterborne Transport

Horizon Europe Partnership



# Waterborne TP Association

## A European Technology Platform for the Waterborne sector

- All waterborne stakeholders such as ship-owners, shipbuilders, maritime equipment manufacturers, infrastructure and service providers, classification societies, universities or research institutes, waterway and port operators.
- Dialogue between members, the EU Institutions, and Member States.
- Common medium and long-term R&D Vision and a Strategic Research Agenda (SRA).
- Waterborne = Maritime + Inland Navigation and lakes + Ports!



# Waterborne TP Association

## Membership

- Ship owners 8
- Ship yards 10
- Equipment manufacturers 8
- Engineering companies 10
- Class societies 6
- Research institutes 19
- Academia 9
- (Inter)national associations 19
  
- IWT: 5 members



# Waterborne shipping

- The *transformation* of the Waterborne transport
  - ❑ **Green and clean** Waterborne transport
  - ❑ **Connected and automated** Waterborne transport
  - ❑ **Safe and secure** Waterborne transport
  - ❑ **Safe, competitive and eco-friendly** yards and production sites



## Ports and logistics

- Integrating shipping and inland navigation into seamless port and logistics operations
  - ❑ Zero emission port operation and infrastructure
  - ❑ Integrating **maritime** and **hinterland** logistics



Partnership



## Partnership

- Major investment from Commission in innovation
- Main stakeholders have pledged large investments in innovation as well
- Council of Commissioners has approved partnership
- Official launch last week (Wednesday 23<sup>rd</sup>)
- Large amount of calls were launched last week (22<sup>nd</sup>)



## General objective

Vision &  
objectives

*To provide and demonstrate zero-emission solutions for all main ship types and services before 2030 which will enable zero-emission waterborne transport before 2050.*



## Operational objectives

- Use of sustainable alternative fuels
- Electrification for shorter ranges (150 nm)
- Reduction of energy consumption by 55%
- Port-based supply infrastructure
- Climate neutral, climate resilient IWT
- Reduction of air pollution by 50%
- Elimination of pollution to water (including noise)

## Implementation

- Implementation pathways for
  - Long distance ships
  - Cruise ships
  - Ferries
  - Inland vessels
  - Short-sea ships
  - Offshore ships
- Detailed actions to achieve specific objectives

## Inland vessels

- Prime focus on retrofitting of existing vessels
  - ❑ Sustainable alternative fuels with ICE
    - ❑ From LNG through bio-fuels to E-fuels (methanol)
  - ❑ Hybridization with battery electric



## Inland vessels

- Current new builds
  - Profit from increased energy efficiency
  - Switch to electric drive trains
  - Multi-fuel ICE
  - Allow for future switch to fuel cells
- Future new builds
  - Fully profit from increased energy efficiency
  - Electric drive trains
  - Fuels cells run on hydrogen



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## Contact

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