



SUSTAINABLE WATERWAY TRANSPORT, CLEAN AIR

Financing the CLINSH Scenario



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Introduction

- *The Netherlands has the highest share of inland waterway transport in EU – 43.2% (Eurostat, 2020)*
- *IWT is favorable: CO₂ emissions per ton-kilometers over water is lower than those for land transport by a factor of six*
- *PM/NO_x emission factors from inland ships are considerably higher than diesel truck engines due to less stringent emission standards*
- *Inland shipping emissions are significant for air quality and related health impacts of people living nearby*

Baseline and CLINSH scenarios

Baseline Scenario (2020 – 2035)

- No new policies to increase adoption of emission reducing technologies
- Involves a voluntary switch to Stage V type engines only when existing engines are at the end of lifetime

CLINSH Scenario (2020 – 2035)

- Policy incentives result in a strong adoption of Stage V engines, after-treatment technologies and alternative fuels.
- Involves retrofit solutions for the part of the inland waterway fleet whose engines are not at end of lifetime or not scheduled for revision

Costs for fulfilling the scenarios

	Baseline scenario (M€)	CLINSH scenario (M€)	Difference (M€)
Social costs with 15 years lifetime (M€)	€ 26,139	€ 21,280	€ -4,859
Total cost of ownership with 15 years lifetime (M€)	€ 10,751	€ 11,512	€ 761
Initial investment costs (M€)	€ 1,123	€ 2,393	€ 1,270

Social costs: costs imposed on society – Health effects, bio-diversity losses etc.

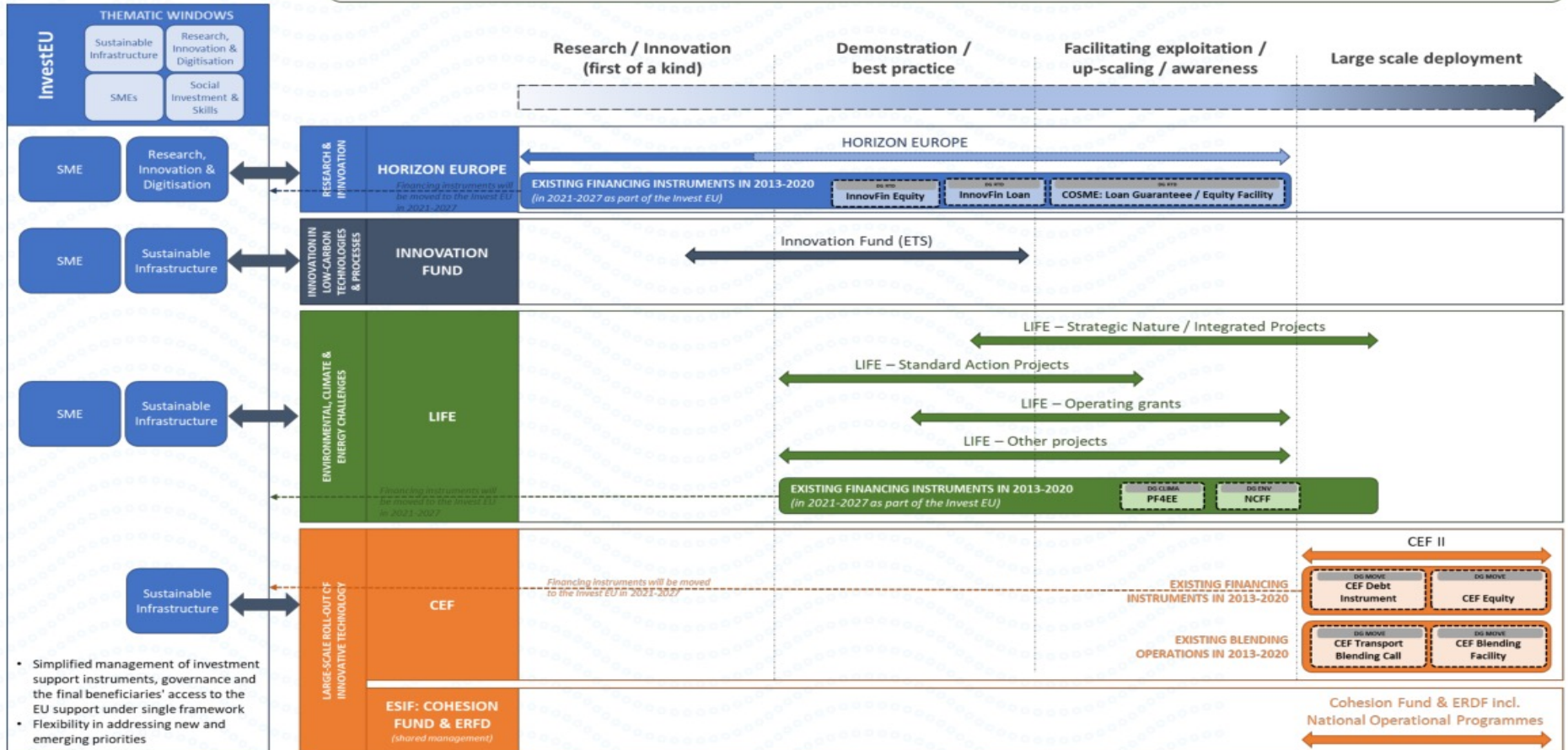
Total cost of ownership: CAPEX + OPEX

Approximate fleet size: 6,700 vessels

CLINSH Scenario shows that an extra investment of €1.3bln and the additional total costs of ownership of €760mln have a societal benefit of €4.9bln

Available funding instruments in the EU

PROGRAMMES AND STAGES TO SHIFT TO A GREENER EUROPE (2021-2027)



Policy developments relevant to the shipping industry

- *EU parliament draft report towards future-proof IWT (2021/2015(INI))*
 - Greening of the IWT with technologies that makes vessels more suitable with regard to climate-related emission targets.
- *NAIADES III: Boosting future-proof European inland waterway transport*
 - Action plan on how to transform the IWT and move it to climate neutrality
 - Shifting more freight transport to inland waterways (i.e. modal shift)
 - Setting the sector on an irreversible path to zero-emissions
- *Fit for 55 package*
 - Legislative proposals to revise the entire EU 2030 climate and energy framework
 - New legislation is proposed on clean maritime and aviation fuels

Added value of a new financial scheme

- *Earmarked contributions towards a Greening Fund*
 - Contributions of €0,04/l and to a lesser extent €0,08/l fuel through taxation of IWT fuels could be acceptable and would not be expected to lead to significant market disruptions. This could result in total revenues of €1.3bln to € 2.6bln within a time period of 25 years (2025-2050).
 - An average value of €0,06/l would result in total revenues of €1.95bln (CCNR - EICB, 2021).
 - Assuming that the legal framework can be arranged, the result would be a mix of public (e.g., CEF and InvestEU) and private funds provided as resources for the new funding and financing scheme

Recommendations

- *Promote accelerated deployment of already available technologies to reduce NO_x and PM emissions until zero-emission technologies are mature.*
- *An incentive scheme should make at least Stage V, SCR-DPF, FWE and GTL attractive for entrepreneurs to invest in.*
- *EU and Member States should provide incentives for this accelerated adoption through an IWT Greening Fund or grant schemes*

Recommendations

- *Given the scarce capital availability in the IWT sector it is recommended to seek permission to provide investment support up to 80% over the price difference (befitting EU state aid laws conforming with EU taxonomy) combined with low-interest loans*
- *Budget for the fund or grant schemes could be raised by earmarking revenue from the taxation of IWT fuels*
- *A 'one-stop shop' approach to make the funding application process as easy as possible.*



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Thank you for your attention

