



# The European Green Deal-

Setting the Course for a Sustainable Maritime Industry

## Research & Innovation as a Driver for Change

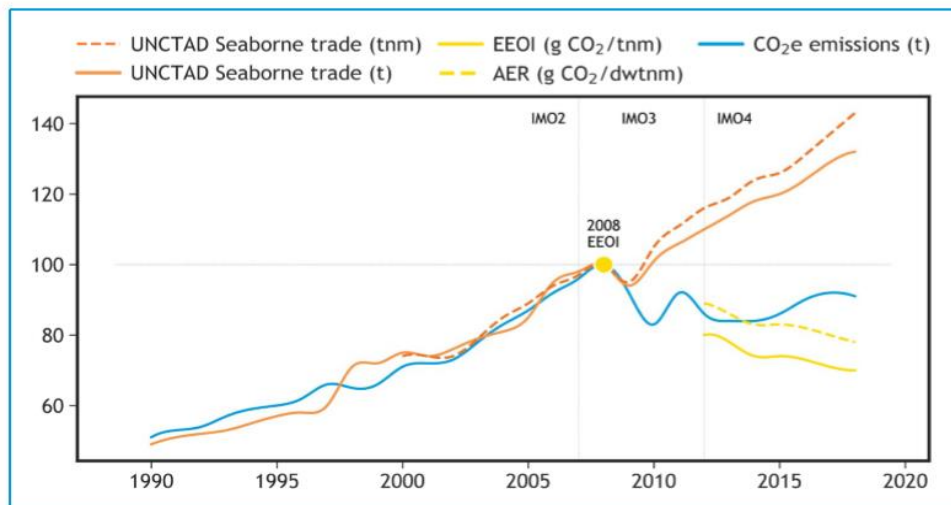
Peter Crawley DG RTD D3

#EUGreenDeal

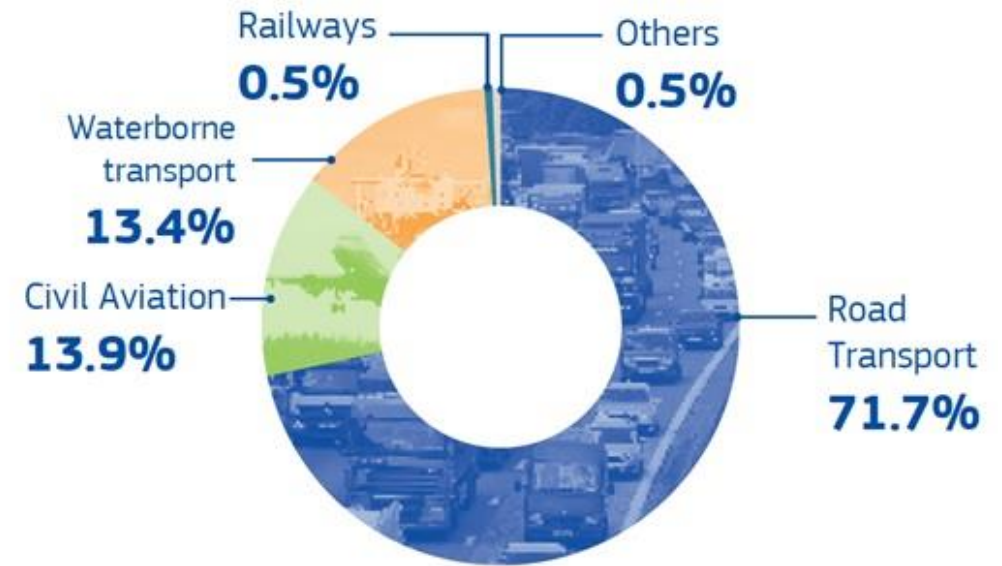
Research and  
Innovation

# Green Deal and transport

- Transport accounts for a **quarter of the EU's GHG emissions** and these continue to grow.
- Waterborne, mainly marine contribute **13,4% of EU transport emissions** and Rising.



Share of Greenhouse Gas Emissions by Mode of Transport (2017)



Source: Statistical pocketbook 2019

Source IMO 4th GHG study





”

*The European Green Deal is  
Europe's Man on the Moon  
Moment*

#EUGreenDeal



European  
Commission

# Tackling transport emissions

*“Transport emissions require a basket of measures, including the EU Emissions Trading System. Bringing transport emissions down in line with our climate neutrality objectives will require a comprehensive and ambitious set of policies for sustainable mobility. We need to ensure more rapid development of alternative fuels for aviation and shipping and lead markets for those fuels will need to be established in the next years.”*

Answers to the European Parliament by F. Timmermans

=> The concept of ‘basket of measures’ is particularly important for maritime as it implies that different instruments need to be put in place to address different issues.

Mobilising Research & Fostering Innovation

Transforming the EU's economy for a sustainable future

Mainstreaming sustainability in all EU policies

Designing a set of deeply transformative policies

The European Green Deal

And leaving no one behind

Leave no one behind (Just Transition)

Financing the transition

The EU as a global leader

A European Climate Pact



Designing a set of  
deeply  
transformative  
policies:  
€1.8 trillion



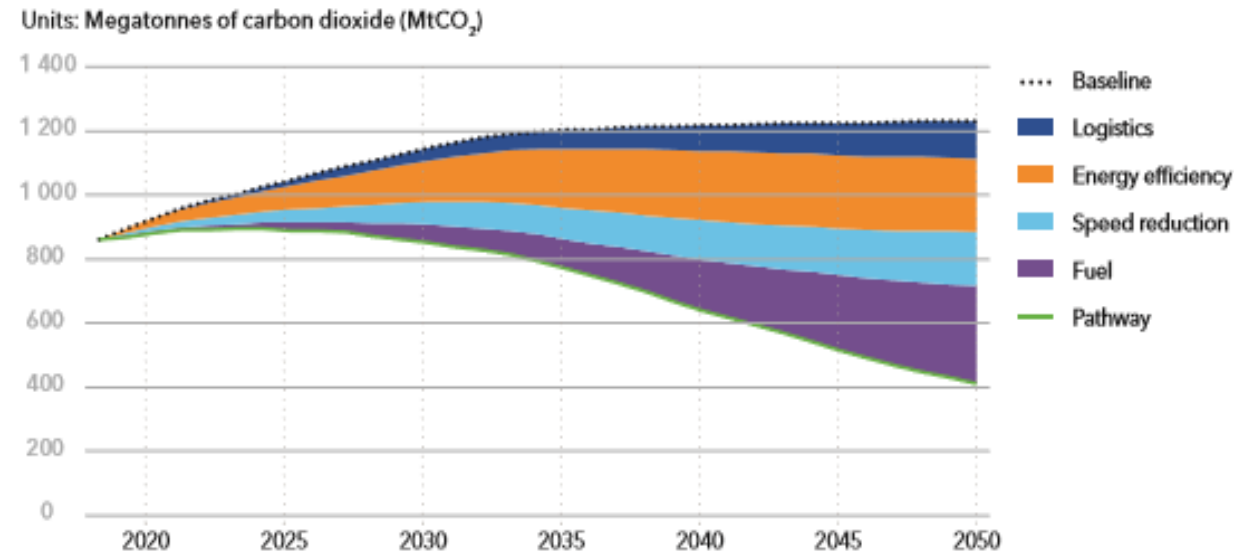
# CLIMATE PACT & CLIMATE LAW

- Proposed **Climate Law**: “*make Europe the first climate neutral continent in the world, by 2050*”, *For transport cut GHG’s by at least 90% by 2050. Transport now 25% of EU GHGs.*
- September 2020: Commission proposes raising climate ambition to **at least 55% by 2030**
- The Green Deal says:
  - Boost multimodality- Rail, IWT, Short Sea Shipping
  - Automated and Connected transport.
  - Cost of Transport reflect Environment impact
  - Accelerate sustainable alternate fuel deployment. ETS
  - **Beyond Business as usual, innovative new technologies essential.**
  - **Keep EU competitive in Green Technology**

# CLIMATE PACT & CLIMATE LAW

- Consensus two parallel priorities:

1. Use Less Energy
2. Cleaner Energy



DNV-GL (2019) | Maritime Forecast to 2050

- Operational measures not sufficient, systemic change.
- EU three step strategy for climate neutral shipping:
  1. Data bench mark: MRV Monitoring Reporting Verification
  2. Targets
  3. Measures



# Measures ?

- Measures to deliver ambition **proposed by June 2021**
- Operational change insufficient alone
- Within the Basket:
  - **Carbon pricing**, Shipping within EU ETS
  - **Alternative fuels**; New rules for decreasing carbon intensity of fuels and their infrastructure across Europe.
  - **Research and innovation**, including a partnership on waterborne transport charged with demonstrating deployable, zero-emission solutions for all main ship types before 2030.
  - Recovery funding, CEF, Life Innovation fund to **support uptake of innovative technologies** with proven benefits.





**Research &  
Innovation**

**Enabling Solutions for  
Waterborne Transport**



# R&I POLICY IN THE EGD

- DG Research and Innovation is **actively engaged** across **all EGD work streams**
- Research and innovation is **a policy of opportunity** and should **play a key role** in helping Europe achieve **Climate Neutrality**



# HORIZON EUROPE'S EUROPEAN PARTNERSHIPS

- A new wave of research and innovation **European Partnerships**, including:
  - Clean **Steel, Circular & Bio-based Europe**
  - Clean **Hydrogen, Clean Energy Transition, Batteries**
  - Clean **Aviation, Zero-Emission Waterborne Transport & Zero-Emission Road Transport**
  - Sustainable & Safe **Food System**, Environmental Observation for **Sustainable Agriculture**
  - **Rescuing Biodiversity** to Safeguard Life on Earth
  - Climate Neutral **Blue Economy, Water for All**



WATERBORNE

# Zero emission waterborne transport

Co-Programmed Partnership in the  
framework of Horizon Europe

Contact:

[jaap.gebraad@waterborne.eu](mailto:jaap.gebraad@waterborne.eu)



# Zero Emission Waterborne Transport Partnership

## PORTFOLIO OF ACTIVITIES



## OVERARCHING OBJECTIVES



### 2030 - 2050 goal

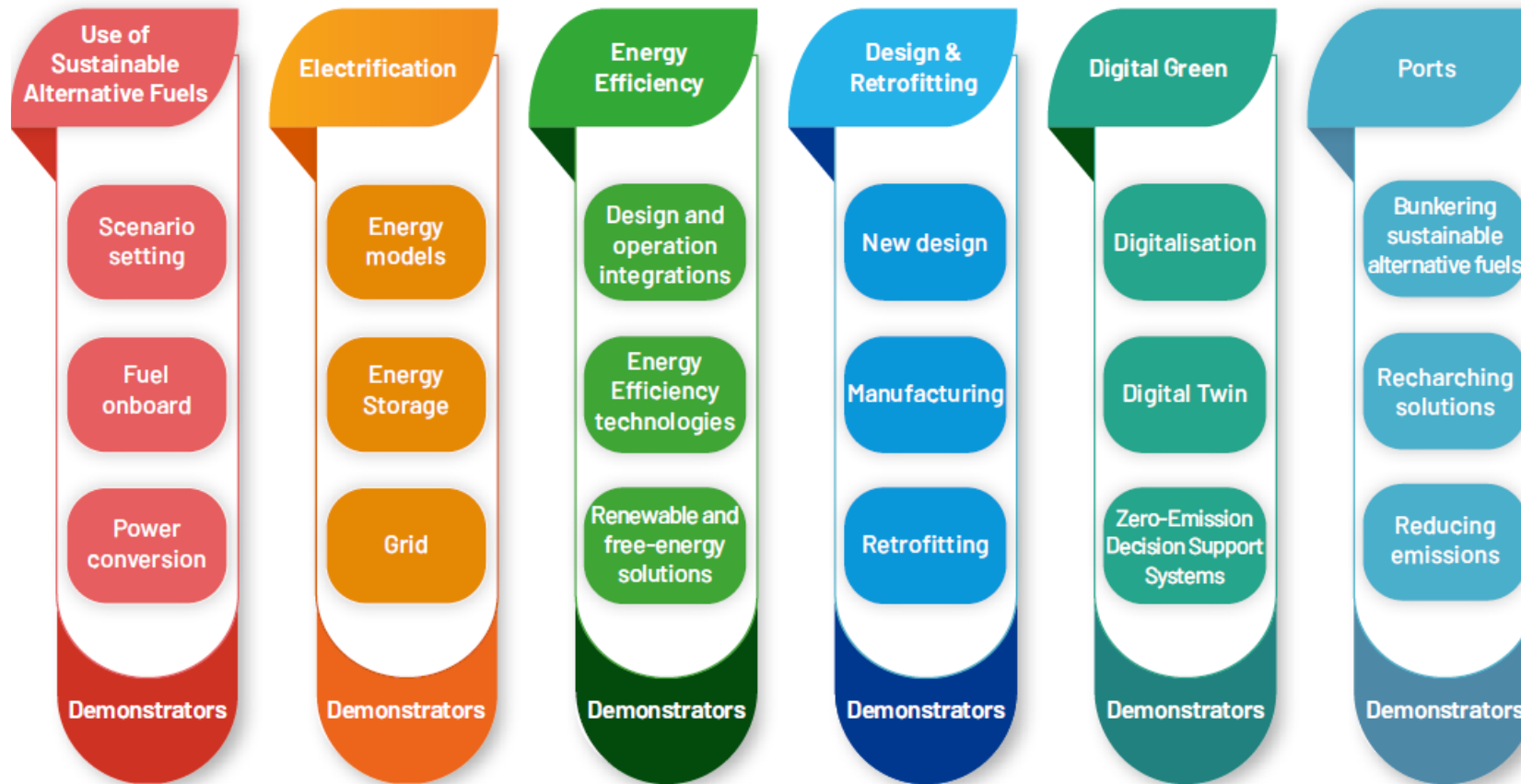
- 1 To demonstrate zero-emission solutions for all main ship types and services before 2030.
- 2 To implement economically viable European technologies and concepts for zero-emission waterborne transport.
- 3 To facilitate the development of regulations and policies at national and international level.

### 2050 VISION: REALIZING ZERO-EMISSION WATERBORNE TRANSPORT TO THE BENEFIT OF FUTURE GENERATIONS

For Europe to lead the transformation of the waterborne transport sector into a zero-emission mode of transport which has eliminated all harmful environmental emissions.



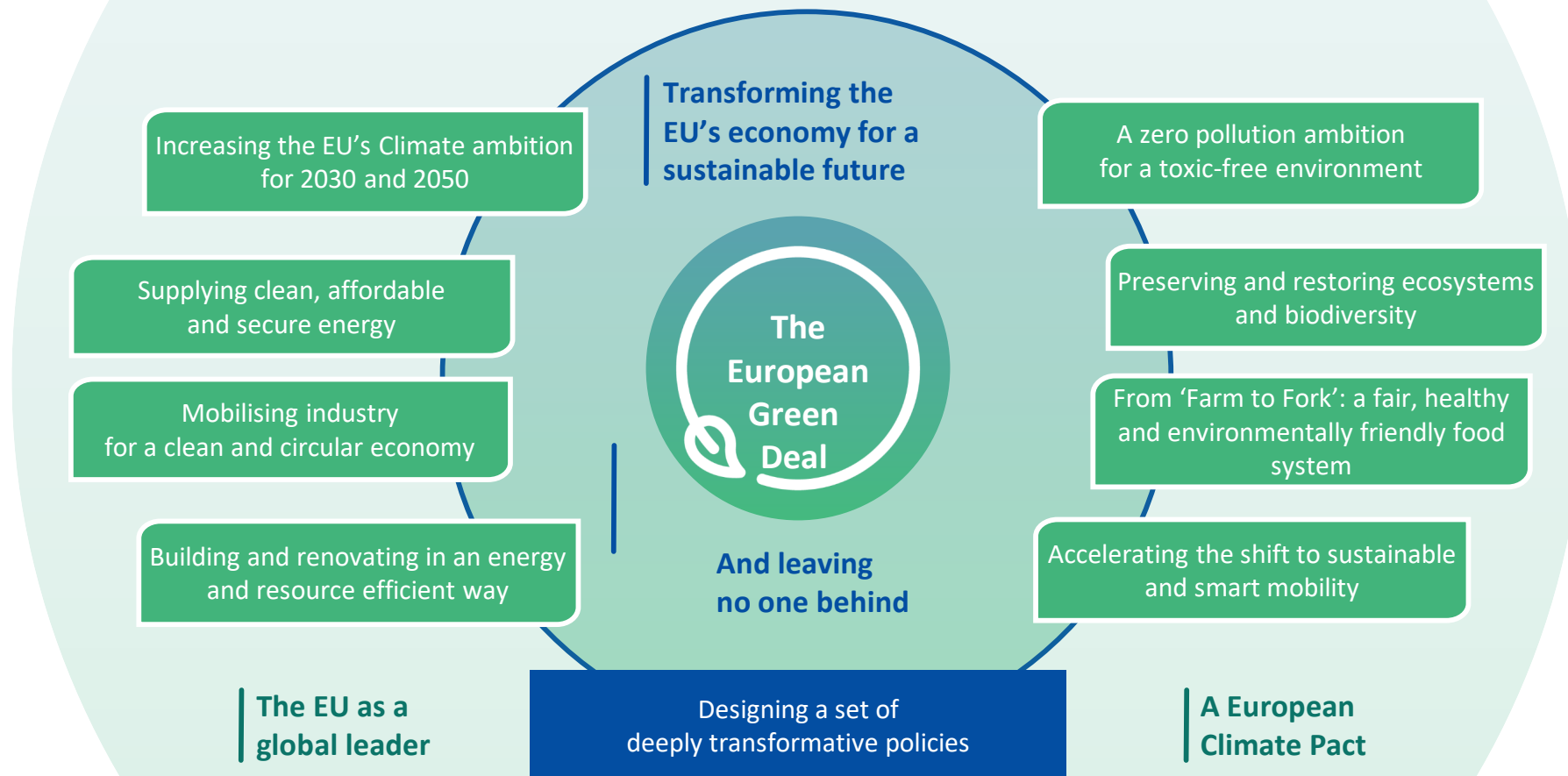
# Zero Emission Waterborne Transport Partnership



# THE EUROPEAN GREEN DEAL CALL

## €1Bn, Deadline 26 January

### Underpinning Green Deal and Recovery Plan



# Green airports and ports as multimodal hubs for sustainable and smart mobility LC-GD-5-1-2020



**Topic:** [https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-gd-5-1-2020\\_modalities](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-gd-5-1-2020_modalities)

## Action type

Innovation Action (IA)

## Project duration

4-5 years

## Consortia

Including 1 leading "Lighthouse" and max. 3 "Fellow" airports/ports

## Evaluation

Potential funding for at least 2 proposals per area A) Green Airports, B) Green Ports

## Budget

EUR 100 million overall – EUR 15-25 million per proposal

## Call model

Single-stage

## Call deadline

**26 January 2021**

*Note: The prevailing text for Green Deal Call Topic LC-GD-5-1-2020 is contained in the Horizon 2020 Work Programme 2018-2020, as adopted by European Commission Decision in September 2020.*



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# Green airports and ports as multimodal hubs for sustainable and smart mobility



## Key features for Green Airports and Ports

### Sustainable

- Green energy production, distribution, supply
- Use of clean energy for transport and other purposes
- Green hydrogen, electricity, biofuels, sustainable alt. fuels

### Smart

- Connected and automated vehicles, cranes, etc.
- Dynamic traffic optimisation into/out of airport/port, from/to city or nodes
- Smart operations, logistics, inter-modal connections/modal shifts

### Multimodal

- Aviation, Maritime, Inland Waterway Transport
- Road, Rail, multimodal connections/modal shifts
- System-wide door-to-door multimodal mobility for passengers/freight

### Other

- Green logistics, infrastructures, energy-efficient buildings
- Links with cities, urban environment, urban mobility
- Biodiversity, circular economy, effective land/sea/river use

*Note: The prevailing text for Green Deal Call Topic LC-GD-5-1-2020 is contained in the Horizon 2020 Work Programme 2018-2020, as adopted by European Commission Decision in September 2020.*



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# | THANK YOU

Contact: [peter.crawley@ec.europa.eu](mailto:peter.crawley@ec.europa.eu)

Register as expert evaluator for Horizon 2020/Horizon Europe:

[https://ec.europa.eu/research/participants/docs/h2020-funding-guide/experts/expert-registration\\_en.htm](https://ec.europa.eu/research/participants/docs/h2020-funding-guide/experts/expert-registration_en.htm)

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