

# Horizon Europe and the maritime transport sector

DG RTD.C3

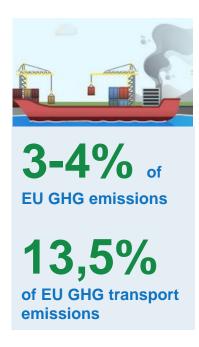
1 February 2024

### The maritime transport sector

### A strategic sector with significant environmental impact











### The Fit-for-55 package and maritime transport

### Why targeting maritime transport emissions?

- All sectors need to contribute, including maritime transport
- Maritime transport is a substantial CO2 emitter (3-4% of EU CO2 emissions) and emissions have increased, and with that also their share of global and EU emissions
- Lack of adequate measures in place at EU or global level

### How to reduce emissions?

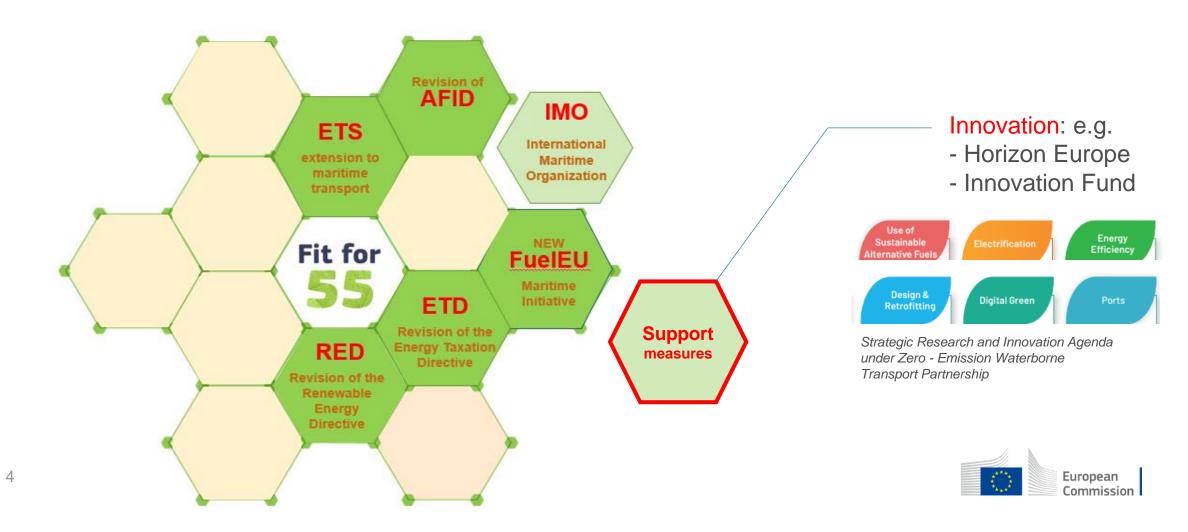
- The decarbonisation of the sector requires:
  - **Improving energy efficiency** i.e. using less fuel
  - **Greater use of renewable and low carbon fuels** i.e. using cleaner fuels
  - **Economic incentives** for cleaner activities tilt the level playing field.

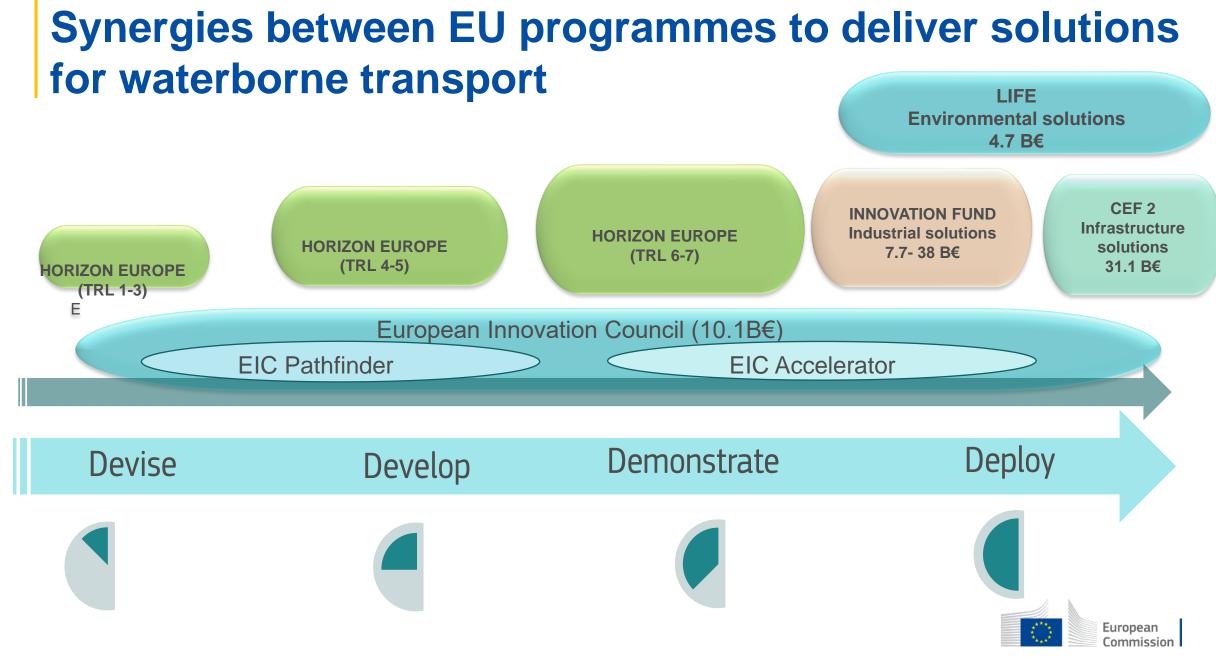




# A basket of measures to address GHG emissions from shipping

pricing, targets, standards and support measures





#### **HORIZON EUROPE 2021-27 €95.5 billion**

#### **EURATOM**

SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

**Development** actions

#### SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

Exclusive focus on civil applications





Marie Skłodowska-Curie

**Research Infrastructures** 

Waterborne Transport



#### Pillar II

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioconomy, Natural esources, Agriculture & Environment

**Joint Research Centre** 

**EU Missions** 



European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology\*

Fusion

**Fission** 

Joint Research Center

#### WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system



<sup>\*</sup> The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

## **Overview of European Partnerships**

#### HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

		9 =	
CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture,
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive
Chemicals risk assessment	European Metrology	Europe's Rail	Blue Economy
	(Art. 185)	Connected and Automated Mobility (CCAM)	Water4All
ERA for Health	Al-Data-Robotics		Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Systems Transitions*
Personalised Medicine*	Clean steel – low-carbon	Zero-emission road	Agriculture of Data*
	steelmaking	transport	Safe & Sustainable Food
Pandemic Preparedness* Co-funded or co-programmed	Processes4Planet	Built4People	System*
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	
Institutionalised Partnerships (A	·		
Institutionalised Partnerships / E	:11 KICs		
Co-Programmed			

Co-Funded

#### PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATIO ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

#### CROSS-PILLARS II & III

European Open Science Cloud



<sup>\*</sup> Calls with opening dates in 2023-24

<sup>\*\*</sup> Calls with opening dates not before 2022

### Horizon Europe – Waterborne Transport

### **EU Budget:**

- Partnership: €530 M
- Collaborative R&I
   €100 M + other parts of the program

Private side commitment:

€ 3.3 Bn



**Public** 

### **Private**

### **European Commission:**

- DG RTD
- DG MOVE
- DG CLIMA

### Waterborne Technology Platform

>120 members representing entire sector (classification societies, shipbuilders, shipowners, maritime equipment manufacturers, infrastructure and service providers, universities or research institutes)

European

https://www.waterborne.eu/

## Zero-emission waterborne transport partnership

Objectives:

Using R&I to develop and demonstrate zero-emission solutions for all main ship types and services by 2030 which will enable zero-emission waterborne transport by 2050.

Eliminating <u>GHG emissions</u> from new ships and retrofitted existing ships by means of sustainable alternative climate-neutral fuels, renewable energies, electrification and energy efficiency.

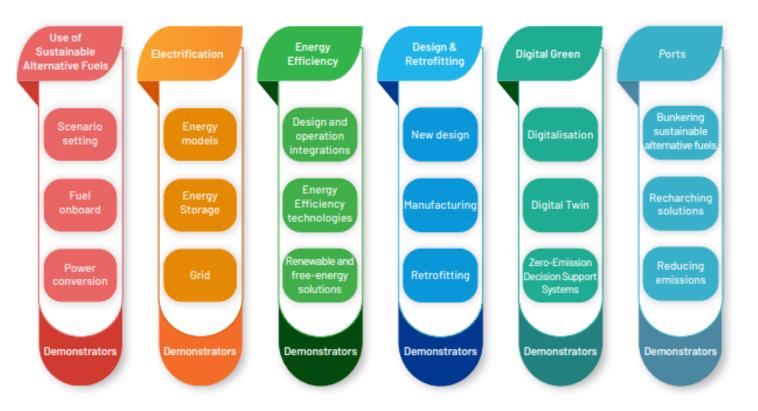
Cutting coastal and inland pollution to <u>air</u> by at least 50% compared to current levels

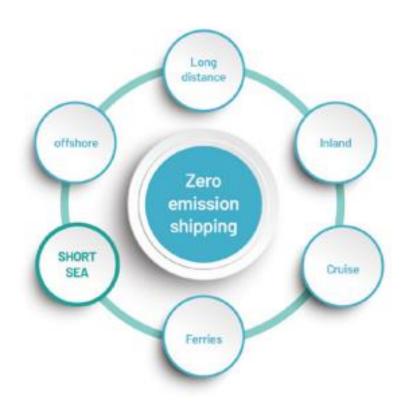
Elimination of pollution to <u>water</u> (including harmful underwater noise) from ships





### Zero-Emission Waterborne Transport Partnership Strategic R&I Agenda







### Waterborne Transport - Horizon Europe

### Zero Emission Waterborne Transport Partnership

On board integration

# Clean Hydrogen Joint Undertaking

Technology building blocks for various applications

# Co-programmed partnership Batteries4EU

Battery technologies for various applications

# **EU Mission: Climate- Neutral and Smart Cities**

Port cities

# **EU Mission: Restore our Ocean and Waters**

Shipping Contribution to Blue Economy



### **Questions & Answers**





# Thank you



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