



Horizon Europe

Horizon Europe Towards Zero Green House Gas Emission Waterborne Transport

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C3 Low Emission Future Industries

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Green Hysland & H2Ports Webinar — 5 October 2022

Decarbonising Waterborne Transport: Context

December 2019

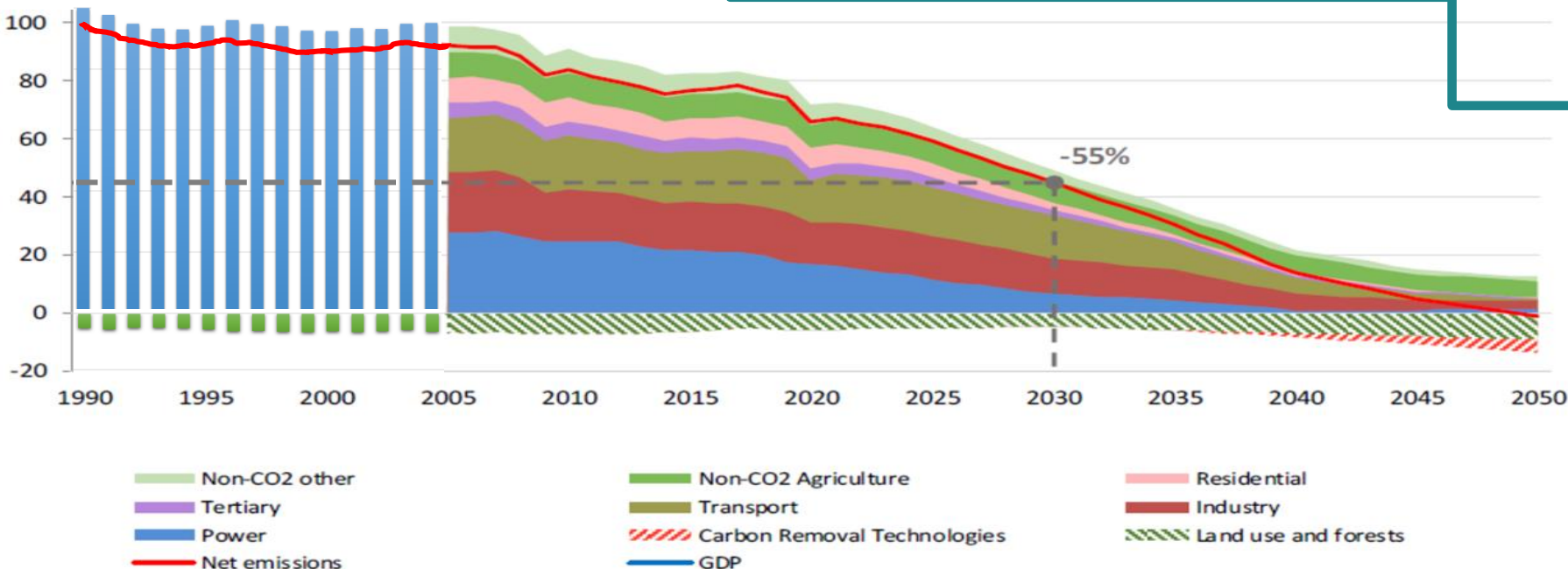
European Green Deal,
Vision for a sustainable economy

July 2021

EU climate Law,
2030 55% reduction
2050 climate neutral

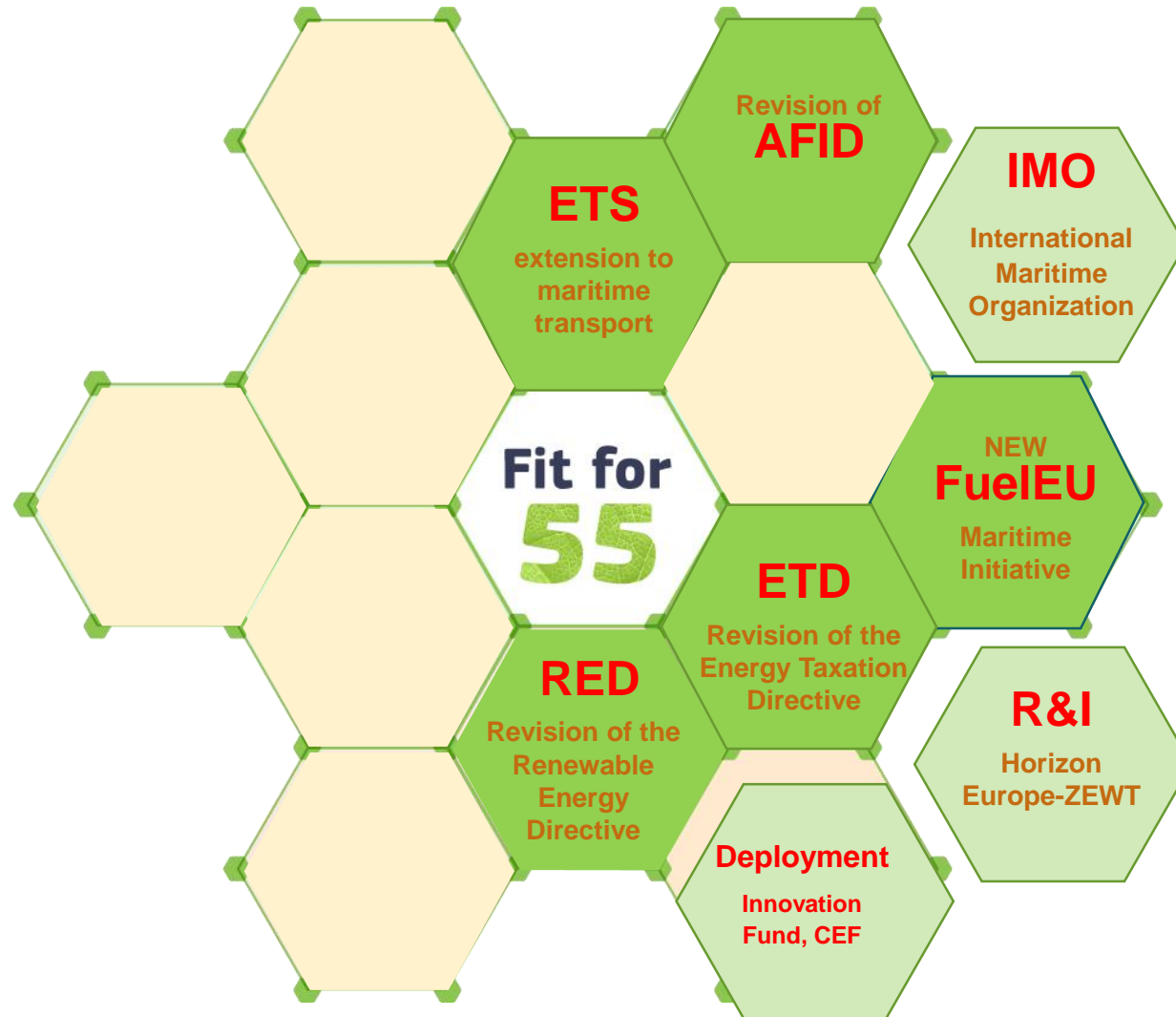
July 2022

Fit for 55 Package
Legislative; ETS, Fuel EU
maritime..



*Pathway to
Decarbonisation*

Decarbonising Waterborne Transport: “Basket of Measures”

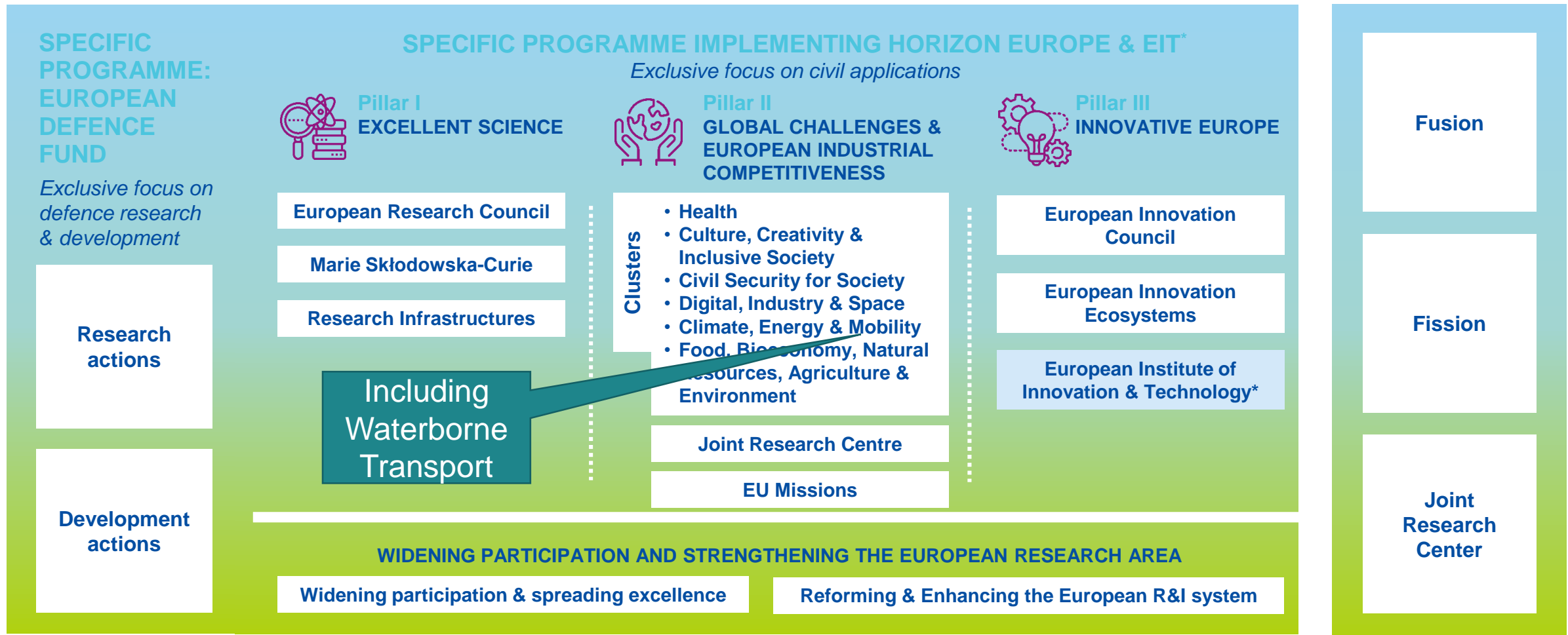


MARITIME

ZEWT= Zero Emission Waterborne Transport Partnership

HORIZON EUROPE 2021-27 €95.5 billion

EURATOM



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

Decarbonising Waterborne Transport: Horizon Europe

New: Zero Emission Waterborne Transport (ZEWT) Partnership, stepping up investment to cut waterborne transport emissions



Commitments:

- **Horizon Europe:**
€530 million
- **Partners other than EU:** **€3,300 million**

Outside partnership scope

(digitalisation, automation
competitiveness)

R&I **€100 M**

Co-programmed partnership between the Commission and private side –represented by Waterborne Technology Platform

To:

- Accelerate the transition towards zero emission waterborne transport
- Implement partnership's **Strategic Research and Innovation Agenda**
- By 2030 demonstrate deployable zero emission solutions suitable

<https://www.waterborne.eu/partnership/partnership>

Also: Clean Hydrogen Joint Undertaking: www.clean-hydrogen.europa.eu

Zero-emission waterborne transport partnership

Objectives:

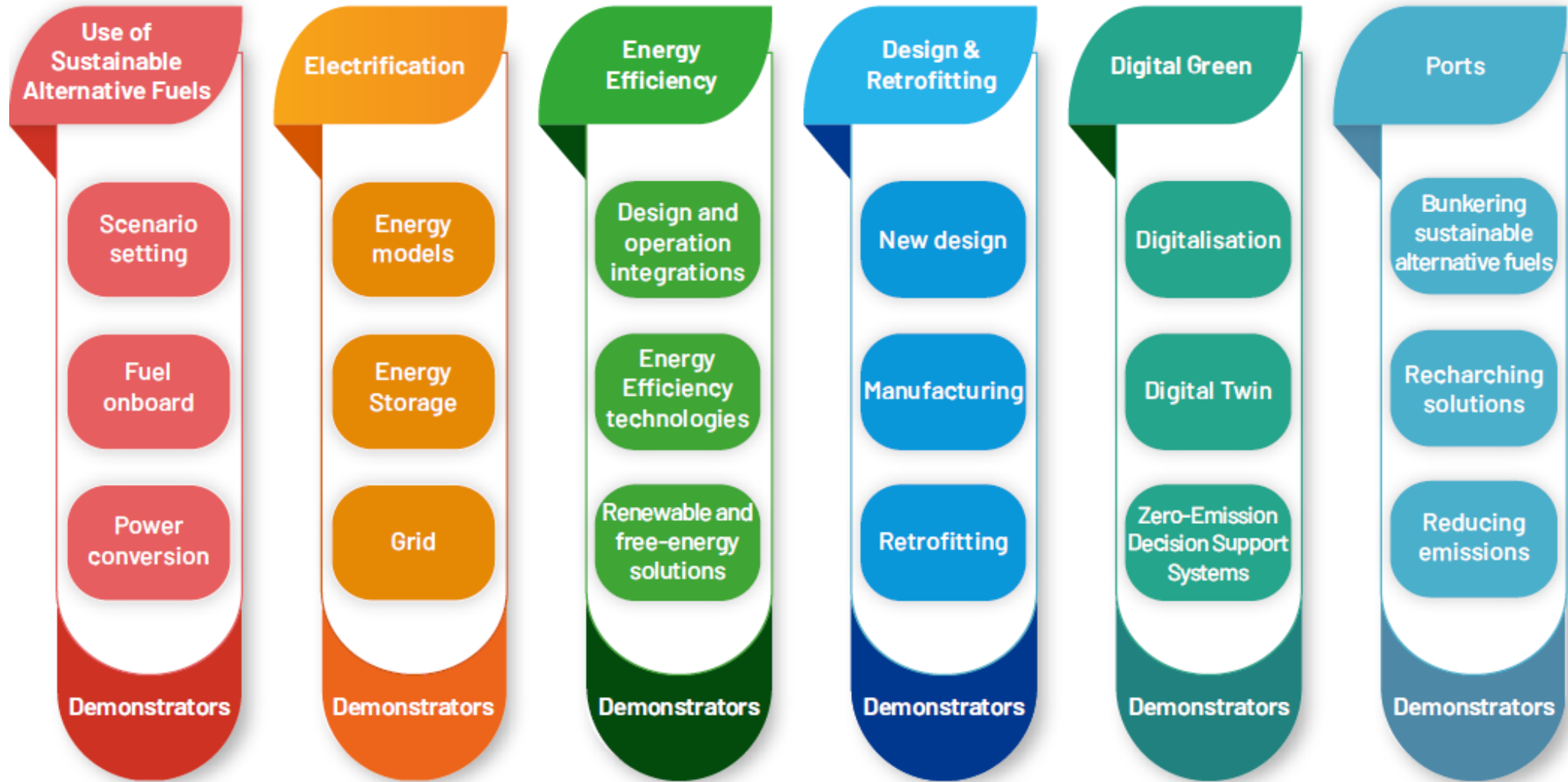
Using R&I to develop and demonstrate zero-emission solutions for all main ship types and services by 2030 which will enable zero-emission waterborne transport by 2050.

Eliminating **GHG emissions** 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 air by at least 50% compared to current levels

Elimination of pollution to water (including harmful underwater noise) from ships

R&I areas (Strategic Research and Innovation Agenda)



Synergies – Horizon Europe Partnerships

Zero Emission Waterborne Transport Partnership - on board integration

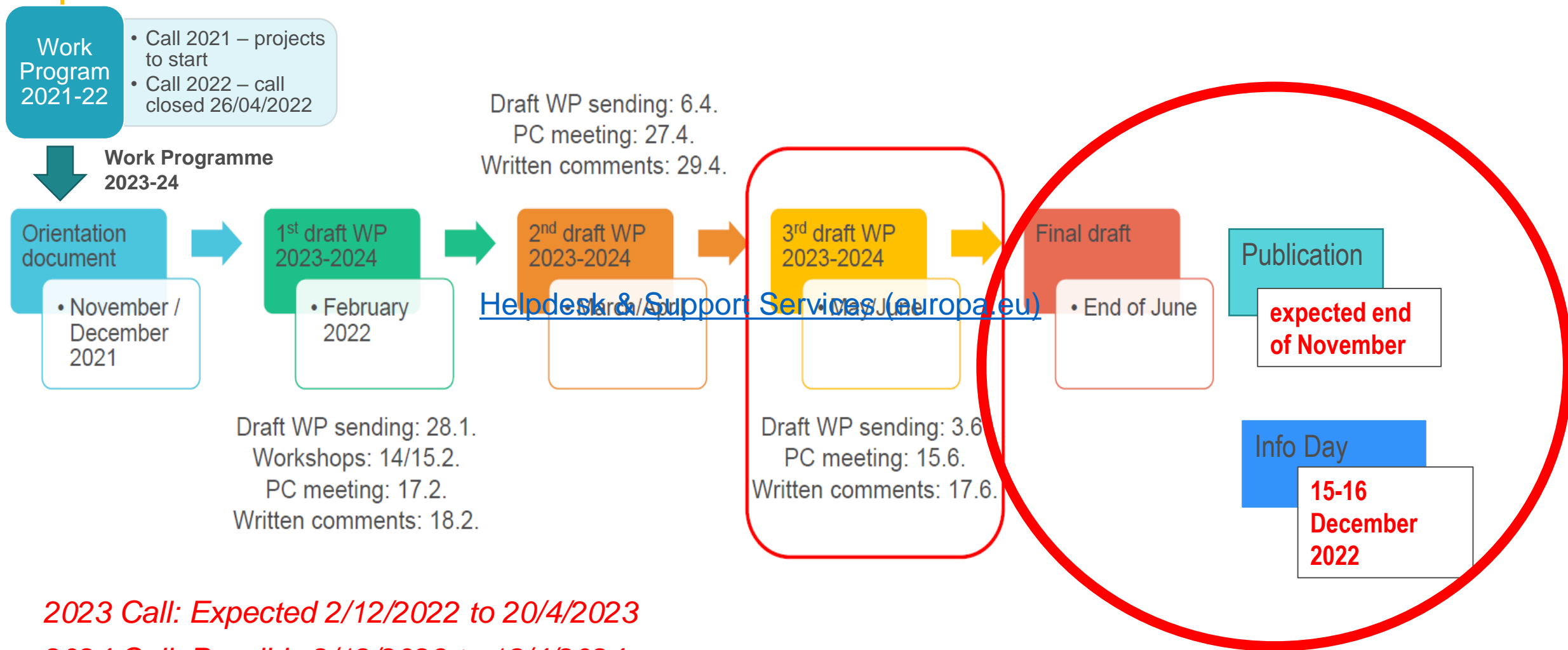
Clean Hydrogen Joint Undertaking

- Large scale demonstration of hydrogen fuel cell propelled inland waterway vessels
- Development of large scale LH2 containment for shipping
- + 5 linked topic (concerning clean hydrogen production for use of shipping and other high power transport modes)

Co-programmed partnership on Batteries

- Topics concerning battery technologies for various applications

Next



2023 Call: Expected 2/12/2022 to 20/4/2023

2024 Call: Possibly 2/12/2023 to 18/4/2024

Indicative type of support area

- Power Conversion technology
- Demonstrate new sustainable fuels
- Optimise navigation & port calls
- Clean power for ships moored near ports
- Greener shipyards
- Automated vessel to move more by water

- High voltage power and DC electric grid.
- Retrofitting for fit for 55 targets
- Cutting underwater noise.
- Digitalisation for green ships
- Business models supporting innovation
- Better combining national activities
- What's the harm from ship air pollution

Decarbonising Waterborne Transport:

Useful links

- Waterborne Technology Platform <https://www.waterborne.eu/>
- Zero-Emission Waterborne Transport Partnership (ZEWT) <https://www.waterborne.eu/partnership/partnership>
- Strategic Research and Innovation Agenda of the ZEWT Partnership
https://www.waterborne.eu/images/210601_SRIA_Zero_Emission_Waterborne_Transport_1.2_final_web_low.pdf
- Horizon Europe Work Programme – Cluster 5: Climate, Energy and Mobility

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-5-climate-energy-and-mobility_en

- EU Funding: [Funding & tenders \(europa.eu\)](#)
- Clean Hydrogen Joint Undertaking: [Clean Hydrogen Joint Undertaking \(europa.eu\)](#)
- Batteries Partnership (BATT4EU): [BATT4EU Partnership – BATT4EU \(bepassociation.eu\)](#)
- Where to find help: [Helpdesk & Support Services \(europa.eu\)](#)