



# SUSTAINABLE & SMART **MOBILITY STRATEGY**

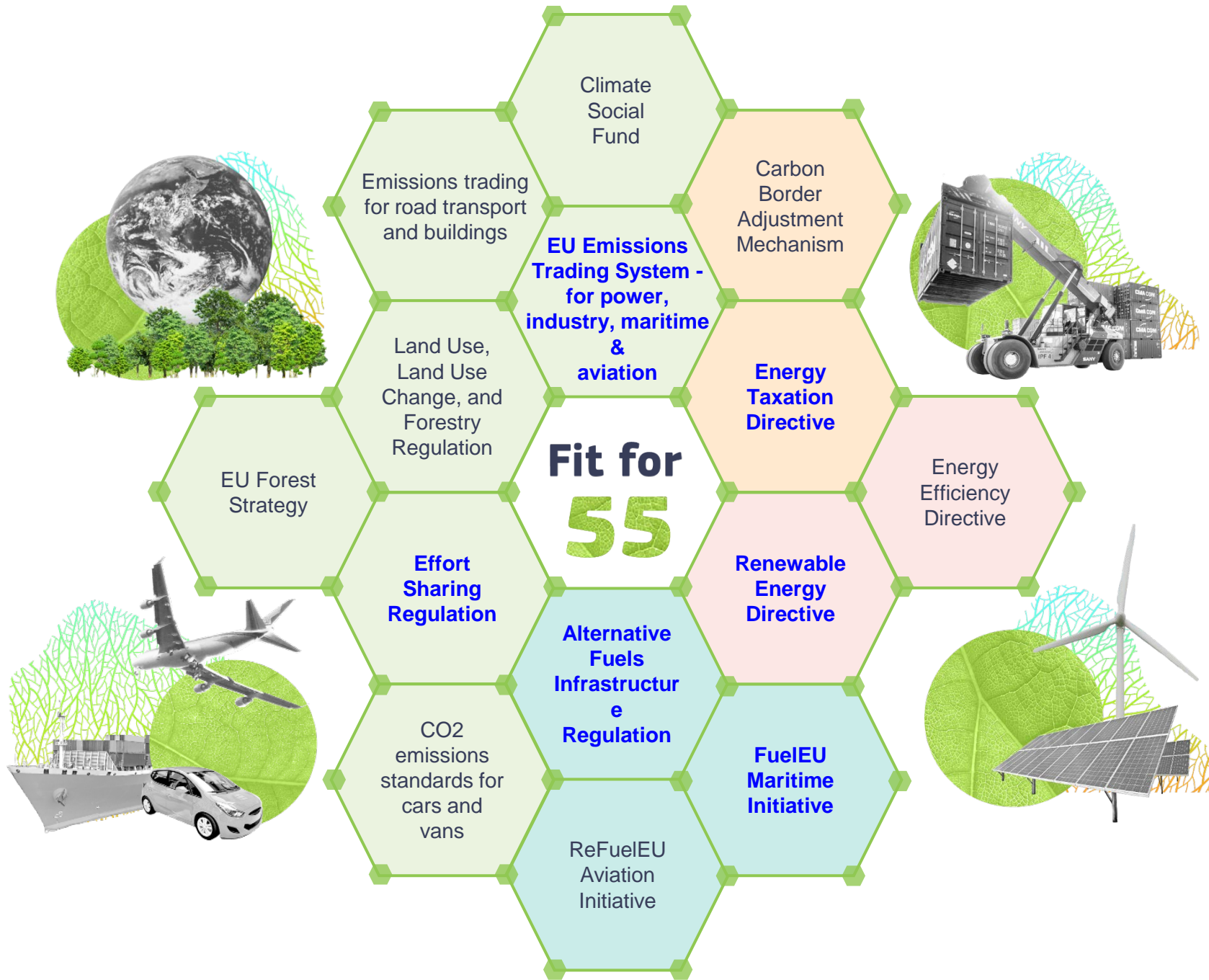
## Maritime and financing aspects of the European Green Deal package



HELCOM Green Team  
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DG MOVE D.2

# Context

- In March 2020, the Commission put forward the proposal for the first **EU Climate law**. It aims to write into law the goals set out in the European Green Deal.
- In the **2030 Climate Target Plan**, the Commission proposed to cut EU GHG emissions by **at least 55 % in 2030** and to become **climate neutral in 2050**.
- The targets were endorsed by the European Council in December 2020.
- Parliament and Council provisionally agreed on these targets in April 2021.
- On 14 July, the Commission proposed the **European Green Deal (Fit for 55) package** to implement the targets.



# Initiatives that concern waterborne transport (“basket of measures”)

- **Emission Trading System** – gradual extension to maritime from 2023 with 3-year phase-in period, same CO<sub>2</sub> price across sectors, yearly ‘cap’ on the total emissions covered by the system and gradual reduction of cap over time, attribution of shipping companies to national administering authority to ensure compliance.
- **Energy Taxation Directive** – no exemptions for fuels used in intra-EU maritime and in inland shipping; tax exemption possibility for shore side electricity; zero minimum rates for sustainable fuels (biofuels and biogas, low-carbon-fuels, renewable fuels of non-biological origin, advanced sustainable biofuels and biogas, and electricity) for 10-year transitional period.
- **Renewable Energy Directive** – counts energy used in international shipping towards the target, multiplier for renewable fuels of non-biological origin and advanced biofuels and biogas supplied to maritime.
- **Energy Efficiency Directive** – counts energy consumption in domestic maritime (excluding international maritime bunkers).
- **Effort Sharing Regulation** – national targets continue to include domestic maritime.
- **FuelEU Maritime**
- **Regulation on Alternative Fuels Infrastructure**



# Proposal for a Regulation: FuelEU Maritime



## Proposed approach

- Focus on **fuel and on demand** (but other aspects are covered elsewhere!)
- **Technology-neutral approach** maritime operators will need to use an increasing proportion of zero and low carbon sustainable fuels, without obligation to use a specific technology.
- Inclusion of **CO<sub>2</sub>, methane and nitrous oxide** on a full **well-to-wake** calculation, in line with EU promoted approach in IMO
- Requirement to use **onshore power supply (OPS) in ports** for ships with highest energy demand.
- Flexibility mechanism via banking and borrowing.
- Open pooling to reward/incentivise overachievers and encourage the rapid deployment of the most advanced options, in particular zero emission technologies.
- Ships not meeting limits / OPS obligation would pay deterrent financial penalty. Revenues used for development of RLF.
- **Low administrative burden:** monitoring is based on MRV and its electronic system (THETIS MRV) – ‘report only once’ approach.

## Overview

- **GHG intensity of the energy used on-board** – introduction of limits on the yearly average GHG intensity of energy used on-board (CO<sub>2</sub>eq/MJ)
- **OPS or zero-emission technology** compulsory as of 2030 for container and passenger vessels
- **Level of ambition** is in line with **the Climate Target Plan 2030** (consistency with other measures; constraints of fuel availability, production, etc.)
- **Targets** are established in 5-year intervals **from 2025 until 2050** – regulatory predictability
- **Same scope as in ETS** (ships above 5000 GT, intra-EU traffic + 50% international, EU ports)

# How would FuelEU work?



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In case of compliance, companies are issued a valid certificate of compliance – **Article 19**



To provide flexibility and address issues of fuel availability the same ship can bank/borrow compliance surplus – **Article 17**



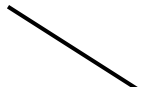
To reward early adopters and zero-emission ships, pooling of over-compliance is allowed among ships (private law agreements); no transfer of borrowed surplus – **Article 18**



Enforcement is done by checking for the certificate of compliance (**Articles 22, 23**); for non-compliance the company is subject to dissuasive proportionate penalties (**Articles 20, 21**)

- OBLIGATIONS:**
- Maximum limits on the GHG intensity of the energy used on board (yearly average) – **Article 4**
  - For containers, ro-pax and passenger ships obligation to connect to OPS in ports or be zero-emissions at berth – **Article 5**

Companies monitor during the year the amount and type of energy in regulated journeys / port calls (using bunker delivery notes and OPS bills) – **Articles 6, 7, 8**  
 Data is scrutinised by verifiers (**Articles 10, 11, 12, 13**) and reported to COM through IT tool (**Articles 14, 15, 16**)



Lower GHG intensity using liquid biofuels, e-liquids, decarbonised gas (including biogas and e-gas), decarbonised hydrogen and decarbonised hydrogen-derived fuels (including methanol, and ammonia), electricity and wind. Certification relying as much as possible on existing schemes, like REDII – **Article 9 + Annexes**



In case of disagreement with the work of the verifiers, the companies may request a review (**Articles 24, 25**).



European Commission

Mobility and Transport



# AFIR: Overview of the structure of the regulation

- Regulation instead of Directive
- Changes in the scope and definition
- Mandatory infrastructure deployment targets for road, maritime and aviation
- Improving the quality of / user experience at electric recharging and hydrogen refuelling infrastructure
- Technical specifications to improve interoperability
- Reporting mechanisms to ensure that targets are met

# Mandatory targets waterborne

- **On Shore Power Supply (OPS) maritime ports (Art 9)**
  - TEN-T core and comprehensive ports to provide OPS for passenger, and container vessels to meet demand for OPS (in line with FuelEU maritime)
- **OPS inland waterway ports (Art 10)**
  - 1 installation per inland waterway port at TEN-T core and comprehensive port
- **LNG maritime ports (Art 11)**
  - Existing provision remain

# Art 15, Review of national policy frameworks and progress reports

- By 1 January 2026 the Commission shall assess the NPFs and submit a report on this assessment to the European Parliament and the Council
- The Commission shall assess the national progress reports (Art 14(1)) and where appropriate issue recommendations to Member States that will update their progress reports within 6 months after having received those recommendations
- By 1 January 2028 the Commission shall assess the national progress reports and submit a report on this assessment to the European Parliament and the Council
- The Commission will publish and regularly update information on the national targets and objectives for all relevant infrastructure for all modes

# Technical specifications (Art 19 and annex II)

- **Physical standards**

- Mandate to ESOs and subsequent adoption through delegated acts
  - Road (e.g. ultra-fast recharging for trucks, supplementary standards for hydrogen)
  - Waterborne (e.g. battery recharging points, hydrogen, methanol and ammonia refuelling points)
  - Aviation (e.g. hydrogen refuelling)

- **Communication standards (e-mobility)**

- Mandate to ESOs and subsequent adoption through delegated acts
  - Communication between vehicle and the recharging point
  - Communication between recharging point and CPO back-end
  - Communication between recharging point and roaming platforms
  - Communication between recharging points and the grid

# Next steps

- Proposals have been formally sent to Council and Parliament in all language versions in early September 2021.
- Link to proposal and accompanying documents:  
[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_3541](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3541)

# Ship financing: context

- **A highly capital-intensive industry, long term assets**
- **Need for a rapid transition towards zero and low carbon technologies**
  - Environmental and climate challenges
  - Ambitious climate targets
- **Regulatory measures**
  - Fit For 55 package (FuelEU Maritime, AFIR, RED II, ETS),
  - Measures at the IMO level
- **EU taxonomy framework**
  - Delegated Regulation on climate, adopted in 2021, maritime shipping included
  - New Delegated Regulation on all the environmental criteria, planned for 2022
- **A vital role of the EU funding and financing programmes to support the green transition**

# EU instruments to support the sector

- **InvestEU – main instrument, key role of the EIB Group and other Implementing Partners (such as EBRD and national promotion banks)**
  - Relevant policy windows: SIW, RIDW, SMEW
  - General financial products
  - Specific financial products, such as the Future Mobility Facility
- **Connecting Europe Facility – the ship component limited to zero emission**
  - First calls launched on 16 September
  - Alternative Fuels Infrastructure Facility
- **Recovery and Resilience Facility – to limited extent only (few countries planning ship financing)**
- **Horizon Europe – in particular the Zero Emission Waterborne Technology Partnership**
- **Innovation Fund – mostly for the energy sector but renewable alternative fuels production for maritime-based projects may be eligible**
- **EIB group lending operations, guarantees and equity financing**

# Where to get information and support?

- [InvestEU Advisory Hub](#)
- [InvestEU Portal](#)
- [EU funding and tenders portal](#)
- [CINEA](#)
- EU Member States: for their respective RRP's and Cohesion Policy programmes (including CF, ERDF, JTF etc.)