



SUSTAINABLE & SMART
MOBILITY STRATEGY

Fit for 55 package —

OPS for maritime transport
and ports







ETA Sustainable Conference, 02 February 2023
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Maritime transport in the EU





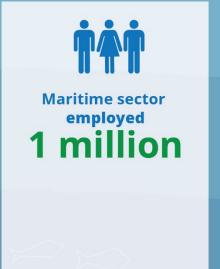
77% of EU international

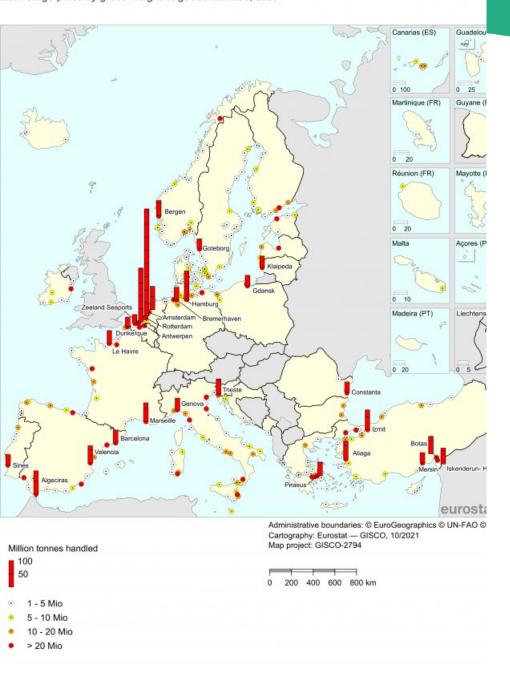
35% intracommunity trade



17.6% world fleet EU MS-flagged

36.4% world fleet owned by persons/businesses domiciled in the EU





Maritime transport in the EU

- Round 1000 commercial ports
- About 300 part of a European Network (TEN-T ports)
- Large variation on port characteristics
- TEN-T Regulation currently under revision

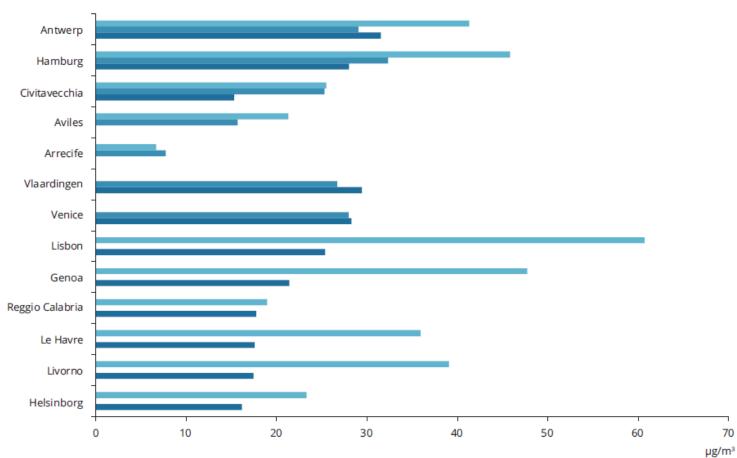


Maritime transport and air pollution



Maritime transport and air pollution

Figure 4.10 Average of the annual mean NO₂ concentrations recorded at air quality monitoring stations (by station type) located within a 2 km radius of some EU ports, 2018

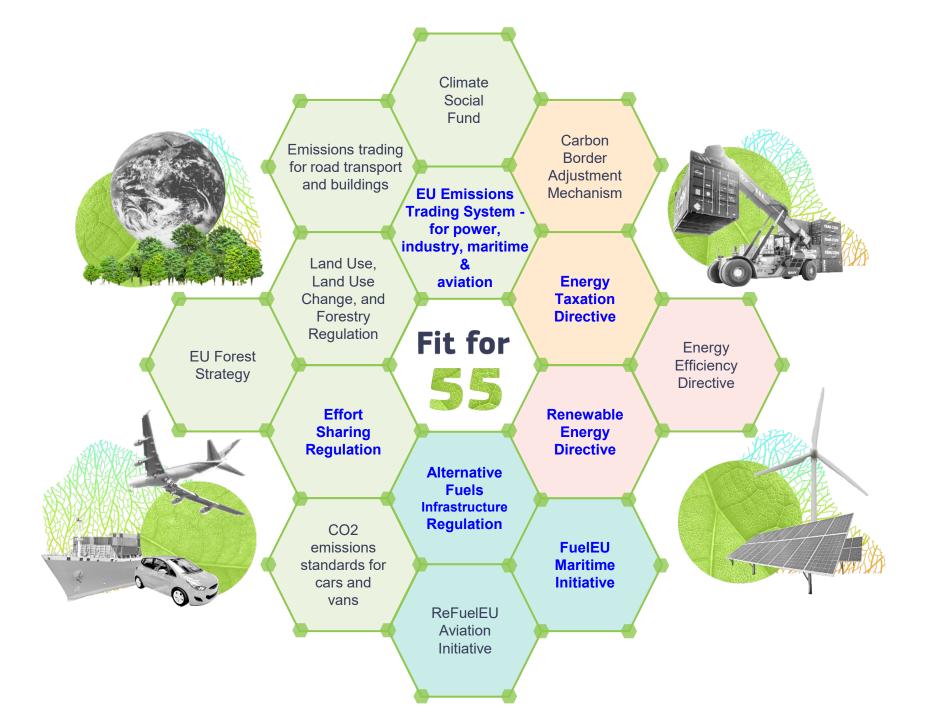


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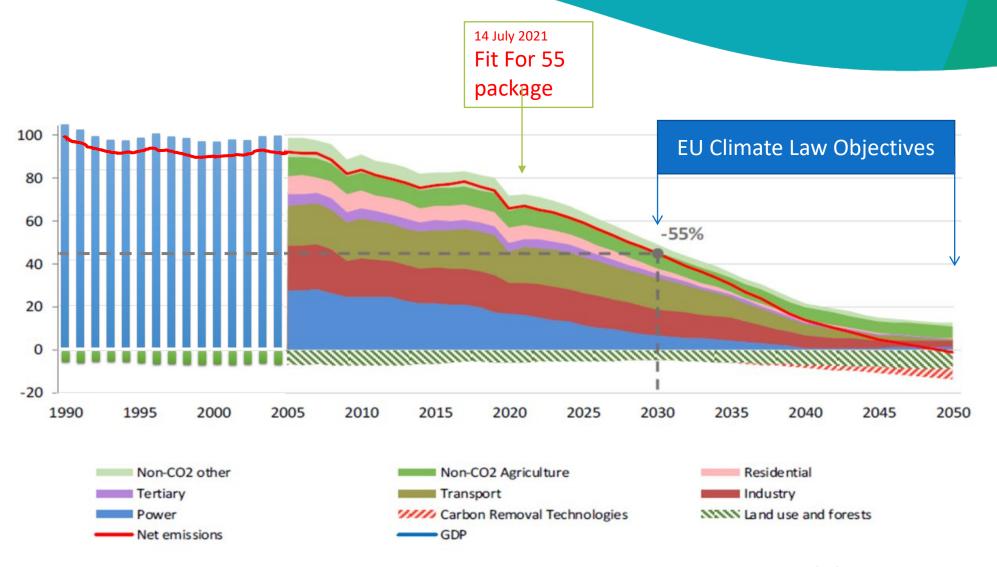
Fit for 55 package

Context

- The **European Green Deal** (2019) sets the goal of becoming climate neutral by 2050. The EU Climate Law writes this goal into law
- The **2030 Climate Target Plan** proposes to cut EU GHG emissions by **at least 55 % in 2030** in order to become climate neutral in 2050
- The **Sustainable and Smart Mobility Strategy** (2020) commits the EU to a 90% reduction in transport CO2 emissions by 2050
- On 14 July 2021, the Commission proposed the Fit for 55 package to implement these targets



Fit for 55 package





Fit for 55 package

Main initiatives that concern waterborne transport and ports

- Emission Trading System gradual extension to maritime from 2023 with 3-year phase-in period, same CO₂ price across sectors, yearly 'cap' on the total emissions covered by the system and gradual reduction of cap over time.
- FuelEU Maritime stimulate demand for renewable and low-carbon fuels in maritime transport.
- Regulation on Alternative Fuels Infrastructure (AFIR) fuel distribution, including on-shore power supply for TEN-T maritime and inland ports and LNG refuelling points in TEN-T core maritime ports.
- 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 for 10-year transitional period (biofuels and biogas, low-carbon-fuels, renewable fuels of non-biological origin, advanced sustainable biofuels and biogas, and electricity).
- Renewable Energy Directive fuel supply: 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.

FuelEU Maritime

Proposed approach

- **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.
- **GHG intensity of the energy used on-board** introduction of limits on the yearly average GHG intensity of energy used on-board (CO2eq/MJ). **Targets** are established in 5-year intervals **from 2025 until 2050** regulatory predictability. **Same scope as ETS** (ships above 5000 GT, intra-EU traffic + 50% of international, EU ports)
- Requirement to use onshore power supply (OPS) or other zero-emission technology in ports as
 of 2030 for ships with highest energy demand (container and passenger ships).
- 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 renewable and low-carbon fuels.
- Low administrative burden: monitoring is based on MRV and its electronic system (THETIS MRV)
 'report only once' approach.

Proposed approach

Alternative Fuels Infrastructure Regulation (AFIR) – waterborne transport

- Targets for shore side electricity supply in TEN-T maritime ports
 - On-shore power supply by 2030 (90% of calls for container and passenger ships > 5000 GT) for TEN-T maritime ports exceeding a minimum annual threshold 50 calls/year for container ships, 40 calls/year for ro-pax and high-speed passenger crafts, 25 calls/year for other passenger ships (cruise).
 - **Notable exemptions**: port calls under 2 hours, ships using zero-emission technologies, unscheduled calls for reasons of safety or saving life at sea.
 - Exemption for islands not connected to the grid.
- Targets for shore side electricity supply in **TEN-T inland ports**: at least one installation for inland waterway vessel by 1 January 2025 (core) or 1 January 2030 (comprehensive)
- Targets for supply of **LNG in maritime ports**: appropriate number of refuelling points for LNG in place at TEN-T core maritime ports by 1 January 2025.



OPS in FF55

Main benefits

- Mature Technology
- Target most polluting vessels
- Allows flexibility for ports
- Not only GHG benefit but also on pollution

Main challenges

Change of mentality!



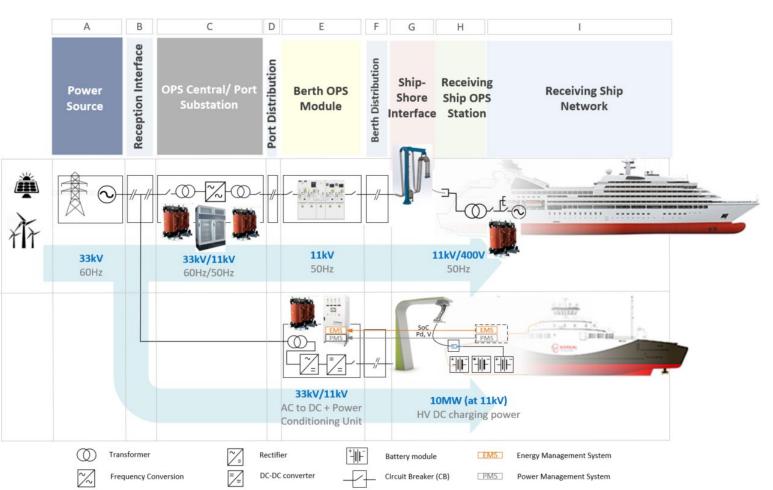
Funding aspects

Funding opportunities and financial instruments

- Connecting Europe Facility CEF II: grants to support transport infrastructure/Motorways of the Sea
- Alternative Fuels Infrastructure Facility AFIF: support maritime projects, deployment of zero and low emission technologies (only zero emission vessels supported)
- Invest EU: key role of EIB and other implementing partners. Will finance inter alia alternative fuel infrastructure and zero-emission and low emission vessels deployed in SSS
- EIB: providing loans, guarantees and equity financing
- Recovery and Resilience Facility (RRF): loans and grants to support investments in Member States
- Innovation Fund: aims to bring to the market industrial solutions for decarbonising and transition to climate neutrality
- Horizon Europe (HE): support projects related to the climate transition, including shipping. HE includes the Zero-Emission Waterborne Partnership, implementing a strategic research agenda to eliminate emissions from shipping.

Technical aspects

EMSA Guidance on Shore-Side Electricity







PART1

Equipment & Technology

OBJECTIVE: Introduction and Overview of Equipment and Technologies available SSE infrastructure projects

PART2

Planning, Operations and Safety

OBJECTIVE:
Support to
Project,
Implementation
and Operation of
SSE facilities.
Safety
Assessment

QUICK-GUIDE Quick-Reference

Guide on SSE development

OBJECTIVE:
Provide
"summaryguide" support
on development
of SSE projects



European Ports Forum

European Ports Forum (EPF)

- Established 2017
- Exchange information and provide advice on port related matters

Sustainable Ports Subgroup (SPS)

- Support the EPF in sharing and promoting initiatives that can enhance the sustainable development of the ports, of port managing and operating bodies and of the different actors active in the port area.
- Working on best practices on alternative fuels in port operations

Study on the Capacity for Greening of European Sea Ports



Thank you



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