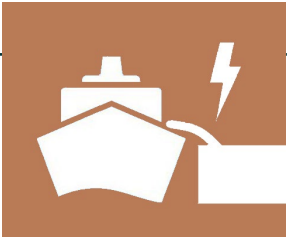


Maritime & inland waterway transport

AFIR

Alternative Fuel infrastructure Regulation - AFIR (Regulation (EU) 2023/1804)



Shore-Side Electricity Infrastructure in Maritime and IWT Ports

- AFIR Article 9 – TEN-T ports with meeting port call thresholds for containerships and passenger ships (above 5,000GT) to deploy Shore Side Electricity infrastructure for 90% of port calls.
- Port call thresholds: Containerships: 100/ RO-PAX/ferries: 40/ Cruiseships: 25
- Port calls not considered: port calls under 2 hours, ships using zero-emission technologies, unscheduled calls for safety or saving life at sea, exceptional risk to grid stability, or emergency situations
- Exemption for islands, outermost regions and Ceuta and Melilla not connected to mainland grid
- **TEN-T inland ports:** at least one installation for inland waterway vessels by 31 December 2024 (core) or 31 December 2029 (comprehensive)

AFIR

Alternative Fuel infrastructure Regulation - AFIR (Regulation (EU) 2023/1804)



Refuelling infrastructure in Maritime Ports

Targets for supply of liquefied methane in maritime ports: appropriate number of refuelling points for liquefied methane in place at TEN-T core maritime ports by 31 December 2024

AFIR

Alternative Fuel infrastructure Regulation - AFIR (Regulation (EU) 2023/1804)



[AFIR Implementation - National Policy Framework](#)

National policy frameworks: Member States to submit drafts by 31 December 2024

Main points for maritime transport:

- national targets and objectives in respect of the deployment of alternative fuels infrastructure in maritime ports for liquefied methane and shore-side electricity supply for use by seagoing vessels
- policies and measures necessary to ensure that mandatory targets and objectives are reached
- overview of the state of play, perspectives and planned measures in respect of the deployment of other alternative fuels infrastructure in **maritime ports**, such as for hydrogen, ammonia, methanol and electricity
- overview of the state of play, perspectives, and planned measures in respect of deployment of alternative fuels infrastructure in **inland navigation**, such as for electricity and hydrogen

Final national policy frameworks by 31 December 2025

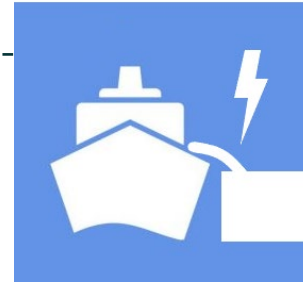
FuelEU Maritime

FuelEU Maritime (Regulation (EU) 2023/1805)



Reduction of GHG intensity of the energy Used onboard ships

- Target Reduction for GHG intensity of energy used onboard (from 2% in 2025, up to 80% in 2050) – Applies from 1JAN2025
- Designed to promote use of renewable and low-carbon fuels in shipping.
- Scope based on Well-to-Wake (Life Cycle) assessment
- Technology neutral.
- Same scope as MRV (ships above 5,000GT)



Mitigation of air pollution (direct) emissions at berth

- Obligation for containerships and passenger ships to connect to OPS in AFIR ports, as from 1JAN2030.
- Same Obligation in all non-AFIR ports if they have the capacity from 2035.
- Zero Emission Technologies are an alternative.



Zero emission for inland & maritime ports

Electricity

Eligible

- On-shore Power Systems (OPS)
- Recharging stations for port services
- Batterie charging systems
- Related grid connection

Hydrogen

Eligible

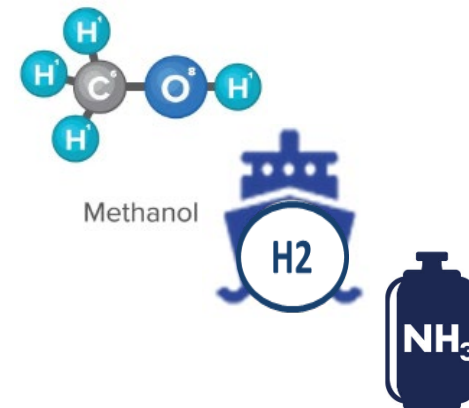
- Hydrogen Refueling Stations (HRS)

- Vessels & port equipment
- Transshipment equipment

Location

- In TEN-T inland waterway and maritime ports areas.

Zero emission for inland & maritime ports



Ammonia

Methanol

Ammonia Refueling facilities

Eligible

- Ammonia Refueling Stations (HRS)
- Ammonia Bunkering vessels 10,000m³

Methanol Refueling facilities

Eligible

- Methanol Refueling Stations (HRS)
- Methanol Bunkering vessels 10,000m³

- Vessels & port equipment

Location

- In TEN-T inland waterway and maritime ports areas.

Q & A