

Maritime legislation developments in EU update PvdA Energie, Dec '21

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# For the maritime sectors, multiple legislation is under development in the FF55 package

FF55 MARITIME RELEVANT INITIATIVES

	Core focus	Effect on maritime
FuelEU	GHG reduction for maritime sectors	GHG reduction target for vessels energy-use
ETD	Implementation of GHG based taxation schemes for energy markets	Gradual increase in taxation for maritime fuels
revision of EU-ETS	Expansion of scope and creation of new- sub part of EU-ETS	Inclusion into existing cap-and-trade system
RED II (I)	Renewable energy production	Aviation and maritime sector counted towards the numerator (*1.2) in transport, kerosene and HFO not considered in the denominator, (freeriding)
AFIR	Alternative energy infrastructure development	Use of on-shore power supply while at berth

# Three main relevant legislative development with regard to martime

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		FuelEU Maritime	ETS	ETD
Ī	Obligated party	Shipowner	Shipowner	Fuel supplier
	Scope	<ul> <li>Intra EU &amp; 50% Extra EU</li> <li>Energy consumption at berth</li> <li>Ships above 5000 Gross tonnage (inland vessels* are excluded)</li> <li>WtW emissions</li> </ul>	<ul> <li>Intra EU &amp; 50% Extra EU</li> <li>100% of emissions at berth</li> <li>Same scope of ships as FuelEU Maritime</li> <li>TtW emissions</li> </ul>	Intra EU including inland shipping     Optional for MS: Extra EU
	Goals	<ul> <li>Focus on GHG intensity</li> <li>Reference year: 2020</li> <li>12% by 2025</li> <li>26% by 2030</li> <li>313% by 2035</li> <li>426% by 2040</li> <li>559% by 2045</li> <li>675% by 2050</li> </ul>	<ul> <li>Focus on GHG emissions</li> <li>Reference year: 2005</li> <li>By 2030: -61% (over all sectors included in the ETS)</li> </ul>	Focus on fuel consumption     No goals set
	Associated costs non-compliance	About 2,400 €/tonne non-compliant fuel	Current ETS price is around 180 €/tonne fossil fuel Expected: ETS price 90 €/tonne	Fossil: 0.9 €/GJ → € 36/tonne
		0	fossil fuel in 2030 and 450 €/tonne fossil fuel in 2050	

## EU-ETS 1.01:general

### Scope + approach

- Inclusion of aviation, maritime, road and buildings
- No free allocation for CBAM sectors after phase in
- MS transposition: 31/12/2023
- No multiplier (REDIII) for shipping for IX-B (or aviation)

#### Revenues

- Part of revenues to MS, part to EC (funds), must be use for climate purposes.MS to use for low income households
- a new Social Climate Fund will provide dedicated funding (25% of T&B ETS revenues in 26-32)
- > 2% of auctioned volume ('21-'30) goes to the Modernisation Fund' (for countries with GDP<60% of EU average 2013)
- 2,5% of auctioned volume ('21-'30) goes to the Modernisation Fund' for countries with 65% GDP less in 2016-2018)

### General changes to EU-ETS

- > 61% reduction compared to 2005 in 2030
- Inear reduction factor is changed to 4,2 % from the year following the entry into force leading to 61% emission reduction by 2030 (for current EU ETS sectors)
- one-off downward adjustment of the cap Cap increase: around 90 million tons of CO2 would be added through the extension to maritime transport to the existing ETS (directive itself states 79Mt)
- > 400M EUAs for innovation (annex I and III:CCS,Z-E)
- For less exposed sectors, free allocation is foreseen to be phased out after 2026 from a maximum of 30% to 0 at the end of phase 4 (2030).
- > 57% of the total amount of general allowances were auctioned in phase 3. In phase 4 (2021-2030), the share of allowances to be auctioned remains the same.' \*

<sup>\*</sup> From EC-DG clima website, no percentage is mentioned in draft directive

## FuelEU maritime (FEUM) regulation: 1.01

### Scope, goal, method

- maximum GHG intensity target for energy used onboard decreasing over time (2020 reference)
- mechanisms to reward over-achievers; pooling and multipliers for zero-emission technologies
- > vessels >5,000t, commercial
- All journeys arriving at, within or departing from ports under the jurisdiction of a Member State , as well as stay in EU ports
- > GHG performance on wellto-wake basis

#### GHG reductions (2020 ref. value)\*

GHG % reduction	Year
2%	2025
6%	2030
13% 26%	2035
26%	2040
59% 75%	2045
75%	2050

#### Relevant market size (2020 data)

> Total shipping fuel market (2020, >5kt vessels size) +/-	240MMT
240 MMT	
Eligible fuel usage (EU<>ROW and Intra EU shipping (25%)	60 MMT
> Weighted Scope: 75% of voyages (to/fro and intra EU)	45 MMT
2% remaining GHG reduction (@75% GHG saving)	1350 kt
> 6% reduction (100%bio, @75%)	3,6 MMt

<sup>\*</sup> fleet average greenhouse gas intensity of the energy used on-board by ships in 2020 determined on the basis data monitored and reported in the framework of MRV Regulation (EU) 2015/757

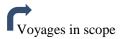
# FEUM's current proposed scope would entail any shipping journey going from or to, or passing thru, the EU.

"All journeys arriving at, within or departing from ports under the jurisdiction of a Member State", as well as stay in EU ports



#### Intra-EU

On-shore power supply requirement (2030) applies to Containerships & Passenger ships



#### scope

- **>** Reduction requirement applies to:
  - > Half the energy used when MS> outside EU or outside EU>MS
  - > Full energy for MS>MS voyages
  - > Full energy used at berth in a MS
- **Compliance is on the shipowner/ (or bare boat charterer)**, who can hold accountable for compliance costs, the 'entity that is directly responsible for the decisions affecting the GHG intensity of the energy used by the ship. (entity: entity responsible for the choice of fuel, route and speed of ship)
- Only IX-A and B ,RFNBOS (synfuels) and RCFs are eligible, no FF based fuels (fossil ref), RED II certification forms basis. (art 27,29). No MeoH included
- > GHG: Well-to wake, divided into WTT and TTW, LCA approach
  - > fossil: default only RLF: default or actual (certified) values
  - > Fuels bunkered outside EU: RED II (imported fuels) as basis

## Compliance requirements: monitoring plan

- > Ships shall maintain a monitoring plan that is verified by independent party (ports, fuels consumed, OPS, emission factors (W2T,T2W,fugitive) substitute energy consumed)
- Ships need to show a 'certificate of compliance' for each reporting period
- Excess compliance units may be transferred to the ship's balance for the following reporting period or transferred to another ship within 6 months after the end of the reporting period
- > Transfer of compliance units shall not be allowed once a FuelEU certificate of compliance has been issued
- If still not compliant: penalty to be paid
  - > Fuels and OPS: proportional to non compliance
  - Penalties allocated to support common projects aimed at the rapid deployment of renewable and low carbon fuels in the maritime sector (Innovation Fund)
- **EC** can change amounts via Delegated act as well as 'modalities for the payment'
- > Companies shall use standardised monitoring plans based on templates, to be developed through Implementing Acts (IA)

## FuelEU (+ EU-ETS) timeline overview

