# Lost at sea: EU States' €20 billion giveaway to the shipping industry

Analysis of European institutions' shipping ETS positions

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#### **Executive Summary**

The European Commission proposed to include maritime shipping in its Emissions Trading System (ETS) in July 2021. The two European 'co-legislators', the European Parliament and the EU Council, approved the proposal, putting forward their own positions in June 2022. To give the first clear picture of what each position means for climate ambition, we have undertaken a qualitative and quantitative analysis of each position.

In terms of emissions coverage, the largest amount of emissions are at play with the geographical scope and the phase-in. In both cases, the European Parliament's position would increase coverage by around 154 MtCO<sub>2</sub> from 2023 until 2030 compared to the Commission proposal. In contrast, under a worst case scenario, the Council's position on harmonising geographical scope with a global measure, could decrease emissions coverage by 132 MtCO<sub>2</sub>. The Council's position to delay the Commission's phase-in would also reduce emissions coverage by 93 MtCO<sub>2</sub> without credible justification. The Parliament, on the other hand, has proposed to scrap the phase-in to cover an additional 154 MtCO<sub>2</sub>.

Qualitative analysis demonstrates the prime importance of regulating all relevant greenhouse gases, all ships above 400 GT and offshore vessels. Although the latter exemptions do not account for the biggest quantitative exemptions, their exemption would delay or even undermine decarbonisation, notably by incentivising ships run on Liquified Natural Gas (LNG) and impeding investment in new technologies that are most often tested in small vessels.

Exemptions for national circumstances proposed by the Council and Parliament on outermost regions, ice-class ships and islands could exempt up to 7 MtCO<sub>2</sub>, 5 MtCO<sub>2</sub> and 4 MtCO<sub>2</sub> between 2023 and 2030. However, these smaller sums hide important qualitative concerns. For instance, the exemption for Public Service Obligations (PSOs) has already been misused by regional governments, to apply to more local ships. The PSO exemption and the exemption for ferries travelling to islands would also exempt the ship types easiest to decarbonise.

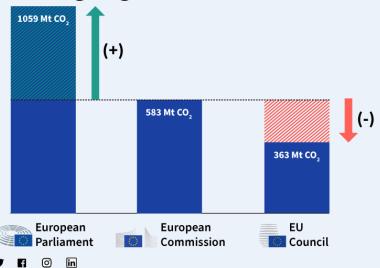
Comparing each institution's position in terms of emissions coverage shows that the Council position would amount to a €20 billion giveaway to the shipping sector at current ETS prices (89.80 August 2022), compared to the European Commission's proposal. The Parliament's position, on the other hand, would increase revenues by €42.7 billion and, as the qualitative analysis shows, would not lead to negative social impacts. Instead, it would kickstart the long-awaited decarbonisation of the shipping industry.

In trilogue negotiations on the ETS, as well as in FuelEU Maritime where policy-makers have put forward similar exemptions, we therefore recommend that policy-makers should:



- Regulate all greenhouse gases to ensure all relevant greenhouse gas emissions, in particular those of methane-leaking LNG vessels, are accounted for. Similarly, policy-makers should end exemptions for ships below 5,000 GT and other ships types, starting with offshore vessels, without delaying these decisions to review clauses in future years;
- 2. **Scrap the phase-in and exemptions based on national circumstances** (the exemption for ice-class ships, for passenger ships to certain islands, for outermost regions and for vessels operating under Public Service Obligations). The phase-in of the ETS, in particular, risks handing a large, unwarranted subsidy to European business.
- 3. **Optimise climate ambition of geographical scope,** ensuring Europe always covers a share of international shipping emissions in the event of the adoption of a market-based measure at the International Maritime Organization (IMO);
- 4. Direct ETS revenues to the deployment of zero-emission ships through operational subsidies (Carbon **Contracts for Difference**).

# Total emissions coverage of each institution's shipping ETS proposal 2023-2030



Graph 1: Total emissions coverage of the shipping ETS positions of the European Parliament, European

Commission and EU Council between 2023 and 2030

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Source: MRV and AIS data, 2019

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#### 1. Context

First proposed by the European Commission in 2021 as part of its 'Fit for 55' Package, the inclusion of shipping into the EU's Emissions Trading System (ETS) is now assured, thanks to approval from the European Parliament and representatives of EU governments, the EU Council. The 'co-legislators' took their respective positions on the shipping ETS in June 2022 and will decide on a final text in the 'trilogue' negotiations between the three institutions that begin in Autumn 2022.

There are important similarities between the institution's positions. Notably, all three institutions have agreed to regulate Europe's share of emissions from international voyages and that no free allowances should be awarded to shipping companies. Nonetheless, some important differences remain, in particular on the use of revenues and whether to create exemptions to the proposal.

#### 2. Methodology

Building on the analysis from the 'EU States Shipping ETS Rankings,¹ our analysis looks at the important parts of the ETS positions to evaluate their quantitative and qualitative impacts, using data from the EU's Monitoring, Reporting and Verification (MRV) Regulation, Marine Benchmark and Automatic Identification Systems (AIS) data.²

To measure the relative differences in emissions coverage between each proposal, we have analysed each policy issue separately from one another. For example, the emissions coverage for the European Parliament's position on geographical scope does not take into account the different policy choices on the phase-in or greenhouse gases: we have analysed the geographical scope as if it is the only policy issue to change in that case. We have used the Commission proposal as a baseline and calculated emissions over the period of 2023 to 2030 as some policy choices have changing impacts over the years (in particular the phase-in).<sup>3</sup> It should be noted that while the calculations give a good idea of relative emissions coverage between each institution's position, the analysis does not reveal emissions reduction as a result of the ETS.

Although this briefing focuses on the ETS, the analysis of emissions coverage for different policy proposals is also relevant for the FuelEU Maritime proposal. While the Parliament's position on that law is forthcoming, the Council position, adopted in June 2022, similarly proposed a review clause to harmonise with the IMO and exemptions for: vessels that do not carry cargo or passengers, ships under 5,000 GT, all voyages to outermost regions and ferries to islands with populations under 200,000

<sup>&</sup>lt;sup>1</sup> Transport & Environment (May 2022). 'EU States Shipping ETS Rankings: Fit for 55 climate ambition'. Retrieved at <a href="https://www.transportenvironment.org/wp-content/uploads/2022/05/TE-Briefing\_-MS-Rankings-Shipping-Proposals-1.pdf">https://www.transportenvironment.org/wp-content/uploads/2022/05/TE-Briefing\_-MS-Rankings-Shipping-Proposals-1.pdf</a>

<sup>&</sup>lt;sup>2</sup> Transport & Environment (January 2022). 'Climate Impacts of Exemptions to EU's Shipping Proposals.' Retrieved at <a href="https://www.transportenvironment.org/wp-content/uploads/2022/01/Climate\_Impacts\_of\_Shipping\_Exemptions\_Report-1.pdf">https://www.transportenvironment.org/wp-content/uploads/2022/01/Climate\_Impacts\_of\_Shipping\_Exemptions\_Report-1.pdf</a>

<sup>&</sup>lt;sup>3</sup> 2030 is also the date that some exemptions in the European Parliament and EU Council positions are set to expire. However, 2030 has not been chosen because of this date. In practice, it is likely that any such exemptions continue past 2030 given that the ETS will be revised before that date, so any exemptions may simply be extended.

inhabitants. The Council also proposed a modified correction factor for ice-class ships, and an exemption for vessels operating under public service contracts to Cyprus (smaller than the exemption proposed in its ETS positions). Calculations on these policy choices are therefore also relevant to FuelEU Maritime.

#### 3. Analysis of greenhouse gas emissions per issue

#### 3.1 Geographical Scope

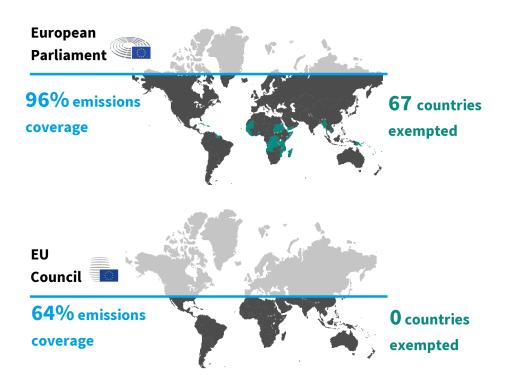
European Commission	European Parliament	EU Council
Regulate all emissions from ships at berth, all emissions from voyages between European ports <sup>4</sup> and 50% of emissions from voyages between European and non-European ports	Same as Commission proposal until 2027, when 100% of emissions from voyages between European and non-European ports are to be regulated, except voyages to least developed nations and countries with equivalent measures, where scope remains 50%	Same as Commission proposal
583 MtCO <sub>2</sub>	737 MtCO <sub>2</sub> +154 MtCO <sub>2</sub> (+27%)	583 MtCO <sub>2</sub> +/-

The Parliament has put forward a detailed proposal seeking to maximise climate ambition while reducing the impact on low-income states: the geographical scope would remain as the Commission proposed until 2027, when coverage would increase to emissions from all ships calling at European ports, with the exception of Small Island Developing States (SIDS), Least Developed Countries (LDCs) and countries that have equivalent regulation.

Our analysis shows that the European Parliament's position would combine climate ambition with equity: the proposal would cover 96% of emissions from all voyages to and from European ports while exempting the 67 poorest maritime countries. This compares to 64% in the Council and Commission positions.

<sup>&</sup>lt;sup>4</sup> European ports refer to ports in the European Economic Area, which will be covered by the EU's ETS.

# How to increase the geographical scope of the shipping ETS while ensuring global equity



**Note:** Emissions coverage data calculated from 2019 EU MRV and AIS data. List of Least Developed Countries (LDCs) and Small and Island Developing States (SIDS) taken from UN.



Graph 2: Geographical scope of the European Parliament and EU Council

#### 3.2 Phase-in

European Commission	European Parliament	EU Council
Gradual phase-in:	No phase-in. Full entry into ETS from 2023.	Gradual phase-in dependent on the year of entry into force:  • 20% in the first year of entry (here assumed to be 2024)  • 45% in year two  • 70% in year three  • 100% in year four

583 MtCO <sub>2</sub>	737 MtCO <sub>2</sub>	490 MtCO <sub>2</sub>
	+ 154 MtCO <sub>2</sub> <sup>5</sup> (+26%)	- 93 MtCO <sub>2</sub> (-16%)

The Commission proposed to gradually phase-in requirements for the ETS, whereas the Parliament proposed to start the scheme in 2023 without a phase-in, covering an extra 154 MtCO $_2$  emissions over 7 years compared to the original Commission proposal, comparable to the emissions of 11 million cars over 7 years. This analysis assumes that, in the Council position, the ETS Directive enters into force in 2024. However, in reality their position may entail a delay past this date.

It should be noted that the Commission proposed the phase-in - to "help market actors get acquainted with the new system" - is novel and has not applied to any other industry. Given that the ETS system is the same whether a company trades 1 tonne of carbon or 1,000, the phase-in becomes difficult to justify.

## 3.3 Alignment with a potential future measure by the International Maritime Organization (IMO)

European Commission	European Parliament	EU Council
The Commission proposes to present a report if and when the IMO proposes a global market-based measure to reduce emissions and "where appropriate, the Commission may follow to the report with a legislative proposal."	The Parliament instructs the Commission to "consider possible amendments" in the event of a global market-based measure from the IMO, and "where appropriate, the Commission may follow to the report with a legislative proposal". Any revision of the ETS should "recognis[e] the Union's sovereignty to regulate its share of emissions from international shipping voyages	The EU Council instructs the Commission to "review this Directive to take account" of a global market-based measure adopted by the IMO. The Commission should report on the IMO measure "as regards its ambition in light of the objectives
There is no indication what the report should look into.	in line with the obligations of the Paris Agreement."  The report "shall take into account the level of participation in those global measures, their enforceability, transparency, penalties for noncompliance, the processes for public input, monitoring, reporting and verification of	of the Paris Agreement and its overall environmental integrity." It should also look to avoid "significant double burden".  There is no indication what the report should look into.
583 MtCO₂	emissions, registries and accountability."  583 MtCO <sub>2</sub> +/-	452 MtCO <sub>2</sub> -132 MtCO <sub>2</sub> (-22%) in the worst case scenario)

<sup>&</sup>lt;sup>5</sup> In some cases missing decimal points mean that the difference from the Parliament or Council position does not exactly equal the Commission's emission coverage

<sup>&</sup>lt;sup>6</sup> European Commission (2021). 'DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757.' Retrieved at <a href="https://ec.europa.eu/info/sites/default/files/revision-eu-ets\_with-annex\_en\_0.pdf">https://ec.europa.eu/info/sites/default/files/revision-eu-ets\_with-annex\_en\_0.pdf</a>



The aviation ETS demonstrates the importance of text when mandating harmonisation with a global measure. When the International Civil Aviation Organization (ICAO) adopted the 'Carbon Offsetting and Reduction Scheme for International Aviation' (CORSIA), the EU Council interpreted 'the avoidance of double burden' in terms of the geographical scope. It argued that the ETS should only apply to flights between European airports, while CORSIA should apply to flights between European and non-European airports, despite the former having a carbon price of 90 EUR/tonne and the latter less than 1 EUR/tonne. The Commission itself described the decision to apply CORSIA to European flights as the worst possible option for the climate.<sup>7</sup>

Analysis of emissions has therefore been made following the example of the aviation ETS: the Council's position to avoid double burden is translated as the Commission's 50% geographical scope until 2027, then a limited scope covering just voyages between European ports from 2028 (assuming a global measure is negotiated by 2027). The difference of emissions coverage over just 3 years is 132 MtCO<sub>2</sub>.

In practice the Council language of avoiding 'significant double burden' is different from the text in the aviation ETS. It is therefore entirely possible that such text would not lead to a reduction in geographical scope of the EU's ETS. Nonetheless, we interpreted the language in terms of geographical scope to illustrate a possible worst-case scenario.

#### 3.4 Other ship types

European Commission	European Parliament	EU Council
No mention of other ship types	Offshore service vessels included in MRV and ETS from 2024	Same as Commission proposal
583 MtCO <sub>2</sub>	629 MtCO <sub>2</sub> +45 MtCO <sub>2</sub> (+8%)	583 MtCO <sub>2</sub>

The Commission and Council only proposed to regulate passenger- and cargo-carrying vessels, while the Parliament proposed to include offshore service vessels in the MRV and ETS from 2024. Several qualitative issues should be noted:

- Firstly, the boom in offshore renewable energy production will increase the demand for offshore service vessels.<sup>8</sup> Exempting these vessels from the ETS may lock-in fossil-fuel vessels at a critical stage in the industry's development.
- Secondly, vessels servicing offshore energy production have access a priori to large sources of renewable energy. The Nordsee Two Offshore Windfarm Innovation Project recently received approval from the EU's Innovation Fund to create an integrated electrolyser that would produce

<sup>&</sup>lt;sup>7</sup> Transport & Environment (March 2021). 'Corsia: worst option for the climate'. Retrieved at: <a href="https://www.transportenvironment.org/wp-content/uploads/2021/07/2021">https://www.transportenvironment.org/wp-content/uploads/2021/07/2021</a> 03 Briefing Corsia EU assessem ent 2021.pdf

<sup>&</sup>lt;sup>8</sup> WindEurope (June 2022). 'Europe's offshore wind expansion will depend on vessel availability.' Retrieved at: https://windeurope.org/newsroom/news/europes-offshore-wind-expansion-will-depend-on-vessel-availability/

- green hydrogen for offshore vessel fuelling, demonstrating possible links between the two sectors.<sup>9</sup>
- Finally, a large amount of Europe's offshore fleet service oil and gas facilities. Excluding these vessels would therefore amount to subsidies for oil and gas production, contravening the European country's pledge at COP26 to end such subsidies.<sup>10</sup>

In our analysis we have only quantified emissions from offshore vessels, as per the European Parliament position. However, given the large social, climate and environmental impacts of superyachts and large fishing vessels, the co-legislators could also consider to set up by 2025 MRV systems for ship types not already included in the EU legislation.

#### 3.5 Gross tonnage threshold

European Commission	European Parliament	EU Council
Maintain 5,000 GT threshold in the MRV and the ETS	Reduce the threshold to 400 GT for all ships in the MRV from 2024, then include all ships above 400 GT in the ETS from 2027. Ships between 400 and 5,000 GT will only have to report a limited number of information to the MRV	Reduce the threshold to 400 GT for general cargo ships in the MRV and ETS from 2025, with the reduction of the threshold for other ship types in the MRV and ETS to be decided in a future review
583 MtCO <sub>2</sub>	615 MtCO <sub>2</sub> +32 MtCO <sub>2</sub> (+5%)	591 MtCO <sub>2</sub> +8 MtCO <sub>2</sub> (+1%)

It should be noted that the emissions coverage is only increased from 2027 in the Parliament position and 2025 in the Council position, meaning emissions coverage is only counted for 3 and 5 years respectively.

Qualitative factors are important to consider for the GT threshold. Green technology is ready for smaller vessels. The barrier to their commercialisation is simply higher costs for green technology, which the ETS would partially address. Furthermore, the Council's proposal to review the threshold in the MRV and ETS may have an adverse effect on investors looking to fund zero-emissions vessels, creating more risk than if these ships would be automatically regulated.

#### 3.6 Greenhouse gas (GHG) coverage

European Commission	European Parliament	EU Council
Regulate CO <sub>2</sub> in the MRV and the ETS	Regulate CO <sub>2</sub> , CH₄ and N₂0 in the MRV and the ETS from 2023. A report before 2025 on other particles with a global warming potential	Regulate $CO_2$ , $CH_4$ and $N_2O$ in the MRV from 2024. A review by 2027 to include $CH_4$ and $N_2O$ in the ETS

<sup>&</sup>lt;sup>9</sup> Renews (July 2022). 'Nordsee 2 in running for EU innovation support'. Retrieved at <a href="https://renews.biz/79145/nordsee-two-in-running-for-eu-innovation-support/">https://renews.biz/79145/nordsee-two-in-running-for-eu-innovation-support/</a>

https://ukcop26.org/statement-on-international-public-support-for-the-clean-energy-transition/



<sup>&</sup>lt;sup>10</sup> UN Climate Change Conference UK 2021 (November 2021). 'Statement on international public support for the clean energy transition.' Retrieved at:

583 MtCO <sub>2</sub>	602 MtCO <sub>2eq</sub>	596 MtCO <sub>2</sub> (if included from 2027)
	+19 MtCO <sub>2eq</sub> (+3%)	+13 MtCO <sub>2eq</sub> (+2%)

The quantitative analysis ignores certain important qualitative issues: the exempted emissions from methane (CH<sub>4</sub>) are potentially dangerous. This is because methane's climate impact, measured as global warming potential (GWP), is much higher on a 20 year basis than on a 100 year basis (which is traditionally, if erroneously used, and which we have used in this analysis).

This analysis has only taken into account emissions from  $CO_2$ ,  $CH_4$  and  $N_2O$ , given that no institution mandates the regulation of black carbon under the ETS (the Parliament asks the Commission to produce a report on its climate impact). It should be noted that black carbon's climate impact is significant: it increases the global warming impact of conventional fuels by up to 20%.<sup>11</sup>

#### 3.7 Exemption for outermost regions

European Commission	European Parliament	EU Council
No exemption	55% discount for domestic voyages to outermost regions	Full exemption for domestic voyages to outermost regions
583 MtCO <sub>2</sub>	579 MtCO <sub>2</sub> - 3 MtCO <sub>2</sub> (-0.5%)	576 MtCO <sub>2</sub> - 7 MtCO <sub>2</sub> (-1.2%)

It should be noted in the context of exemptions to outermost regions here that the ETS will have minor impacts on the final cost of products. We estimated in June 2022 that, if the EU chose the most ambitious green measures in the ETS and FuelEU Maritime, the price of a fridge would go up by just 0.81, a television by 0.1 and shoes by 0.008. These costs apply from China to Europe, a distance further than from Europe to its outermost regions.

#### 3.8 Exemption for ice class vessels

European Commission	European Parliament	EU Council
No exemption	5% discount for most ice-class vessels and and a correction factor for vessels travelling on ice	5% discount for most ice-class vessels
583 MtCO <sub>2</sub>	579 MtCO <sub>2</sub> -5 MtCO <sub>2</sub> (-0.9%)	580 MtCO <sub>2</sub> -4 MtCO <sub>2</sub> (-0.7%)

https://theicct.org/wp-content/uploads/2021/08/update-well-to-wake-co2-aug21-1.pdf

<sup>&</sup>lt;sup>11</sup> International Council on Clean Transportation (August 2021). 'Update: Accounting for well-to-wake carbon dioxide equivalent emissions in maritime transportation climate policies.' Retrieved at

<sup>&</sup>lt;sup>12</sup> Transport & Environment (June 2022). 'Cost of clean shipping is negligible.' Retrieved at <a href="https://www.transportenvironment.org/wp-content/uploads/2022/06/Cost-of-clean-shipping-is-negligible---Case-study-for-6-green-e-fuels-and-stringent-ETS\_Final\_Corrected.pdf">https://www.transportenvironment.org/wp-content/uploads/2022/06/Cost-of-clean-shipping-is-negligible---Case-study-for-6-green-e-fuels-and-stringent-ETS\_Final\_Corrected.pdf</a>

Both the Parliament and the Council proposed exemptions based on ice navigation. The Council's proposal awards a 5% discount for ice-class vessels (Swedish-Finnish Class IA or greater), while the Parliament awards a correction factor on top of a 5% discount for ice-class vessels.

#### 3.9 Exemption for ferries to islands

European Commission	European Parliament	EU Council
No exemption	No exemption	Exemption for non-cruise passenger vessels travelling domestically to islands with less than 200,000 inhabitants
583 MtCO <sub>2</sub>	583 MtCO <sub>2</sub>	579 MtCO <sub>2</sub> -4 MtCO <sub>2</sub> (-0.7%)

The Council's exemption would apply to all Greek islands except Crete and all Spanish islands bar Tenerife, Mallorca and Gran Canaria.

It is of note that ferries are the simplest ship type to decarbonise because they are on average smaller, travel shorter distances and operate on regular schedules. Clean ferries are already technologically feasible: fully electric ferries have operated in Europe since 2015 and Danish ferry company DFDS recently announced their plan to build a hydrogen fuel cell ferry with the capacity to transport 1,600 passengers from Copenhagen to Norway.<sup>13</sup> Furthermore, the average age of the European ferry fleet is 35 years, meaning fleet renewal is timely.<sup>14</sup>

#### 3.10 Use of Revenues

European Commission	European Parliament	EU Council
No dedicated funds for maritime	Ocean Fund for maritime projects, including funds for operational subsidies for clean fuels and marine biodiversity projects, and opt-out mechanism where shipping companies may pay a fixed fee directly into the Ocean Fund or trade allowances on the market	The Commission may publish dedicated maritime projects within the Innovation fund. 3.5% of maritime allowances are to countries with large shipping industries
n/a	n/a	n/a

The Parliament's Ocean Fund gives clear indications about how ETS revenues should be used, unlike the Council and Commission. Of note, the Parliament specifies funds for operational subsidies for clean fuels

<sup>&</sup>lt;sup>13</sup> DFDS (November 2020). 'Partnership aims to develop hydrogen ferry for Oslo-Copenhagen.' Retrieved at <a href="https://www.dfds.com/en/about/media/news/hydrogen-ferry-for-oslo-copenhagen">https://www.dfds.com/en/about/media/news/hydrogen-ferry-for-oslo-copenhagen</a>

<sup>&</sup>lt;sup>14</sup> Siemens Energy (June 2022). 'Decarbonizing maritime transport: a study on the electrification of the European ferry fleet.' Retrieved at

https://assets.siemens-energy.com/siemens/assets/api/uuid:19d8fa46-e6ce-47d3-8378-c6df6d20473b/se-ferrystudy-final.pdf?ste\_sid=1b9aa6d16604dfc41e2f8ee4c3db4baf

through Contracts for Difference (CfDs). CfDs are a proven financial instrument that improve investor confidence by providing public guarantees for certain technologies. Studies have shown that this instrument could catalyse shipping's energy transition<sup>15</sup> and calculations show that, if the European Commission uses half the revenues from the shipping ETS to fund ammonia-powered vessels, it could finance all the 715 containerships that operated in Europe in 2018 (most ships above 5,000 TEU). This equates to greening the transport of 9 million containers.



Graph 3: Contracts for Difference (CfDs) could finance the 715 biggest containerships to run on ammonia, greening the transport of 9 million containers

### 3.11 Exemption for vessels operating under Public Service Obligations (PSOs) and Public Service Contracts (PSCs)

European Commission	European Parliament	EU Council
No exemption	Exemption for all vessels operating under PSOs	Exemption for vessels operating under transnational PSOs and transnational PSCs
n/a	n/a	n/a

Unlike in other transport modes, information on PSOs and PSCs in shipping is difficult to obtain, meaning we have not been able to quantify emissions coverage for this exemption. The latest Commission staff

<sup>&</sup>lt;sup>15</sup> Alex Clark et al. (June 2021). 'Zero-emissions shipping: contracts-for-difference as incentives for the decarbonisation of international shipping.' Retrieved at: <a href="https://www.inet.ox.ac.uk/files/zero-emissions-shipping-FINAL.pdf">https://www.inet.ox.ac.uk/files/zero-emissions-shipping-FINAL.pdf</a>

working document with some information on vessels operating under PSOs and PSCs dates from 2014 and data from national sources is also inaccessible.

While PSOs are defined in the Cabotage Regulation,<sup>16</sup> in practice, Member States have a significant degree of flexibility when defining PSOs. This means that some countries have very few ships operating under PSOs, while others have many. Greece, for example, has a total of 63 ships operating under a public service obligation on different 85 routes.<sup>17</sup>

There is also a risk that Member States take advantage to exempt their own fleet. The Balearic Government clearly demonstrated how authorities can bend the rules on PSOs when it introduced a new decree to make it easier to declare shipping routes as PSOs 'so that ships operating under routes declared Public Service Obligations are exempt from the ETS'. 18

Finally, PSOs are often mandated for certain voyages or even portions of certain voyages. Meaning part of a voyage between two islands may be under a PSO, but the part of the voyage to other islands and the mainland not, complicating implementation of a PSO exemption.

A blanket PSO exemption would therefore be difficult to implement and may result in a broader exemption than expected with negative impacts on decarbonisation.

#### 3.12 Port evasion

European Commission	European Parliament	EU Council
The Commission to monitoring evasive practises and propose preventative measures if appropriate	Voyages that precede or follow certain non-EU transhipment port calls are to be included in the MRV and ETS, as well as 100% of emissions from voyages from European ports to these non-EU transhipment ports	Voyages past certain non-EU transhipment ports are to be included in the MRV and ETS
n/a	n/a	n/a

The recent announcement that Maersk will put in place ETS surcharges may have ended the debate as to whether port evasion might happen as a result of the shipping ETS, as ETS costs are recovered by surcharges, rendering evasion uneconomic (evidence suggests that the surcharge announced my Maersk in July 2022 would in fact make them money from travelling to more European ports, in effect evading

<sup>&</sup>lt;sup>16</sup> Council Regulation (EEC) No 3577/92 (December 1992). 'Applying the principle of freedom to provide services to maritime transport within Member States (maritime cabotage).' Retrieved at <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992R3577&rid=14">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992R3577&rid=14</a>

<sup>&</sup>lt;sup>17</sup> Information from the Hellenic Coast Guard

<sup>&</sup>lt;sup>18</sup> La Vanguardia (July 2022). 'El Govern abre un segundo período de información pública del Proyecto de Decreto de Transporte Marítimo.' Retrieved at <u>El Govern abre un segundo período de información pública del Proyecto de Decreto de Transporte Marítimo (lavanguardia.com)</u>

non-EU ports).<sup>19</sup> Nonetheless, each institution has put forward proposals to address port evasion, with the Parliament and Council positions being similar.

#### 3.13 Responsible entity

European Commission	European Parliament	EU Council
The entity responsible for the ETS is the ISM holder. No mechanism for cost pass-through	The entity responsible for the ETS is the ISM holder. In case the commercial operators is not the ISM holder, there will be a contractual obligation for the operator to reimburse the ISM holder	The entity responsible for the ETS is the ISM holder. In case the commercial operators is not the ISM holder, Member States shall make sure the ISM holder has the means to recoup costs from the operator
n/a	n/a	n/a

Both Parliament and Council have recognised the owner/operator issue in shipping: the shipping company dealing with the ETS (the ISM holder) may not be the commercial operator (the company responsible for the day-to-day decisions with the biggest impact on fuel use such as speed, itinerary, cargo handled and choice of fuel). The Parliament and the Council therefore proposed similar mechanisms to address the issue, both of which are legally feasible.<sup>20</sup> The Commission did, in fact, recognise the principle that there should be a cost pass-through mechanism,<sup>21</sup> but did not propose a mechanism to address the issue.

#### 4. Conclusions

Table 1 and Graph 4 summarise the difference in emission coverage for each institution's position. As a reminder, we calculated the impact of each amendment individually, using the Commission's proposal as a baseline.

Policy Issue	European Parliament (MtCO <sub>2</sub> )	EU Council (MtCO₂)
Geographical Scope	+154	+/-
Phase-In	+154	-93
IMO Alignment (scope)	+/-	-132

<sup>&</sup>lt;sup>19</sup> Maersk (July 2022). 'EU Emissions Trading System - latest developments'. Retrieved at: https://www.maersk.com/news/articles/2022/07/12/eu-ets-latest-developments

https://ec.europa.eu/info/sites/default/files/revision-eu-ets\_with-annex\_en\_0.pdf

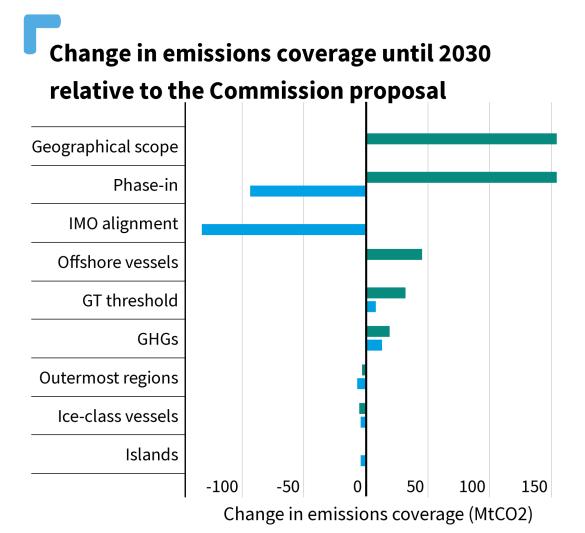
<sup>&</sup>lt;sup>20</sup> See, for instance, Transport & Environment (January 2022). 'Should shipowners be responsible for compliance with shipping ETS?' Retrieved at

https://www.transportenvironment.org/discover/should-shipowners-be-responsible-for-compliance-with-shippingets/

<sup>&</sup>lt;sup>21</sup> Recital 20, European Commission (July 2021). 'Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC.' Retrieved at:

Other Ship Types (Offshore)	+45	±1
Other Ship Types (Onshore)	T45	7/-
Gross Tonnage	+32	+8
GHGs	+19	+13
Outermost Regions	-3	-7
Ice class	-5	-4
Islands	+/-	-4

Table 1: Relative emissions coverage of policy proposals of the European Parliament and the EU Council with the European Commission's proposal as a baseline.



European ParliamentEU Council

**Note:** Black line represents the Commission proposal, with changes increasing the emissions coverage on the right-hand side and changes decreasing the emissions coverage on the left-hand side. Emissions coverage data calculated from 2019 MRV and AIS data.

Graph 4: Emissions coverage per policy issue for the European Parliament and the EU Council

Looking at each policy option, the geographical scope and the phase-in have the highest impacts on emissions coverage. The policy choices around which ships and emissions are to be regulated (GHGs, GT threshold, other ship types) are also important in terms of emissions coverage. Nonetheless, our methodology does not fully showcase their importance: smaller ships are only covered in the Parliament and Council position for 3 or 5 years until 2030, meaning total emissions would be higher if measured fully over 7 years. Similarly, coverage of all GHGs and offshore vessels will grow in importance past 2030, given the large growth in LNG and offshore vessels in the near future.

The exemptions for national circumstances have lower differences in emissions coverage, but each have important qualitative issues to consider. For instance, the exemption for ferries to islands would - like the exemption for smaller ships - exempt the easiest ships to decarbonise and may also delay the decarbonisation of larger vessels given that the smaller ships and ferries are testing grounds for new technologies. Finally, we have demonstrated the high potential of ETS revenues to fund clean vessels through Contracts for Difference, even for the biggest ships.

#### 4.1 Total emissions coverage

In Table 2 we show what the emission coverage of the ETS would become if all the positions of each institution were adopted together. The Council's position would cover 696 MtCO $_{2(e)}$  less than the European Parliament's, a difference of €63 billion in revenue between 2023 and 2030, or 220 MtCO $_{2(e)}$  less than the Commission proposal, foregoing €20 billion in revenue. The European Parliament proposal covers 476 MtCO $_{2(e)}$  more than the Commission's proposal, increasing revenue by €43 billion. Rather than being invested in European budgets to invest in schools, hospitals and decarbonisation, these revenues will instead be foregone as subsidies to the shipping sector, parts of which have profited more during the Covid crisis than during the previous 60 years combined. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476 billion in revenue. The European Parliament proposal covers 476

European Commission	European Parliament	EU Council
583 MtCO <sub>2</sub>	1059 MtCO <sub>2</sub>	363 MtCO <sub>2</sub>
	+476 MtCO <sub>2(e)</sub> (+182%)	- 220 MtCO <sub>2(e)</sub> (-62%)
€52.4 billion	€95.1 billion	€32.6 billion

Table 2: Total emissions coverage of each institution's ETS proposal

#### 4.2 Recommendations

In light of our analysis, we conclude that policy-makers from the European Institutions should prioritise the following points during the trilogue negotiations for the ETS. Most issues are also valid in the

<sup>&</sup>lt;sup>22</sup> ETS price Aug 23, 2022: €89.80/tCO<sub>2</sub>, from <a href="https://ember-climate.org/data/data-tools/carbon-price-viewer/">https://ember-climate.org/data/data-tools/carbon-price-viewer/</a>

<sup>&</sup>lt;sup>23</sup> Financial Times (September 2022). 'Hard landing threat hangs over booming container shipping industry.' Retrieved at: <a href="https://www.ft.com/content/f4c3a643-bc32-4b50-a311-059a9268a20b">https://www.ft.com/content/f4c3a643-bc32-4b50-a311-059a9268a20b</a>

forthcoming FuelEU Maritime negotiations, although other specific measures on how to accelerate the uptake of sustainable fuels should be prioritised in that law.<sup>24</sup>

#### 1. GHGs, GT threshold, offshore ships

Our qualitative analysis demonstrates that these policy issues are key to ensure a future-proof policy. This means an ETS that does not give an unfair advantage to methane-leaking LNG ships by regulating all GHGs, an ETS that accelerates new green technology by regulating smaller ships and an ETS that ensures a sustainable offshore economy by regulating offshore vessels.

#### 2. Phase-in and national exemptions

We have shown that the phase-in has no credible justification and exempts an unacceptable amount of emissions; the ETS should apply in full as from 2023. The exemptions for national circumstances are smaller in terms of emission coverage, but have important qualitative considerations. The exemption for ferries to islands, in particular, may delay the greening of the ferry fleet, shown to be the easiest ship type to decarbonise.

#### 3. Geographical scope

The choice of geographical scope is the most impactful policy choice in terms of quantitative emissions coverage. In our analysis we've shown that the Parliament's policy choice of full scope with exemptions for developing countries can optimise climate ambition while lowering social impacts. Similarly, the co-legislators must ensure the ETS always covers international shipping in the context of a possible future review to harmonise with a measure potentially adopted at the IMO.

#### 4. Revenues

The ETS will not decarbonise shipping on its own - the abatement costs are too high - so policy-makers should consider how best to use ETS revenues to that end. The biggest barrier to decarbonisation currently is high cost fuels (energy efficiency technologies should become attractive as the ETS carbon price rises, unlike green fuels). Revenues should therefore go to guaranteeing the deployment of those fuels, through schemes like Contracts for Difference.

<sup>&</sup>lt;sup>24</sup> See Transport & Environment (February 2022). 'FuelEU Maritime: T&E analysis and recommendations. How to drive the uptake of sustainable fuels in European shipping.' Retrieved at: https://www.transportenvironment.org/wp-content/uploads/2022/02/TE-Report-FuelEU-Maritime-1.pdf