



**2021/0210(COD)**

27.1.2022

## **DRAFT OPINION**

of the Committee on Industry, Research and Energy

for the Committee on Transport and Tourism

on the proposal for a regulation of the European Parliament and of the Council  
The use of renewable and low-carbon fuels in maritime transport and amending  
Directive 2009/16/EC  
(COM(2021)0562 – C9-0333/2021 – 2021/0210(COD))

Rapporteur for opinion: Rasmus Andresen



## SHORT JUSTIFICATION

The latest IPCC report is unequivocal in its finding: human influence has warmed the atmosphere, ocean and land and this human-induced climate change is already affecting many weather and climate extremes also across Europe<sup>1</sup>. In order to prevent further global heating above 1.5 C° compared to pre-industrial levels, rapid and ambitious international and European climate action across all economic sectors is now imperative.

The overall ambition of the EU's climate-neutrality target for 2050, the 2030 GHG emissions reduction target and the proposals under the Fit for 55 package are just a timid start: in order to limit global warming to 1.5 C° and to fulfil our obligations under the Paris Climate, the EU needs to achieve a zero emission, highly energy-efficient and fully renewables-based economy by 2040 at the latest. Studies have shown that such a system is not only technologically possible, but also economically and socially beneficial for the EU<sup>2</sup>.

With shipping traffic accounting for some 11% of all EU CO<sub>2</sub> emissions from transport and 3-4% of total EU CO<sub>2</sub> emissions, stimulating the swift ecological transition of the maritime sector is of particular importance. In fact, unless further action is taken emissions from maritime transport at European level are expected to further increase by 86 % compared with 1990 levels by 2050<sup>3</sup>, while the uptake of energy efficiency measures and renewable energy sources are expected to remain limited.

The Commission's FuelEU Maritime proposal start with good intentions, but lacks ambition in a range of respects that the rapporteur seeks to address in order to provide a stronger impetus for the just ecological transition of the entire maritime value chain and workforce.

The European maritime industry will play a leading role in the transition of the global maritime transport sector. The rapporteur's ambition is to support and encourage the industry's efforts towards the energy transition and to ensure a sustainable competitiveness on the global market. By means of a clear legislative European framework and stronger efforts to foster European innovation in the maritime sector our industry will be strengthened.

### Promoting operational and energy efficiency measures

Reducing the energy needs and improving energy efficiency is the precondition to achieve climate neutrality at the lowest possible cost<sup>4</sup>. Unfortunately, to date, no EU legislation spurs effectively energy efficiency measures in the maritime sector. This, in turn, constitutes a major risk to the sector's ability to achieve zero-emissions any time soon.

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<sup>1</sup> IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. In Press.

<sup>2</sup> See e.g. i) CAN Europe "Building a Paris Agreement Compatible (PAC) energy scenario": <https://caneurope.org/work-areas/energy-transition/> ii) Mark Z. Jacobson (2020). 100% Clean, Renewable Energy and Storage for Everything <https://web.stanford.edu/group/efmh/jacobson/WWSBook/WWSBook.html>;

iii) LUT University for SolarPower Europe: [100% Renewable Europe – SolarPower Europe](https://www.solarpower.eu/100-renewable-europe-solar-power-europe)

<sup>3</sup> Fourth IMO GHG Study

<sup>4</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions – The European Green Deal, COM(2019) 640 final.

For this reason, the rapporteur follows the guidelines on the application of the energy efficiency first principle<sup>5</sup> and takes an integrated approach introducing a target to stimulate a quick uptake of operational and energy efficiency measures by shipping companies, so that minimal energy would be required for various maritime activities in the first place. He mirrors and complements what was already voted by the European Parliament on the MRV regulation (COM(2019)0038)<sup>6</sup>, the negotiations on which are currently being kept on a stall by the Council. The rapporteur considers that such target is particularly well fit within this Regulation, which is dealing expressly with the decarbonisation of the sector.

An emission reduction target per transport work is in fact likely to stimulate ship-owners and operators to implement available operational and energy efficiency measures which they believe are better suited to their needs, such as slow steaming, speed and planning optimisation, wind propulsion, anti-fouling coatings, electrification from renewable sources and energy storage, but also digitalisation and logistics optimisation.

The rapporteur furthermore suggests to more accurately and proportionally reward, and hence incentivise, more energy efficient energy sources or propulsion technologies for energy uses on board and at berth to comply with the provisions in this Regulation.

### **Strengthening the GHG emission reduction targets**

Beyond operational and energy efficiency measures, a GHG intensity target tightening over time is needed to stimulate the switch from fossil fuels to sustainable renewable alternatives. However, the levels initially proposed by the Commissions fall not only short of reaching zero emissions, and in doing so contravening the sector's obligation under the Paris Agreement<sup>7</sup>, but also to ensure that only renewable sources are promoted for achieving the target.

For the rapporteur it is essential to provide a strong regulatory signal to stimulate green innovation and encourage first movers<sup>8</sup>. Therefore, he suggests a GHG emissions reduction pathway compatible with a highly energy-efficient and fully renewables-based EU's economy by 2040, employing the best available research. The Lappeenranta-Lahti University of Technology (LUT, Finland) is currently finalizing such modelling also providing, for the first time, a specific zero emission pathway by 2040 for the shipping sector<sup>9</sup>. This overall target has also been identified by globally acting companies and prominent economic stakeholders as both feasible, as well as desirable, constituting crucial regulatory support to the industry's transition<sup>10</sup>.

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<sup>5</sup> Commission recommendation of 28.9.2021 C (2021)7014 "On energy efficiency first: from principle to practice. Guidelines and examples for its implementation in decision-making into the energy sector and beyond."

<sup>6</sup> Amendments adopted by the European Parliament on 16 September 2020 on the proposal for a regulation of the European Parliament and of the Council amending Regulation (EU) 2015/757 in order to take appropriate account of the global data collection system for ship fuel oil consumption data ([COM\(2019\)0038](#) – C8-0043/2019 – [2019/0017\(COD\)](#))

<sup>7</sup> legal advice: Inclusion of emissions from international aviation and shipping in nationally determined contributions; 2021; E. Dehon, lawyer; Published by Transport and Environment (T&E)

<sup>8</sup> It is worth noticing first movers pledging for zero-emission shipping by 2040 <https://www.bbc.com/news/business-58970877> - <https://www.ft.com/content/850ccc4b-2c2d-4186-99d7-fdbe8131ddd0>

<sup>9</sup> Greens/EFA & LUT, 2022. preliminary results for internal analyses; the full study will be published in early spring;

<sup>10</sup> [https://www.cozev.org/img/FINAL-coZEV-2040-Ambition-Statement\\_2021-10-18-145014\\_wfcp.pdf](https://www.cozev.org/img/FINAL-coZEV-2040-Ambition-Statement_2021-10-18-145014_wfcp.pdf)

In the context of stepping up the ambition and of ensuring that everyone play its fair role, the rapporteur proposes to extend the scope of the regulation to cover a wide range of ship categories above 400 gross tonnage. The initially proposed threshold leaves 45% of ships unregulated and calculations on the basis of the data from Marine Benchmark suggest that 15% rather than the assumed 10% of emissions would remain unregulated. In practical terms that would mean continuously emitting a total of up to 25.8 Mt - comparable to the total CO<sub>2</sub> emissions of Denmark in 2020- with no clear pathway for incentivizing emission reductions in the future<sup>11</sup>. In light of the fact that zero-emission technologies are already available for smaller ships (especially green hydrogen fuel cells and electric batteries), it is crucial to encourage their further uptake, and hence the market development of such technologies so that they would also become more readily available for bigger ships.

### **Boosting the uptake of sustainable renewable energy sources**

It should be the ambition of the ITRE report to lay out a clear pathway on how to encourage only those energy sources and fuel alternatives that are truly sustainable, renewable and scalable.

This requires a holistic approach that accounts accurately for the methane emissions of for example LNG, considering methane's significant short-term global warming potential. LNG, as a fossil fuel that emits large amounts of methane all along its lifecycle, and its use as a marine fuel being more damaging for the climate than the fossil diesel it replaces, should not be the beneficiary of any policy support, as was also recently recommended by the World Bank<sup>12</sup>. The World bank's analysis also finds that aggregate investment implications of a two-stage conversion (oil to LNG, followed by LNG to zero-carbon) might amount to additional investment costs of up to \$186 billion, relative to a single-stage conversion from the current oil-derived bunker fuels directly to zero-carbon bunker fuels.

In order to ensure sustainable business models, such a holistic approach also entails a full lifecycle assessment of different technologies, including biofuels. This comprises considering the limited availability of advanced biofuels, the demand for those in other hard-to-abate sectors like aviation, and the overall planetary boundaries, in the limits of which an overreliance on crop-based biofuels would result in higher food prices and significant GHG emissions from expanding cropland globally<sup>13</sup>.

The rapporteur therefore proposes to concentrate policy support instruments on those renewable alternatives that are truly sustainable and scalable. He also proposes a mandated minimum share of renewable fuels of non-biological origin (RFNBOs), as well as a multiplier that particularly rewards investments in RFNBOs when it comes to calculating the compliance with the greenhouse gas intensity targets. Those measures, combined with limiting the pooling mechanism to zero-emission fuels and zero emission technologies, will

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<sup>11</sup> Transport & Environment; (2022); Climate Impacts of Exemptions to EU's Shipping Proposals; [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)

<sup>12</sup> Englert, Dominik; Losos, Andrew; Raucci, Carlo; Smith, Tristan. 2021. The Role of LNG in the Transition Toward Low- and Zero-Carbon Shipping. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/35437> License: CC BY 3.0 IGO.

<sup>13</sup> Transportation Carbon Intensity Targets for the European Union – Road and Aviation Sectors; 2021; A. Christensen; <https://theicct.org/publications/transport-carbon-intensity-targets-eu-aug2021>

further strengthen the economic case for investments in this respect and will therefore make them more cost competitive and boost their uptake.

### **Ensuring European leadership and competitiveness**

As the committee on industry, the rapporteur is of the strong belief that the ITRE position must stimulate even further the European leadership in green technologies in the sector and hence its competitiveness in the global sector of shipping.

The ambition of this report is also to be understood as a strong mandate to the EU and its Member States to advocate for and support complimentary solutions of equal or higher ambition at the IMO level. Being a regulatory first-mover is not only a way to ensure that the EU is able to proactively influence global standards, but also an opportunity to preserve European technological leadership and create and keep well-paid jobs along the entire maritime value chain in Europe.

Nonetheless, the rapporteur acknowledges that the transition will constitute significant challenges to European industries and therefore strongly supports the proposal to channel penalty payments through a dedicated Ocean fund back into the transition of the industry. In order to ensure the optimal use of these resources, the rapporteur proposes to specify further within this regulation the earmarking and intended purpose of these funds, to channel them to wherever they are most needed. This includes rapid improvement of energy and operational efficiency of ships, the deployment of zero-emission propulsion technologies powered by renewable energy sources, and the uptake of renewable fuels, as well as retraining and upskilling. Furthermore, 20% of the yearly collected penalties shall be used to contribute to the protection, restoration and better management of marine ecosystems. This approach is in direct alignment with the standing EP position on the MRV regulation (COM(2019)0038).

### **Strengthening transparency, data collection and publication**

In order to ensure the successful and impactful enforcement, the rapporteur proposes to strengthen the involvement of public authorities and the transparency towards the public. A more pronounced role for public authorities and thus public oversight will be achieved through giving the responsibility to assign and collect penalty payments to the administering authority. By furthermore better collecting and publishing the data in a public, open and transparent database, the ability of the public, including the European Parliament, researchers and civil society, to scrutinise the compliance is further enhanced.

## **AMENDMENTS**

The Committee on Industry, Research and Energy calls on the Committee on Transport and Tourism, as the committee responsible, to take into account the following amendments:

### **Amendment 1**

#### **Proposal for a regulation Title 1**

*Text proposed by the Commission*

*Amendment*

Proposal for a  
REGULATION OF THE EUROPEAN  
PARLIAMENT AND OF THE COUNCIL  
on the use of renewable **and low-carbon  
fuels** in maritime transport and amending  
Directive 2009/16/EC

(Text with EEA relevance)

Proposal for a  
REGULATION OF THE EUROPEAN  
PARLIAMENT AND OF THE COUNCIL  
on **energy efficiency and** the use of  
renewable **energy sources** in maritime  
transport and amending Directive  
2009/16/EC (**REES FuelEU Maritime**)

(Text with EEA relevance)

*(This Amendment applies throughout the  
text.)*

Or. en

**Amendment 2**

**Proposal for a regulation**

**Recital 1**

*Text proposed by the Commission*

*Amendment*

***(1) Maritime transport accounts for around 75% of EU external trade and 31% of EU internal trade in terms of volume. At the same time, ship traffic to or from ports in the European Economic Area accounts for some 11% of all EU CO<sub>2</sub> emissions from transport and 3-4% of total EU CO<sub>2</sub> emissions. 400 million passengers embark or disembark annually in ports of Member States, including around 14 million on cruise ships. Maritime transport is therefore an essential component of Europe's transport system and plays a critical role for the European economy. The maritime transport market is subject to strong competition between economic actors in the Union and beyond for which a level playing field is indispensable. The stability and prosperity of the maritime transport market and its economic actors rely on a clear and harmonised policy framework where maritime transport***

***deleted***

*operators, ports and other actors in the sector can operate on the basis of equal opportunities. Where market distortions occur, they risk putting ship operators or ports at a disadvantage compared to competitors within the maritime transport sector or in other transport sectors. In turn, this can result in a loss of competitiveness of the maritime transport industry, and a loss of connectivity for citizens and businesses*

Or. en

### *Justification*

*Moved and modified after Recital 2*

### **Amendment 3**

#### **Proposal for a regulation**

#### **Recital 2**

##### *Text proposed by the Commission*

(2) To enhance the Union's climate commitment under the Paris Agreement and set out the steps to be taken to achieve climate neutrality by 2050, and to translate the political commitment into a legal obligation, the Commission adopted the (amended) proposal for a Regulation of the European Parliament and of the Council on establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law)<sup>19</sup> as well as the Communication 'Stepping up Europe's 2030 climate ambition'<sup>20</sup>. This also integrates the target of reducing greenhouse gas (GHG) emissions by at least 55% compared to 1990 levels by 2030. *Accordingly*, various complementary policy instruments are needed to *motivate the use of sustainably produced renewable and low-carbon fuels, included in the maritime transport sector*. The necessary technology development and deployment

##### *Amendment*

(2) To enhance the Union's climate commitment under the Paris Agreement and set out the steps to be taken to achieve climate neutrality by 2050, and to translate the political commitment into a legal obligation, the Commission adopted the (amended) proposal for a Regulation of the European Parliament and of the Council on establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law)<sup>19</sup> as well as the Communication 'Stepping up Europe's 2030 climate ambition'<sup>20</sup>. This also integrates the target of reducing greenhouse gas (GHG) emissions by at least 55% compared to 1990 levels by 2030. *In its communication of 13 October 2021 entitled 'A stronger EU engagement for a peaceful, sustainable and prosperous Arctic' The European External Action Service highlighted the need to promote faster and more*



has to happen *by 2030 to prepare for much more rapid change thereafter.*

*ambitious emission reductions, in line with objectives of the Green Deal and the ‘Fit for 55 package’. To ensure the maritime sector achieves zero-emission by 2040, various complementary policy instruments are needed to **first improve the energy and operational efficiency of the sector and then to promote the swift uptake of sustainable renewable energy.** The necessary *changes*, technology development and deployment has to happen *as soon as possible to ensure the Union is on track to reach its 2030 climate and energy target as well as climate neutrality by 2040 at the latest.**

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<sup>19</sup> COM(2020) 563 final

<sup>20</sup> COM(2020) 562 final

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<sup>19</sup> COM(2020) 563 final

<sup>20</sup> COM(2020) 562 final

Or. en

#### Amendment 4

##### Proposal for a regulation Recital 2 a (new)

*Text proposed by the Commission*

*Amendment*

***(2a) Maritime transport accounts for around 75% of the Union’s external trade and 31% of its internal trade in terms of volume. At the same time, ship traffic to or from ports in the European Economic Area accounts for some 11% of all Union’s CO<sub>2</sub> emissions from transport and 3-4% of total Union’s CO<sub>2</sub> emissions. CO<sub>2</sub> emissions from maritime transport both at global and European level are expected to increase, unless further action is taken respectively by 90 % to 130 % of 2008 emissions by 2050 and by 86 % compared with 1990 levels by 2050. 400 million passengers embark or disembark annually in ports of Member States, including around 14 million on cruise ships. Maritime transport is therefore an essential component of Union’s transport***

*system and plays a critical role for the Union economy, whose environmental and climate impact needs to be tackled swiftly. The maritime transport market is subject to strong competition between economic actors in the Union and beyond for which a level playing field is indispensable. The stability and prosperity of the maritime transport market and its economic actors rely on a clear and harmonised policy framework where maritime transport operators, ports and other actors in the sector can operate on the basis of equal opportunities. It is therefore essential for the Union to set an ambitious pathway for the swift ecological transition of the maritime sector in order to maintain and further promote its global leadership and competitive advantage in the green technologies, services and solutions in the sector.*

Or. en

## Amendment 5

### Proposal for a regulation Recital 2 b (new)

*Text proposed by the Commission*

*Amendment*

***(2b) Currently, the fuel mix in the maritime sector relies entirely on fossil fuels. By weight, almost 40% of maritime trade itself consists of fossil fuels. The almost exclusive reliance on fossil fuels and the slow implementation of energy efficiency and emission reduction measures in the sector constitutes a major risk to the climate and the sector's ability to achieve zero-emissions any time soon. For this reason, no fossil fuels or gases should be incentivised nor accounted for the achievement of the targets set out by this Regulation. This also includes fossil LNG whose marginal or negative GHG benefits over existing marine fuels have***

*been widely documented. In fact, the combination of CO<sub>2</sub> and methane leakage/slippage over the whole fuel life-cycle, from production to combustion (well-to-wake analysis), can make natural gas/LNG more damaging than fossil marine diesel, depending on the ship engine. This is also why, financial authorities such as the World Bank have already explicitly called on regulators to avoid any policy support to LNG in the maritime sector, including as a, so-called, transitional fuel, due to the risk of technology locks-in, stranded assets and unnecessary capital expenditure it creates. Accordingly, LNG and any other fuel that does not meet at least the sustainability and GHG saving criteria for transport fuels set out in Directive (EU) 2018/2001 of the European Parliament and of the Council<sup>1a</sup> should be considered to have the same emission factors as the least favourable fossil pathway for this type of fuel.*

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<sup>1a</sup> *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2001, p. 82).*

Or. en

## **Amendment 6**

### **Proposal for a regulation Recital 2 c (new)**

*Text proposed by the Commission*

*Amendment*

**(2c) Methane is a powerful greenhouse gas, over 80 times more potent than CO<sub>2</sub> over a 20-year period, making it the second most important greenhouse gas, as well as a precursor pollutant to ground-level ozone (O<sub>3</sub>) contributing to about a quarter of the global warming**

*experienced today. Pathways modelled by the 1,5°C Special Report of the Intergovernmental Panel on Climate Change (IPCC), the IPCC Sixth Assessment Report and the 2021 Global Methane Assessment of the UN Environment Programme (UNEP) that limit global warming to 1,5°C with no or limited overshoot involve deep reductions in methane emissions. Therefore in order to adequately capture the short-term climate forcing effects of methane, and thus accurately account for the climate impact of the use of fossil liquified natural gas in the shipping sector over the envisaged timeframe of implementation of this Regulation, the use of a Global Warming Potential (GWP) value of methane over a 20-year time horizon (GWP20) is considered more appropriate than over a 100-year time. Therefore the total GHG intensity of LNG should be calculated using GWP 20 value = 29.8, as defined in the IPCC 6th Assessment Report.*

Or. en

## Amendment 7

### Proposal for a regulation

#### Recital 3

*Text proposed by the Commission*

(3) In the context of fuel transition to renewable **and low carbon** fuels and substitute sources of energy, it is essential to ensure the proper functioning of and fair competition in the EU maritime transport market regarding marine fuels, which account for a substantial share of ship operators' costs. Differences in fuel requirements across Member States of the Union **can significantly affect ship operators' economic performance and negatively impact competition in the market. Due to the international nature of**

*Amendment*

(3) In the context of fuel transition to **sustainable** renewable fuels and substitute sources of energy, it is essential to ensure the proper functioning of and fair competition in the EU maritime transport market regarding marine fuels, which account for a substantial share of ship operators' costs. **To avoid** differences in fuel requirements across Member States of the Union, the availability of renewable fuels in maritime ports under the jurisdiction of a Member State is accompanied by requirements for their use

*shipping, ship operators may easily bunker in third countries and carry large amounts of fuel. This may lead to carbon leakage and detrimental effects on the competitiveness of the sector if* the availability of renewable *and low carbon* fuels in maritime ports under the jurisdiction of a Member State is *not* accompanied by requirements for their use that apply to all ship operators arriving at and departing from ports under the jurisdiction of Member States. This Regulation should lay down measures to ensure that the penetration of renewable *low-carbon* fuels in the marine fuels market takes place under the conditions of fair competition on the EU maritime transport market.

that apply to all ship operators arriving at and departing from ports under the jurisdiction of Member States. This Regulation should lay down measures to ensure that the penetration of renewable fuels in the marine fuels market takes place under the conditions of fair competition on the EU maritime transport market.

Or. en

## Amendment 8

### Proposal for a regulation

#### Recital 4

*Text proposed by the Commission*

(4) In order to produce an effect on all the activities of the maritime transport sector, it is appropriate that this Regulation covers *a share of* the voyages between a port under the jurisdiction of a Member State and port under the jurisdiction of a third country. This Regulation should thus apply to *half* of the energy used by a ship performing voyages arriving at a port under the jurisdiction of a Member State from a port outside the jurisdiction of a Member State, *half of* the of the energy used by a ship performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port outside the jurisdiction of a Member State, the entirety of the energy used by a ship performing voyages arriving at a port under the jurisdiction of a Member State from a port under the jurisdiction of a

*Amendment*

(4) In order to produce an effect on all the activities of the maritime transport sector, it is appropriate that this Regulation covers *all* the voyages between a port under the jurisdiction of a Member State and port under the jurisdiction of a third country. This Regulation should thus apply to *the entirety* of the energy used by a ship performing voyages arriving at a port under the jurisdiction of a Member State from a port outside the jurisdiction of a Member State, the *entirety* of the energy used by a ship performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port outside the jurisdiction of a Member State, the entirety of the energy used by a ship performing voyages arriving at a port under the jurisdiction of a Member State from a port under the jurisdiction of a

Member State, and the energy used at berth in a port under the jurisdiction of a Member State. Such coverage of *a share of* the energy used by a ship in both incoming and outgoing voyages between the Union and third countries ensures the effectiveness of this Regulation, including by increasing the positive impact on the environment of such framework.

***Simultaneously, such framework limits the risk of evasive port calls and the risk of delocalisation of transshipment activities outside the Union.*** In order to ensure smooth operation of maritime traffic, a level playing field among maritime transport operators and among ports, and avoid distortions in the internal market, all journeys arriving or departing from ports under jurisdiction of Member States, as well as the stay of ships in those ports should be covered by uniform rules contained in this Regulation.

Member State, and the energy used at berth in a port under the jurisdiction of a Member State. Such coverage of the energy used by a ship in both incoming and outgoing voyages between the Union and third countries ensures the effectiveness of this Regulation, including by increasing the positive impact on the environment of such framework. . In order to ensure smooth operation of maritime traffic, a level playing field among maritime transport operators and among ports, and avoid distortions in the internal market, all journeys arriving or departing from ports under jurisdiction of Member States, as well as the stay of ships in those ports should be covered by uniform rules contained in this Regulation.

Or. en

## Amendment 9

### Proposal for a regulation Recital 5

#### *Text proposed by the Commission*

(5) The rules laid down in this Regulation should apply in a non-discriminatory manner to all ships regardless of their flag. ***For reasons of coherence with Union and international rules in the area of maritime transport, this Regulation should not apply to warships, naval auxiliaries, fish-catching or fish-processing ships, or government ships used for non-commercial purposes.***

#### *Amendment*

(5) The rules laid down in this Regulation should apply in a non-discriminatory manner to all ships regardless of their flag.

Or. en

## Amendment 10

### Proposal for a regulation

#### Recital 6

##### *Text proposed by the Commission*

(6) The person or organisation responsible for the compliance with this Regulation should be the shipping company, defined as the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention. This definition is based on the definition of ‘company’ in Article 3, point (d) of Regulation (EU) 2015/757 of the European Parliament and of the Council<sup>21</sup>, and in line with the global data collection system established in 2016 by the International Maritime Organization (IMO). In line with the polluter pays principle, the shipping company could, by means of a contractual arrangement, hold the entity that is directly responsible for the decisions affecting the greenhouse gas intensity of the energy used by the ship accountable for the compliance costs under this Regulation. This entity would normally be the entity that is responsible for the choice of fuel, route and speed of the ship.

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<sup>21</sup> Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55).

##### *Amendment*

(6) The person or organisation responsible for the compliance with this Regulation should be the shipping company, defined as the shipowner or any other organisation or person, such as the manager, ***the time charterer*** or the bareboat charterer, that has assumed the responsibility for the ***commercial*** operation of the ship from the shipowner and that ***is responsible for paying for fuel consumed by the ship and***, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention. This definition is based on the definition of ‘company’ in Article 3, point (d) of Regulation (EU) 2015/757 of the European Parliament and of the Council, and in line with the global data collection system established in 2016 by the International Maritime Organization (IMO). In line with the polluter pays principle, the shipping company could, by means of a contractual arrangement, hold the entity that is directly responsible for the decisions affecting the greenhouse gas intensity of the energy used by the ship accountable for the compliance costs under this Regulation. This entity would normally be the entity that is responsible for the choice of fuel, route and speed of the ship.

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<sup>21</sup> Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55).

**Amendment 11****Proposal for a regulation****Recital 7**

*Text proposed by the Commission*

(7) In order to limit the administrative burden, in particular that of smaller operators, this Regulation should not apply to wooden ships of a primitive build and ships not propelled by mechanical means and focus on ships with a gross tonnage above 5 000. ***Even though these latter ships represent only approximately 55% of all ships calling at ports under the Regulation (EU) 2015/757 of the European Parliament and of the Council, they are responsible for 90% of the carbon dioxide (CO<sub>2</sub>) emissions from the maritime sector.***

*Amendment*

(7) In order to limit the administrative burden, in particular that of smaller operators, this Regulation should not apply to wooden ships of a primitive build and ships not propelled by mechanical means and focus on ships with a gross tonnage above 400.

**Amendment 12****Proposal for a regulation****Recital 8**

*Text proposed by the Commission*

(8) The development and deployment of ***new*** fuels and energy solutions requires a coordinated approach to match supply, demand and the provision of appropriate distribution infrastructure. While the current European regulatory framework already partly addresses fuel production with Directive (EU) 2018/2001 of the European Parliament and of the Council<sup>22</sup> and distribution with Directive 2014/94/EU of the European Parliament and of the Council<sup>23</sup>, there is also a need for a tool that establishes increasing levels of

*Amendment*

(8) The development and deployment of ***sustainable renewable*** fuels and energy solutions requires a coordinated approach to match supply, demand and the provision of appropriate distribution infrastructure. While the current European regulatory framework already partly addresses fuel production with Directive (EU) 2018/2001 of the European Parliament and of the Council<sup>22</sup> and distribution with Directive 2014/94/EU of the European Parliament and of the Council<sup>23</sup>, there is also a need for a tool that establishes increasing levels



demand of renewable *and low-carbon* maritime fuels.

of demand of renewable maritime fuels *and other renewable energy sources*.

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<sup>22</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2001, p. 82).

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<sup>22</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2001, p. 82).

<sup>23</sup> Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure (OJ L 307, 28.10.2014, p. 1).

<sup>23</sup> Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure (OJ L 307, 28.10.2014, p. 1).

Or. en

## Amendment 13

### Proposal for a regulation Recital 9

#### *Text proposed by the Commission*

(9) While instruments such as carbon pricing or targets on the carbon intensity of activity promote improvements in energy efficiency, they are not suited to bring about a significant shift towards renewable *and low-carbon* fuels in the short and medium term. A specific regulatory approach dedicated to the deployment of renewable *and low-carbon marine* fuels and substitute sources of energy, such as wind or electricity, is therefore necessary.

#### *Amendment*

(9) While instruments such as carbon pricing or targets on the carbon intensity of activity *may* promote *some* improvements in energy *and* efficiency, they are not suited to bring about a significant *uptake of operational and energy efficiency measures nor a* shift towards renewable fuels in the short and medium term. A specific regulatory approach dedicated to *spur operational and energy efficiency measures as well as* the deployment of renewable *maritime* fuels and substitute sources of energy, such as wind or electricity, is therefore necessary.

Or. en

## Amendment 14

### Proposal for a regulation Recital 9 a (new)

**(9a) In line with the Commission recommendation of 28 September 2021 entitled ‘on Energy Efficiency First: from principles to practice. Guidelines and examples for its implementation in decision-making in the energy sector and beyond’, this Regulation takes an integrated approach by introducing targets for energy efficiency, so that minimal energy would be required for various maritime activities, in addition to promoting fuel switch to sustainable renewable. An emission reduction target per transport work will stimulate shipowners and operators to implement available operational and energy efficiency measures, according to their needs, such as slow steaming, speed and planning optimisation, wind propulsion, anti-fouling coatings, electrification from renewable sources and energy storage, but also digitalisation and logistics optimisation. Equally important to correctly operationalise the energy efficiency first guidelines is to reward, hence incentivise, more energy efficient energy sources or propulsion technologies for energy used at sea and at berth to comply with the provisions in this Regulation.**

Or. en

## Amendment 15

### Proposal for a regulation

#### Recital 10

Text proposed by the Commission

(10) Policy intervention to stimulate demand of renewable **and low-carbon** maritime fuels should be goal-based and respect the **principle of technological neutrality**. Accordingly, limits should be

Amendment

(10) Policy intervention to stimulate demand of renewable maritime fuels should be goal-based and respect the **energy efficiency and sustainability first principles**. Accordingly, limits should be

set on the greenhouse gas intensity of the energy used on-board by ships **without prescribing the use** of any particular fuel or technology.

set on the greenhouse gas intensity of the energy used on-board by ships, **which should also ensure proper recognition of the energy efficiency and sustainability** of any particular fuel or technology.

**Moreover, dedicated incentives are deemed appropriate to stimulate the upscale and uptake of renewable fuels of non biological origin which are set to play a key role to decarbonise those shipping applications without a more energy efficient and sustainable renewable-based alternative, such as direct renewable-based electrification.**

Or. en

## Amendment 16

### Proposal for a regulation

#### Recital 11

*Text proposed by the Commission*

(11) Development and deployment of renewable **and low carbon fuels** with a high potential **for sustainability, commercial maturity and a high** potential for innovation and growth to meet **future** needs should be promoted. This will support creating innovative and competitive fuels markets and ensure sufficient supply of sustainable maritime fuels in the short and long term to contribute to Union transport decarbonisation ambitions, while strengthening Union's efforts towards a high level of environmental protection. **For this purpose, sustainable maritime fuels produced from feedstock listed in Parts A and B of Annex IX of Directive (EU) 2018/2001, as well as synthetic maritime fuels should be eligible. In particular, sustainable maritime fuels produced from feedstock listed in Part B of Annex IX of Directive (EU) 2018/2001 are essential, as currently the most commercially mature technology to decarbonise maritime**

*Amendment*

(11) Development and deployment of **the most sustainable** renewable **solutions** with a high **energy efficiency** potential **as well as the** potential for innovation and growth to meet **the** needs **of the hardest to abate maritime applications** should be promoted **with priority**. This will support creating innovative and competitive fuels markets and ensure sufficient supply of sustainable **renewable** maritime fuels **and renewable propulsion technologies** in the short and long term to contribute to Union **climate, energy and** transport decarbonisation ambitions, while strengthening Union's efforts towards a high level of environmental protection.

*transport already in the short term.*

Or. en

## **Amendment 17**

### **Proposal for a regulation**

#### **Recital 12**

##### *Text proposed by the Commission*

(12) Indirect land-use change occurs when the cultivation of crops for biofuels, bioliquids and biomass fuels displaces traditional production of crops for food and feed purposes. Such additional demand increases the pressure on land and can lead to the extension of agricultural land into areas with high-carbon stock, such as forests, wetlands and peatland, causing additional greenhouse gas emissions and loss of biodiversity. Research has shown that the scale of the effect depends on a variety of factors, including the type of feedstock used for fuel production, the level of additional demand for feedstock triggered by the use of biofuels, bioliquids and biomass fuels, and the extent to which land with high-carbon stock is protected worldwide. The level of greenhouse gas emissions caused by indirect land-use change cannot be unequivocally determined with the level of precision required for the establishment of emission factors required by the application of this regulation. However, there is evidence that all fuels produced from feedstock cause indirect land-use change to various degrees. In addition to the greenhouse gas emissions linked to indirect land-use change – which is capable of negating some or all greenhouse gas emissions savings of individual biofuels, bioliquids or biomass fuels – indirect land-use change poses risks to biodiversity. This risk is particularly serious in connection with a potentially large expansion of production determined by a significant increase in

##### *Amendment*

(12) Indirect land-use change occurs when the cultivation of crops for biofuels, bioliquids and biomass fuels displaces traditional production of crops for food and feed purposes. Such additional demand increases the pressure on land and can lead to the extension of agricultural land into areas with high-carbon stock, such as forests, wetlands and peatland, causing additional greenhouse gas emissions and loss of biodiversity. Research has shown that the scale of the effect depends on a variety of factors, including the type of feedstock used for fuel production, the level of additional demand for feedstock triggered by the use of biofuels, bioliquids and biomass fuels, and the extent to which land with high-carbon stock is protected worldwide. The level of greenhouse gas emissions caused by indirect land-use change cannot be unequivocally determined with the level of precision required for the establishment of emission factors required by the application of this regulation. However, there is evidence that all fuels produced from feedstock cause indirect land-use change to various degrees. In addition to the greenhouse gas emissions linked to indirect land-use change – which is capable of negating some or all greenhouse gas emissions savings of individual biofuels, bioliquids or biomass fuels – indirect land-use change poses risks to biodiversity. This risk is particularly serious in connection with a potentially large expansion of production determined by a significant increase in

demand. Accordingly, no *feed and food* crop-based fuels should be promoted. Directive (EU) 2018/2001 already limits and sets a cap on the contribution of such biofuels, bioliquids and biomass to the GHG emissions savings targets in the road and rail transport sector considering their lower environmental benefits, lower performance in terms of greenhouse reduction potential and broader sustainability concerns.

demand. Accordingly, no crop-based fuels, *including food and feed crops, intermediate crops, energy crops, as well as by-products already used in other sectors such palm fatty acid distillates, animal fats category III, molasses, soapstock and derivatives* should be promoted. Directive (EU) 2018/2001 already limits and sets a cap on the contribution of such biofuels, bioliquids and biomass to the GHG emissions savings targets in the road and rail transport sector considering their lower environmental benefits, lower performance in terms of greenhouse reduction potential and broader sustainability concerns.

Or. en

## Amendment 18

### Proposal for a regulation Recital 13

#### *Text proposed by the Commission*

(13) However, this approach must be stricter in the maritime sector. The maritime sector has currently insignificant levels of demand for food and feed crops-based biofuels, bioliquids and biomass fuels, since over 99% of currently used marine fuels are of fossil origin. Therefore, the non-eligibility of food and feed crop-based fuels under this Regulation also minimises any risk to slow down the decarbonisation of the transport sector, which could otherwise result from a shift of crop-based biofuels from the road to the maritime sector. It is essential to minimise such a shift, as road transport currently remains by far the most polluting transport sector and the maritime transport currently uses *predominantly* fuels of fossil origin. It is therefore appropriate to avoid the creation of a potentially large demand of *food and feed crops-based* biofuels, bioliquids and biomass fuels by promoting

#### *Amendment*

(13) However, this approach must be stricter in the maritime sector. The maritime sector has currently insignificant levels of demand for food and feed crops-based biofuels, bioliquids and biomass fuels, since over 99% of currently used marine fuels are of fossil origin. Therefore, the non-eligibility of food and feed crop-based fuels, *intermediate crops, energy crops, palm fatty acid distillates, animal fats category III, molasses, soapstock and derivatives*, under this Regulation also minimises any risk to slow down the decarbonisation of the transport sector, which could otherwise result from a shift of crop-based biofuels from the road to the maritime sector. It is essential to minimise such a shift, as road transport currently remains by far the most polluting transport sector and the maritime transport currently uses *predominantly* fuels of fossil origin. *Moreover, many feedstocks listed in*

their use under this Regulation. Accordingly, the additional greenhouse gas emissions and loss of biodiversity caused by all types of **feed and food** crop-based fuels require **that** these fuels be considered to have the same emission factors as the least favourable pathway.

***Annex IX of Directive (EU) 2018/2001 have important existing uses which impacts their availability for other sectors. For example, Palm Fatty Acid Distillate (PFAD) is a by-product of the palm oil refining process of high value in other industries, such as oleochemicals; animal fats category III are by-products from the animal slaughter process and are already being used for the manufacture of oleochemicals (e.g. soaps, cosmetics), pet food and animal feeds; and molasses are by-products from the processing of sugar cane and sugar beet into sugar and are already being used for animal feed and in the yeast sector. It is therefore appropriate to avoid the creation of a potentially large demand of biofuels, bioliquids and biomass fuels, based on food and feed crops, intermediate crops, energy crops, palm fatty acid distillates, animal fats category III, used cooking oil, molasses, soapstock and derivatives, by promoting their use under this Regulation. Accordingly, the additional greenhouse gas emissions and loss of biodiversity caused by all types of crop-based fuels require these fuels to be considered to have the same emission factors as the least favourable fossil pathway. This also applies to by-products with important existing uses such as PFAD, used cooking oil, animal fats cat III, and molasses.***

Or. en

## **Amendment 19**

### **Proposal for a regulation Recital 13 a (new)**

*Text proposed by the Commission*

*Amendment*

***(13a) OLAF yearly investigations<sup>1a</sup> show concerning numbers of illegal dumping of biodiesel from the world market into the EU which are also falsely described as having been obtained from used cooking***

*oil (UCO). UCOs are currently used as feedstocks for biofuels in the road sector and they are also expected to play an important role in the aviation sector. Therefore, it is appropriate to avoid the creation of a potentially large demand of UCO in the maritime sector, whereby its international nature would make enforcement and control of biofuels standards even more difficult than for imported biofuels. For this reason used cooking oil based biofuels should be considered to have the same emission factors as the least favourable fossil pathway.*

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*<sup>1a</sup> The OLAF report 2020, p 26  
[https://ec.europa.eu/anti-fraud/system/files/2021-12/olaf\\_report\\_2020\\_en.pdf](https://ec.europa.eu/anti-fraud/system/files/2021-12/olaf_report_2020_en.pdf)*

Or. en

## Amendment 20

### Proposal for a regulation Recital 14

#### *Text proposed by the Commission*

(14) The long lead times associated to the development and deployment of new fuels and energy solutions for maritime transport require rapid action and the establishment of a clear and predictable long-term regulatory framework facilitating planning and investment from all the stakeholders concerned. A clear and stable long-term regulatory framework will facilitate the development and deployment of **new fuels and** energy solutions for maritime transport, and encourage investment from stakeholders. Such framework should define limits for the greenhouse gas intensity of the energy used on-board by ships until **2050**. Those limits should become more ambitious over time

#### *Amendment*

(14) The long lead times associated to the development and deployment of new **renewable** fuels and energy solutions for maritime transport, **as well as the long average lifespan of ships ranging between 25 and 30 years**, require rapid action and the establishment of a clear and predictable long-term regulatory framework facilitating planning and investment from all the stakeholders concerned. **The accelerating climate crisis increases the importance of measures taken in the sector today.** A clear, **ambitious** and stable long-term regulatory framework will facilitate the development and deployment of **renewable** energy solutions for maritime transport, and encourage investment from

to reflect the expected technology development and increased production of marine renewable and low carbon fuels.

stakeholders. Such framework should define limits for the greenhouse gas intensity of the energy used on-board by ships until **reaching zero emission by 2040**. Those limits should become more ambitious over time to reflect the expected technology development and increased production of marine renewable and low carbon fuels.

Or. en

## Amendment 21

### Proposal for a regulation

#### Recital 15

##### *Text proposed by the Commission*

(15) This Regulation should establish the methodology and the formula that should apply to calculate the yearly average greenhouse gas intensity of the energy used on-board by a ship. This formula should be based on the fuel consumption reported by ships and consider the relevant emission factors of these fuels. The use of substitute sources of energy, such as wind or electricity, should also be reflected in the methodology.

##### *Amendment*

(15) This Regulation should establish the methodology and the formula that should apply to calculate the yearly average greenhouse gas intensity of the energy used on-board by a ship. This formula should be based on the fuel consumption reported by ships and consider the relevant emission factors of these fuels. The use of substitute sources of energy **at sea and at berth**, such as wind, **solar** or electricity, should also be reflected in the methodology.

Or. en

## Amendment 22

### Proposal for a regulation

#### Recital 17

##### *Text proposed by the Commission*

(17) The well-to-wake performance of renewable **and low-carbon** maritime fuels should be established using default or actual and certified emission factors covering the well-to-tank and tank-to-wake

##### *Amendment*

(17) The well-to-wake performance of renewable maritime fuels should be established using default or actual and certified emission factors covering the well-to-tank and tank-to-wake emissions.



emissions. **The performance of** fossil fuels should however only be assessed through the use of default emission factors as provided for by this Regulation.

Fossil fuels **and fossil gas** should however only be assessed through the use of default emission factors as provided for by this Regulation **and deemed not suitable for complying with the GHG emission intensity target.**

Or. en

## Amendment 23

### Proposal for a regulation Recital 18

#### *Text proposed by the Commission*

(18) A comprehensive approach on all the most relevant GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) is necessary to promote the use of energy sources providing a lower GHG footprint overall. In order to reflect the global warming potential of methane and nitrous oxides, the limit set by this Regulation should therefore be expressed in terms of ‘CO<sub>2</sub> equivalent’.

#### *Amendment*

(18) A comprehensive approach on all the most relevant GHG emissions (CO<sub>2</sub>, CH<sub>4</sub>, **BC** and N<sub>2</sub>O) is necessary to promote the use of energy sources providing a lower GHG footprint overall. In order to reflect the global warming potential of methane, **black carbon** and nitrous oxides, the limit set by this Regulation should therefore be expressed in terms of ‘CO<sub>2</sub> equivalent’.

Or. en

## Amendment 24

### Proposal for a regulation Recital 19

#### *Text proposed by the Commission*

(19) The use of renewable energy sources and alternative propulsion, such as wind and solar energy, greatly reduces the greenhouse gas intensity of the overall ship energy *use*. **The difficulty** to accurately measure and quantify these energy sources **(intermittence of the energy use, direct transfer as propulsion, etc.) should not impede their recognition in the overall ship energy use through means of**

#### *Amendment*

(19) The use of renewable energy sources and alternative propulsion, such as wind and solar energy, greatly reduces the greenhouse gas intensity of the overall ship energy. **Solutions** to accurately measure and quantify these energy sources **such as on board sensors and software for assessing route conditions are becoming increasingly available. Therefore, the contribution of renewable energy sources**

*approximations of their* contribution to the ship's energy balance.

*and alternative propulsion* to the overall ship's energy balance ***should be recorded and accounted as accurately as possible through the best means of measuring available to date, or when measuring is proven not technically possible, through the best available approximations. The IMO MEPC.1/Circ.896, for instance, provides guidance on the treatment of innovative energy efficiency technology, including for estimating energy from wind assist propulsion.***

Or. en

## Amendment 25

### Proposal for a regulation

#### Recital 20

##### *Text proposed by the Commission*

(20) Air pollution produced by ships (sulphur oxides, nitrogen oxides and particulate matter) ***at berth*** is a significant concern for coastal areas and port cities. Therefore, specific ***and stringent*** obligations should be imposed to reduce emissions at berth from ships that draw power from their engines during their stay in ***port***. According to the data collected within the framework of Regulation (EU) 2015/757 in 2018, passenger ships and containerships are the ship categories producing the highest amount of emissions per ship at berth. Accordingly, emissions from these categories of ships should be addressed as a priority.

##### *Amendment*

(20) ***It is estimated that*** Air pollution produced by ships (sulphur oxides, nitrogen oxides and particulate matter) ***is responsible for over 50 000 deaths annually in the Union and it*** is a significant concern for coastal areas and port cities. Therefore, specific ***and stringent*** obligations should be imposed to reduce emissions at berth from ships that draw power from their ***internal combustion*** engines during their stay in ***ports***. According to the data collected within the framework of Regulation (EU)2015/757 in 2018, passenger ships and containerships are the ship categories producing the highest amount of emissions per ship at berth . Accordingly, emissions from these categories of ships should be addressed as a priority, ***followed by addressing emissions for all remaining ships in order improve air quality in coastal areas as soon as possible.***

Or. en

## Amendment 26

### Proposal for a regulation Recital 20 a (new)

*Text proposed by the Commission*

*Amendment*

***(20a) Since it is the second largest contributor to climate warming caused by ships, measures to reduce black carbon should be included in this Regulation in order to contribute to tackle both air pollution and climate change as soon as possible. Setting stringent GHG intensity and an operational and energy efficiency target will help reduce both CO<sub>2</sub> and BC emissions. However as those targets will require some time to be implemented, additional measures are required to tackle with priority the release of BC close or near the Arctic. Therefore, all ships covered by this Regulation which sail through the Arctic should be required to use only distillates or renewable fuels or zero-emissions methods of propulsion.***

Or. en

## Amendment 27

### Proposal for a regulation Recital 21

*Text proposed by the Commission*

*Amendment*

(21) The use of on-shore power supply (OPS) abates air pollution produced by ships as well as reduces the amount of GHG emissions generated by maritime transport. OPS represents an increasingly ***clean*** power supply available to ships at berth, ***in view*** of the ***growing renewables*** share in the EU electricity mix. While only the provision on OPS connection points is covered by ***Directive 2014/94/EU*** (Alternative Fuels Infrastructure Directive – AFID), the demand for and, as a result, the deployment of this technology has

(21) The use of on-shore power supply (OPS) abates air pollution produced by ships ***at berth*** as well as reduces the amount of GHG emissions generated by maritime transport ***at berth***. OPS represents an increasingly ***useful*** power supply available to ships at berth, ***which will be as clean as the proportion*** of the ***renewable energy*** share in the EU electricity mix. While only the provision on OPS connection points is covered by ***Directive 2014/94/EU*** (Alternative Fuels Infrastructure Directive – AFID), the

remained limited. Therefore specific rules should be established to mandate the use of OPS by *the most polluting* ships.

demand for and, as a result, the deployment of this technology has remained limited. Therefore specific rules should be established to mandate the use of OPS by *all ships covered by this Regulation..*

Or. en

## Amendment 28

### Proposal for a regulation

#### Recital 22

##### *Text proposed by the Commission*

(22) In addition to OPS, other technologies might be capable of offering equivalent environmental benefits in ports. When the use of an alternative technology is demonstrated to be equivalent to the use of OPS, a ship should be exempted from its use of OPS.

##### *Amendment*

(22) In addition to OPS, other technologies might be capable of offering equivalent environmental benefits in ports, ***such as renewable installation on board, batteries and batteries swaps***. When the use of an alternative technology is demonstrated to be equivalent to the use of OPS, ***in terms of air pollution and GHG emission reduction***, a ship should be exempted from its use of OPS

Or. en

## Amendment 29

### Proposal for a regulation

#### Recital 24

##### *Text proposed by the Commission*

(24) ***Exceptions in case of unavailability or incompatibility of OPS should be limited after ship and port operators have had sufficient time to make the necessary investments, in order to provide the necessary incentives for those investments and avoid unfair competition. As of 2035, ship operators should plan carefully their port calls to make sure that they can carry out their activities without emitting air pollutants***

##### *Amendment*

***deleted***

*and GHG at berth and compromise the environment in coastal areas and port cities. A limited number of exceptions in case of unavailability or incompatibility of OPS should be maintained in order to provide the possibility for occasional last-minute changes in port call schedules and calls in ports with incompatible equipment.*

Or. en

### **Amendment 30**

#### **Proposal for a regulation**

##### **Recital 25**

*Text proposed by the Commission*

(25) A robust monitoring, reporting and verification system should be put in place by this Regulation in order to trace compliance with its provisions. Such system should apply in a non-discriminatory way to all ships and require third party verification in order to ensure the accuracy of the data submitted within this system. In order to facilitate achieving the objective of this Regulation, any data already reported for the purpose of Regulation (EU) 2015/757 should be used, when necessary, for verifying compliance with this Regulation in order to limit administrative burden imposed on companies, verifiers *and* maritime authorities.

*Amendment*

(25) A robust *and transparent* monitoring, reporting and verification system should be put in place by this Regulation in order to trace compliance with its provisions. Such system should apply in a non-discriminatory way to all ships and require third party verification in order to ensure the accuracy of the data submitted within this system. In order to facilitate achieving the objective of this Regulation, any data already reported for the purpose of Regulation (EU) 2015/757 should be used, when necessary, for verifying compliance with this Regulation in order to limit administrative burden imposed on companies, verifiers, maritime *and administrative* authorities.

Or. en

### **Amendment 31**

#### **Proposal for a regulation**

##### **Recital 26**

*Text proposed by the Commission*

(26) Companies should be responsible for monitoring and reporting the amount and type of energy used on-board by ships in navigation and at berth, as well as other relevant information, such as information on the type of engine on board **or presence** of wind assisting technologies, with a view to showing compliance with the limit on the greenhouse gas intensity of the energy used on-board by a ship set out by this Regulation. To facilitate the fulfilment of these monitoring and reporting obligations and the verification process by the verifiers, similarly to Regulation (EU) 2015/757, companies should document the envisaged monitoring method and provide further details on the application of the rules of this Regulation in a monitoring plan. The monitoring plan, as well as its subsequent modifications, if applicable, should be submitted to the verifier.

*Amendment*

(26) Companies should be responsible for monitoring and reporting the amount and type of energy used on-board by ships in navigation and at berth, as well as other relevant information, such as information on the type of engine on board, **technical specification** of wind assisting technologies **or any alternative source of energy present on board, including the accounting of the energy they provide**, with a view to showing compliance with the limit on the greenhouse gas intensity of the energy used on-board by a ship set out by this Regulation. To facilitate the fulfilment of these monitoring and reporting obligations and the verification process by the verifiers, similarly to Regulation (EU) 2015/757, companies should document the envisaged monitoring method and provide further details on the application of the rules of this Regulation in a monitoring plan. The monitoring plan, as well as its subsequent modifications, if applicable, should be submitted to the verifier.

Or. en

**Amendment 32**

**Proposal for a regulation**

**Recital 27**

*Text proposed by the Commission*

(27) Certification of fuels is essential to achieve the objectives of this Regulation and guarantee the environmental integrity of the renewable **and low-carbon** fuels that are expected to be deployed in the maritime sector. Such certification should be undertaken by means of a transparent and non-discriminatory procedure. With a view to facilitating certification and limiting the administrative burden, the

*Amendment*

(27) Certification of fuels is essential to achieve the objectives of this Regulation and guarantee the environmental integrity of the renewable fuels that are expected to be deployed in the maritime sector. Such certification should be undertaken by means of a transparent and non-discriminatory procedure. With a view to facilitating certification and limiting the administrative burden, the certification of

certification of biofuels, biogas, renewable fuels of non-biological origin **and recycled carbon fuel** should rely on the rules established by Directive (EU) 2018/2001. This approach of certification should also apply to fuels bunkered outside the Union, which should be considered as imported fuels, in a similar way as Directive (EU) 2018/2001. ***When companies intend to depart from the default values provided for by that Directive or this new framework, this should only be done when values can be certified by one of the voluntary schemes recognised under Directive (EU) 2018/2001 (for well-to-tank values) or by means of laboratory testing or direct emissions measurements (tank-to-wake).***

biofuels, biogas, renewable fuels of non-biological origin should rely on the rules established by Directive (EU) 2018/2001. This approach of certification should also apply to fuels bunkered outside the Union, which should be considered as imported fuels, in a similar way as Directive (EU) 2018/2001.

Or. en

## Amendment 33

### Proposal for a regulation

#### Recital 29

##### *Text proposed by the Commission*

(29) Based on the data and information monitored and reported by companies, the verifiers should calculate and establish the yearly average greenhouse gas intensity of energy used on-board by a ship and the ship's balance with respect to the limit, including any compliance surplus or deficit, as well as the respect of the requirements to use on-shore power supply at berth. The verifier should notify this information to the company concerned. Where the verifier is the same entity as the verifier for the purpose of Regulation (EU) 2015/757, such notification could be done together with the verification report under that Regulation. Such information should be then reported by the company concerned to the Commission.

##### *Amendment*

(29) Based on the data and information monitored and reported by companies, the verifiers should calculate and establish the yearly average greenhouse gas intensity of energy used on-board by a ship and the ship's balance with respect to the limit, including any compliance surplus or deficit, as well as the respect of the requirements to use on-shore power supply at berth ***and to use distillates or sustainable renewable alternative or zero-emission technologies on journeys in or near the Arctic. The verifier should also separately aggregate on an annual basis each type of fuel or energy consumed at berth and at sea, including for each substitute source of energy consumed such as electricity, wind or solar energy.*** The verifier should notify this information to the company concerned. Where the

verifier is the same entity as the verifier for the purpose of Regulation (EU) 2015/757, such notification could be done together with the verification report under that Regulation. Such information should be then reported by the company concerned to the Commission.

Or. en

## Amendment 34

### Proposal for a regulation Recital 30

#### *Text proposed by the Commission*

(30) The Commission should establish and ensure the functioning of **an** electronic database **that registers** the performance of each ship and ensures its compliance with **this** Regulation. In order to facilitate reporting and limit administrative burden to companies, verifiers and other users, this electronic database should build upon the existing THETIS-MRV module and take into account the possibility to reuse information and data collected for the purpose of Regulation (EU) 2015/757.

#### *Amendment*

(30) The Commission should establish and ensure the functioning of **a centrally managed** electronic database **for registering** the performance of each ship and ensures its compliance with **t this Regulation as well as for collecting data on the energy uses, penalties, flexibilities and exemptions and any other relevant information related to the** Regulation. In order to facilitate reporting and limit administrative burden to companies, verifiers and other users, this electronic database should build upon the existing THETIS-MRV module and take into account the possibility to reuse information and data collected for the purpose of Regulation (EU) 2015/757. **To enhance transparency while reducing the administrative burden for shipowners and operators, verifiers should aggregate at individual ship level the compliance data reported by shipowners and operators. The data entered in the database should be comparable and be made publicly available in an open format in order to allow the general public and, in particular, the civil society and the scientific community to track the ecological transition of the maritime sector.**



## Amendment 35

### Proposal for a regulation

#### Recital 31

*Text proposed by the Commission*

(31) Compliance with this Regulation would depend on elements that could be beyond control of the company, such as issues related to fuel availability or fuel quality. Therefore, companies should be allowed the flexibility of rolling-over a compliance surplus from one year to another or borrowing an advance compliance surplus, within certain limits, from the following year. The use of OPS at berth, being of high importance for local air quality in port cities and coastal areas should not be eligible for similar flexibility provisions.

*Amendment*

(31) Compliance with this Regulation would depend on elements that could be beyond control of the company, such as issues related to fuel availability or fuel quality. Therefore, companies should be allowed the flexibility of rolling-over a compliance surplus **generated by renewable energy** from one year to another or borrowing an advance compliance surplus, within certain limits, from the following year. The use of OPS at berth, being of high importance for local air quality in port cities and coastal areas should not be eligible for similar flexibility provisions.

Or. en

## Amendment 36

### Proposal for a regulation

#### Recital 32

*Text proposed by the Commission*

(32) In order to avoid technology lock-in and continue supporting the deployment of most **performant** solutions, companies should be allowed to pool the performances of **different** ships and use the possible over-performance of one ship to compensate for the under-performance of another ship. This creates a possibility to reward overcompliance and incentivates investment in more advanced technologies. The possibility to opt for pooled compliance should remain voluntary and

*Amendment*

(32) In order to avoid technology lock-in and continue supporting the deployment of most **energy efficient and sustainable renewable energy** solutions, companies should be allowed to pool the performances of ships **powered by zero-emission fuels or zero-emission technologies** and use the possible over-performance of one ship to compensate for the under-performance of another ship. This creates a possibility to reward overcompliance and incentivates

subject to agreement of the concerned companies.

investment in more advanced technologies. The possibility to opt for pooled compliance should remain voluntary and subject to agreement of the concerned companies.

Or. en

## Amendment 37

### Proposal for a regulation

#### Recital 33

##### *Text proposed by the Commission*

(33) A document of compliance ('FuelEU certificate of compliance') issued by a verifier following the procedures established by this Regulation, should be kept on board ships as evidence of compliance with the limits on the greenhouse gas intensity of the energy used on-board by a ship *a* with the requirements on the use of OPS at berth. Verifiers should inform the Commission of the issuance of such documents.

##### *Amendment*

(33) A document of compliance ('FuelEU certificate of compliance') issued by a verifier following the procedures established by this Regulation, should be kept on board ships as evidence of compliance with the limits on the greenhouse gas intensity of the energy used on-board by a ship, ***with the RFNBOs requirement***, with the requirements on the use of OPS at berth ***and of distillates or other sustainable renewable fuels on journeys through the Arctic***. Verifiers should inform the Commission of the issuance of such documents.

Or. en

## Amendment 38

### Proposal for a regulation

#### Recital 35

##### *Text proposed by the Commission*

(35) Without prejudice to the possibility of complying through the flexibility and pooling provisions, the ships that do not meet the limits on the yearly average greenhouse gas intensity of the energy used on-board shall be subject to a penalty that has dissuasive effect. The penalty should

##### *Amendment*

(35) Without prejudice to the possibility of complying through the flexibility and pooling provisions, the ships that do not meet the limits on the yearly average greenhouse gas intensity of the energy used on-board shall be subject to a penalty that has dissuasive effect. The penalty should

be proportionate to the extent of the non-compliance and remove any economic advantage of non-compliance, thus preserving a level playing field in the sector. It should be **based on** the amount and cost of renewable and low-carbon fuel that the ships should have used to meet the requirements of the Regulation.

be proportionate to the extent of the non-compliance and remove any economic advantage of non-compliance, thus preserving a level playing field in the sector. It should be **larger than** the amount and cost of renewable and low-carbon fuel that the ships should have used to meet the requirements of the Regulation.

Or. en

## Amendment 39

### Proposal for a regulation Recital 36

#### *Text proposed by the Commission*

(36) The penalty imposed for each non-compliant port call should be proportionate to the cost of using the electricity and at sufficient level to have a dissuasive effect from the use of more polluting energy sources. The penalty should be based on the power installed on board the vessel, expressed in megawatts, multiplied by a fixed penalty in EUR per hour of stay at berth. Due to lack of accurate figures on the cost of providing OPS in the Union, this rate should be based on the EU average electricity price for non-household consumers multiplied by a factor of two to account for other charges related to the provision of the service, including among others connection costs and investment recovery elements.

#### *Amendment*

(36) The penalty imposed for each non-compliant port call should be proportionate to the cost of using the electricity and at sufficient level to have a dissuasive effect from the use of more polluting energy sources. The penalty should be based on the power installed on board the vessel, expressed in megawatts, multiplied by a fixed penalty in EUR per hour of stay at berth. Due to lack of accurate figures on the cost of providing OPS in the Union, this rate should be based on the **most updated** EU average electricity price for non-household consumers multiplied by a factor of two to account for other charges related to the provision of the service, including among others connection costs and investment recovery elements.

Or. en

## Amendment 40

### Proposal for a regulation Recital 36 a (new)

**(36a) The penalty imposed for each non-compliant Arctic voyage should be set at the amount double that of the difference between the distillate cost and the cost of the non-compliant fuel used. The costs should be determined as the Rotterdam spot price on the day of commencement of the voyage.**

Or. en

## Amendment 41

### Proposal for a regulation

#### Recital 37

Text proposed by the Commission

(37) The revenues generated from the payment of penalties should be used to promote the ***distribution and use of renewable and low-carbon fuels in*** the maritime sector ***and help*** maritime operators to meet their climate and environmental goals. For this purpose these revenues should be allocated to the ***the Innovation*** Fund referred to in Article ***10a(8)*** of Directive 2003/87/EC.

Amendment

(37) The revenues generated from the payment of penalties should be used to promote the ***ecological just transition of*** the maritime sector ***by means of the rapid improvement of energy and operational efficiency of ships, including in short sea shipping and ports, the deployment of zero-emission propulsion technologies and the uptake of sustainable use of renewable energy, including wind, and in doing so helping*** maritime operators to meet their climate and environmental goals. ***In parallel, revenues should also be used to support the training, re- and up-skilling for workers along the entire value chain of the maritime sector, including shipyards, in order to equip them with environmentally friendly skills and technologies needed for the transition. Trainings for maritime navigators and captains, in particular, should also focus on the benefits and efficiency gains of slow steaming, route optimisation and cargo logistics as well as raising awareness of marine ecosystems and of the problem of marine litter. 20% of the yearly revenue generated from the***

***payment of penalties shall be used to contribute to the protection, restoration and better management of marine ecosystems.*** For this purpose these revenues should be allocated to the ***Ocean Fund*** referred to in Article 3gdb of Directive 2003/87/EC ***and distributed in line with the objectives set out in this Regulation.***

Or. en

## **Amendment 42**

### **Proposal for a regulation**

#### **Recital 39**

*Text proposed by the Commission*

(39) Given the importance of consequences that the measures taken by the verifiers under this Regulation may have for the companies concerned, in particular regarding the determination of non-compliant port calls, calculation of the amounts of penalties and refusal to issue a FuelEU certificate of compliance, those companies should be entitled to apply for a review of such measures to the competent authority in the Member State where the verifier was accredited. In the light of the fundamental right to an effective remedy, enshrined in Article 47 of the Charter of Fundamental Rights of the European Union, decisions taken by the competent authorities and the managing bodies of the port under this Regulation should be subject to judicial review, carried out in accordance with the national law of the Member State concerned.

*Amendment*

(39) Given the importance of consequences that the measures taken by the verifiers under this Regulation may have for the companies concerned, in particular regarding the determination of non-compliant port calls, calculation of the amounts of penalties and refusal to issue a FuelEU certificate of compliance, those companies should be entitled to apply for a review of such measures to the competent authority in the Member State where the verifier ***and the administering authority*** was accredited. In the light of the fundamental right to an effective remedy, enshrined in Article 47 of the Charter of Fundamental Rights of the European Union, decisions taken by the competent authorities and the managing bodies of the port under this Regulation should be subject to judicial review, carried out in accordance with the national law of the Member State concerned.

Or. en

## Amendment 43

### Proposal for a regulation Recital 40

#### *Text proposed by the Commission*

(40) In order to maintain a level playing field through the efficient functioning of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amendment of the list of well-to-wake emission factors, amendment of the list of the applicable zero-emission technologies *or* criteria for their use, ***to establish the rules on conducting the laboratory testing and direct emissions measurements, adaptation of the penalty factor, accreditation of verifiers,*** adaptation of the penalty factor, and modalities for the payment of penalties. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

#### *Amendment*

(40) In order to maintain a level playing field through the efficient functioning of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of ***complementing the requirements related to the energy and operational efficiency target, of defining or updating standards for measuring and accounting substitute sources of energy,*** of amendment of the list of well-to-wake emission factors, ***calculation of CO<sub>2</sub>-equivalent emissions, including for BC,*** amendment of the list of the applicable zero-emission ***at berth*** technologies, criteria for their use ***or the measuring of their contribution to the ships' energy balance, to define the monitoring plans template,*** adaptation of the penalty factor ***and formulas, accreditation of verifiers,*** and modalities for the payment of penalties. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

Or. en

## Amendment 44

### Proposal for a regulation

#### Recital 41

*Text proposed by the Commission*

(41) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council<sup>27</sup>. ***When establishing by means of implementing acts the templates for standardised monitoring plans, including the technical rules for their uniform application, the Commission should take into account the possibility of reusing information and data collected for the purpose of Regulation (EU) 2015/757.***

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<sup>27</sup> Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

*Amendment*

(41) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council<sup>27</sup>.

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<sup>27</sup> Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

Or. en

## Amendment 45

### Proposal for a regulation

#### Recital 42

*Text proposed by the Commission*

(42) Given the international dimension of the maritime sector, a global approach to limiting the greenhouse gas intensity of the energy used by ships *is* preferable as it could be regarded as more effective due to its broader scope. In this context, and with

*Amendment*

(42) Given the international dimension of the maritime sector, a global approach to limiting the greenhouse gas intensity of the energy used by ships ***could be*** preferable as it could be regarded as more effective due to its broader scope. ***This should not***

a view to facilitating the development of international rules within the International Maritime Organisation (IMO), the Commission should share relevant information on the implementation of this Regulation with the IMO and other relevant international bodies and **relevant** submissions should be made to the IMO. Where an agreement on a global **approach** is reached on matters of relevance to this Regulation, the Commission should review the present Regulation with a view to aligning it, where appropriate, with the international rules.

***hinder the Union's ability to be more ambitious than the international standards.*** In this context, and with a view to ***improve the ambition and*** facilitating the development of international rules within the International Maritime Organisation (IMO), the Commission should share relevant information on the implementation of this Regulation with the IMO and other relevant international bodies and submissions should be made to the IMO ***promoting the global adoption of measures contained in this Regulation.*** Where an agreement on a global ***approach*** is reached ***and it is proven more effective and ambitious*** on matters of relevance to this Regulation, the Commission should review the present Regulation with a view to aligning it, where appropriate, with the international rules.

Or. en

## Amendment 46

### Proposal for a regulation

#### Recital 43

##### *Text proposed by the Commission*

(43) The uptake of renewable ***and low-carbon*** fuels and substitute sources of energy by ships arriving at, within or departing from ports under the jurisdiction of a Member State across the Union, is not an objective that can be sufficiently achieved by the Member States without risking to introduce barriers to the internal market and distortions of competition between ports and between maritime operators. This objective can be better achieved by introducing uniform rules at Union level that create economic incentives for maritime operators to continue operating unimpededly while meeting obligations on the use of renewable and low-carbon fuels. Accordingly, the Union may adopt

##### *Amendment*

(43) The uptake of renewable fuels and substitute sources of energy by ships arriving at, within or departing from ports under the jurisdiction of a Member State across the Union, is not an objective that can be sufficiently achieved by the Member States without risking to introduce barriers to the internal market and distortions of competition between ports and between maritime operators. This objective can be better achieved by introducing uniform rules at Union level that create economic incentives for maritime operators to continue operating unimpededly while meeting obligations on the use of renewable and low-carbon fuels. Accordingly, the Union may adopt measures, in accordance with the principle



measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective,

of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective,

Or. en

## Amendment 47

### Proposal for a regulation Article 1 – paragraph 1 – point -a (new)

*Text proposed by the Commission*

*Amendment*

***(-a) the reduction of the greenhouse gas ('GHG') emissions per transport work as an average across the ship fleet operated by the same company arriving at, staying within or departing from ports under the jurisdiction of a Member State;***

Or. en

## Amendment 48

### Proposal for a regulation Article 1 – paragraph 1 – point a

*Text proposed by the Commission*

*Amendment*

(a) the limit on the greenhouse gas ('GHG') intensity of energy used on-board by a ship arriving at, staying within or departing from ports under the jurisdiction of a Member State ***and***

(a) the limit on the greenhouse gas ('GHG') intensity of energy used on-board by a ship arriving at, staying within or departing from ports under the jurisdiction of a Member State;

Or. en

## Amendment 49

### Proposal for a regulation

#### Article 1 – paragraph 1 – point a a (new)

*Text proposed by the Commission*

*Amendment*

***(a a) the obligation to use a share of renewable fuels of non-biological origin by a ship arriving at, staying within or departing from ports under the jurisdiction of a Member State;***

Or. en

## Amendment 50

### Proposal for a regulation

#### Article 1 – paragraph 1 – point a b (new)

*Text proposed by the Commission*

*Amendment*

***(ab) the obligation to use distillates, sustainable renewable fuels or zero-emission technologies for the energy used by a ships navigating through the Arctic and arriving at, staying within or departing from ports under the jurisdiction of a Member State;***

Or. en

## Amendment 51

### Proposal for a regulation

#### Article 1 – paragraph 1 – subparagraph 1

*Text proposed by the Commission*

*Amendment*

in order to increase consistent use of renewable ***and low-carbon fuels*** and substitute sources of energy across the Union, while ensuring the smooth operation of maritime traffic and avoiding distortions in the internal market.

in order ***to incentivise more energy efficient shipping operations and*** to increase consistent use of ***sustainable renewable energy*** and substitute sources of energy ***in replacement to fossil fuels*** across the Union ***and to achieve zero emissions in the maritime sector by 2040,***

while ensuring the smooth operation of maritime traffic and avoiding distortions in the internal market.

Or. en

## Amendment 52

### Proposal for a regulation

#### Article 2 – paragraph 1 – introductory part

*Text proposed by the Commission*

This Regulation applies to all ships above a gross tonnage of **5000**, regardless of their flag in respect to:

*Amendment*

This Regulation applies to all ships above a gross tonnage of **400**, regardless of their flag in respect to:

Or. en

## Amendment 53

### Proposal for a regulation

#### Article 2 – paragraph 1 – point c

*Text proposed by the Commission*

(c) **a half** of the energy used on voyages departing from or arriving to a port of call under the jurisdiction of a Member State, where the last or the next port of call is under the jurisdiction of a third country.

*Amendment*

(c) **the entirety** of the energy used on voyages departing from or arriving to a port of call under the jurisdiction of a Member State, where the last or the next port of call is under the jurisdiction of a third country;

Or. en

## Amendment 54

### Proposal for a regulation

#### Article 2 – paragraph 1 – point c a (new)

*Text proposed by the Commission*

*Amendment*

**(ca) the entirety of the energy used on board for voyages through the Arctic that**

*are departing from or arriving to a port of call under the jurisdiction of a Member State, where the last or the next port of call is under the jurisdiction of a third country;*

Or. en

## Amendment 55

### Proposal for a regulation Article 2 – paragraph 2

*Text proposed by the Commission*

This Regulation does not apply to *warships, naval auxiliaries, fish-catching or fish-processing ships*, wooden ships of a primitive build, ships not propelled by mechanical means, *or government ships used for non-commercial purposes*.

*Amendment*

This Regulation does not apply to wooden ships of a primitive build *or* ships not propelled by mechanical means.

Or. en

## Amendment 56

### Proposal for a regulation Article 3 – paragraph 1 – point a

*Text proposed by the Commission*

(a) ‘greenhouse gas emissions’ means the release of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O) into the atmosphere;

*Amendment*

(a) ‘greenhouse gas emissions’ means the release of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O) into the atmosphere *and the direct radiative forcing of black carbon (BC) emissions*;

Or. en

## Amendment 57

### Proposal for a regulation Article 3 – paragraph 1 – point d

*Text proposed by the Commission*

*Amendment*

(d) ‘**recycled carbon fuels**’ means **recycled carbon fuels as defined in Article 2, point (35), of Directive (EU) 2018/2001;**

**deleted**

*(This amendment applies throughout the text)*

Or. en

## **Amendment 58**

### **Proposal for a regulation**

#### **Article 3 – paragraph 1 – point f**

*Text proposed by the Commission*

*Amendment*

(f) ‘**food and feed** crops’ means food and feed crops as defined in Article 2, point (40), of Directive (EU) 2018/2001;

(f) ‘crops’ means food and feed crops as defined in Article 2, point (40), of Directive (EU) 2018/2001 **and intermediate crops, energy crops, palm fatty acid distillates, animal fats category III, molasses, soapstock and derivatives;**

Or. en

## **Amendment 59**

### **Proposal for a regulation**

#### **Article 3 – paragraph 1 – point g**

*Text proposed by the Commission*

*Amendment*

(g) ‘zero-emission technology’ means a technology fulfilling the requirements of Annex III that does not imply the release of the following greenhouse gases and air pollutants into the atmosphere by ships: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>) **and** particulate matter (PM);

(g) ‘zero-emission **at berth** technology’ means a technology fulfilling the requirements of Annex III that does not imply the release **at tailpipe** of the following greenhouse gases and air pollutants into the atmosphere by ships: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM) **and Black Carbon (BC);**

*(This amendment applies throughout the text)*

Or. en

## **Amendment 60**

### **Proposal for a regulation**

#### **Article 3 – paragraph 1 – point i**

*Text proposed by the Commission*

(i) ‘port of call’ means ***a port of call as defined in Article 3, point (b) of Regulation (EU) 2015/757;***

*Amendment*

(i) ‘port of call’ means ***the port where a ship stops to load or unload a substantial part of its cargo or to embark or disembark passengers; consequently, stops for the sole purposes of refuelling, obtaining supplies, relieving the crew, going into dry-dock or making repairs to the ship and/or its equipment, stops in port because the ship is in need of assistance or in distress, ship-to-ship transfers carried out outside ports, and stops for the sole purpose of taking shelter from adverse weather or rendered necessary by search and rescue activities are excluded;***

Or. en

#### *Justification*

*This Amendment reflects the European Parliament position voted on Wednesday, 16 September 2020 on the revision of the "MRV Regulation" (Regulation (EU) 2015/757).*

## **Amendment 61**

### **Proposal for a regulation**

#### **Article 3 – paragraph 1 – point k**

*Text proposed by the Commission*

(k) ‘company’ means ***company as defined in Article 3, point (d) of Regulation (EU) 2015/757;***

*Amendment*

(k) ‘company’ means ***the shipowner or any other organisation or person such as the manager, the time charterer or the bareboat charterer, which has assumed***

*the responsibility for the commercial operation of the ship from the shipowner and is responsible for paying for fuel consumed by the ship;*

Or. en

*Justification*

*This Amendment reflects the European Parliament position voted on Wednesday, 16 September 2020 on the revision of the "MRV Regulation" (Regulation (EU) 2015/757).*

**Amendment 62**

**Proposal for a regulation**

**Article 3 – paragraph 1 – point x a (new)**

*Text proposed by the Commission*

*Amendment*

*(xa) ‘non-compliant Arctic voyage’ means a ship voyage that does not comply with the requirements set out in Article 5a;*

Or. en

**Amendment 63**

**Proposal for a regulation**

**Article 3 – paragraph 1 – point y**

*Text proposed by the Commission*

*Amendment*

(y) ‘least favourable pathway’ means the most *carbon-intensive* production pathway used for any given fuel;

(y) ‘least favourable pathway’ means the most *GHG-intensive* production pathway used for any given fuel;

Or. en

**Amendment 64**

**Proposal for a regulation**

**Article 3 – paragraph 1 – point z**

*Text proposed by the Commission*

(z) 'CO<sub>2</sub> equivalent' means the metric measure used to compute the emissions from CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O on the basis of their global-warming potential, by converting amounts of CH<sub>4</sub> and N<sub>2</sub>O to the equivalent amount of carbon dioxide with the same global warming potential;

*Amendment*

(z) 'CO<sub>2</sub> equivalent' means the metric measure used to compute the emissions from CO<sub>2</sub>, CH<sub>4</sub>, **BC** and N<sub>2</sub>O on the basis of their global-warming potential, by converting amounts of CH<sub>4</sub>, **BC** and N<sub>2</sub>O to the equivalent amount of carbon dioxide with the same global warming potential **(GWP) using GWP 20 figures;**

Or. en

**Amendment 65**

**Proposal for a regulation**

**Article 3 – paragraph 1 – point ee a (new)**

*Text proposed by the Commission*

*Amendment*

**(eea) 'administering authority in respect of a shipping company' means:**

**(i) in the case of a company registered in a Member State, the Member State in which the company is registered;**

**(ii) in the case of a company that is not registered in a Member State, the Member State with the greatest estimated number of port calls from voyages performed by that company in the last two monitoring years and falling within the scope set out in Article 2;**

**(iii) in the case of a company that is not registered in a Member State and that did not carry out any voyage falling within the scope set out in Article 2 in the preceding two monitoring years, the administering authority means the Member State from where the company has started its first voyage falling within the scope set out in Article 2.**

Or. en



*Justification*

*The definition mirrors Article 3gd of the Commission's proposal for amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union. COM/2021/551 final.*

**Amendment 66**

**Proposal for a regulation**

**Article 3 – paragraph 1 – point ee b (new)**

*Text proposed by the Commission*

*Amendment*

*(eeb) ‘Arctic’ means all marine waters of the geographical area including all of Alaska, Canada North of 60°N, together with northern Quebec and Labrador, all of Greenland, the Faroe Islands, and Iceland, and the northernmost counties of Norway, Sweden and Finland, and in Russia the Murmansk Oblast, the Nenets, Yamalo-Nenets, Taimyr, and Chukotka autonomus okrugs, Vorkuta City in the Komi Republic, Norilsk and Igsrka in Krasnoyarsky Kray, and those parts of the Sakha Republic whose boundaries lie closest to the Arctic Circle.*

Or. en

**Amendment 67**

**Proposal for a regulation**

**Chapter II – title**

*Text proposed by the Commission*

*Amendment*

**REQUIREMENTS ON ENERGY *USED*  
ON-BOARD BY SHIPS**

**REQUIREMENTS ON ENERGY *USES*  
ON-BOARD BY SHIPS**

Or. en

## Amendment 68

### Proposal for a regulation Article -3 a (new)

*Text proposed by the Commission*

*Amendment*

#### **Article 3a**

**Operational and energy efficiency:  
Greenhouse gas intensity per transport of  
work**

- 1. Companies shall linearly reduce the annual GHG emissions per transport work by at least 40% by 2030 as an average across all ships under their responsibility, compared to the average performance per ship category of ships of the same size and type as reported under this Regulation or, where appropriate, under the Regulation (EU) 2015/757.**
- 2. Where, in a given reporting period, a company fails to comply with the annual reduction referred to in paragraph 1 of this Article, the administering authority in respect of the company shall impose an effective, proportionate and dissuasive financial penalty. Payment of the excess emissions penalty shall not release the company from its obligation under paragraph 1 of this Article. In the case of companies that have failed to comply with the emission limits laid down under this Article, the provisions of Article 23(3) apply.**
- 3. The Commission shall adopt delegated acts by... [6 months after the entry into force of this Regulation] in accordance with Article 26 in order to supplement this Regulation by:**
  - (i) defining the average performance per ship category referred to in paragraph 1;**
  - (ii) determining the baseline and the annual linear reduction factor to be applied for each ship category by using the data from the THETIS-MRV, including the mandatory parameter**

***‘cargo carried’, and the IMO DCS, when available, while fully recognising the emission reductions already undertaken by the ‘decarbonising first movers’ companies, so as to achieve the target referred to in paragraph 1;***

***(iii) specifying the rules and means for calculating and collecting the excess emissions penalty referred to in paragraph 2;***

***(iv) specifying any other rule and methods necessary for the monitoring, compliance and verification of compliance of this Article, for all ships falling under the scope of this Regulation.***

Or. en

#### *Justification*

*This Amendment reflects the European Parliament position voted on Wednesday, 16 September 2020 on the revision of the "MRV Regulation" (Regulation (EU) 2015/757)*

#### **Amendment 69**

##### **Proposal for a regulation Article 4 – title**

*Text proposed by the Commission*

*Amendment*

Greenhouse gas intensity limit of energy used on-board by a ship

Greenhouse gas intensity limit of energy used on-board by a ship ***and mandate for the uptake of renewable fuels of non-biological origin***

Or. en

#### **Amendment 70**

##### **Proposal for a regulation Article 4 – paragraph 2 – indent 1**

*Text proposed by the Commission*

*Amendment*

— -2% from 1 January 2025;

— -6% from 1 January 2025;

**Amendment 71**

**Proposal for a regulation**  
**Article 4 – paragraph 2 – indent 2**

*Text proposed by the Commission*

— -6% from 1 January 2030;

*Amendment*

— -23% from 1 January 2030;

Or. en

**Amendment 72**

**Proposal for a regulation**  
**Article 4 – paragraph 2 – indent 3**

*Text proposed by the Commission*

— -13% from 1 January 2035;

*Amendment*

— -77% from 1 January 2035;

Or. en

**Amendment 73**

**Proposal for a regulation**  
**Article 4 – paragraph 2 – indent 4**

*Text proposed by the Commission*

— -26% from 1 January 2040;

*Amendment*

— -100% from 1 January 2040;

Or. en

**Amendment 74**

**Proposal for a regulation**  
**Article 4 – paragraph 2 – indent 5**

*Text proposed by the Commission*

*Amendment*

— *-59% from 1 January 2045;* *deleted*

Or. en

#### **Amendment 75**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 2 – indent 6**

*Text proposed by the Commission*

*Amendment*

— *-75% from 1 January 2050.* *deleted*

Or. en

#### **Amendment 76**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 2 a (new)**

*Text proposed by the Commission*

*Amendment*

**2a. From 1 January 2030, ships that do not have any other more energy efficient renewable-based solutions to decarbonise their operations, shall meet at least 18% of their yearly average energy used on-board during a reporting period with RFNBOs.**

Or. en

#### **Amendment 77**

##### **Proposal for a regulation**

##### **Article 4 – paragraph 3 – subparagraph 1 a (new)**

*Text proposed by the Commission*

*Amendment*

**The Commission is empowered to adopt delegated acts in accordance with Article**

***26 to amend Annex I in order to insert or update reference standards for accurately measuring and accounting for the contribution of substitute sources of energy in the light of scientific and technical progress.***

Or. en

## **Amendment 78**

### **Proposal for a regulation Article 4 – paragraph 4**

*Text proposed by the Commission*

4. The Commission is empowered to adopt delegated acts in accordance with Article 26 to amend Annex II in order to include the well-to-wake emission factors related to any new sources of energy *or* to adapt the existing emission factors to ensure consistency with future international standards or ***the legislation*** of the Union in the field of energy.

*Amendment*

4. The Commission is empowered to adopt delegated acts in accordance with Article 26 to amend Annex II in order to ***ensure the emission factors are as representative as possible to real emissions according to the best available scientific and technical knowledge, to*** include the well-to-wake emission factors related to ***black carbon and*** any new sources of energy, to adapt the existing emission factors to ensure consistency with ***more ambitious*** future international standards or ***legislations*** of the Union in the field of energy, ***environment and climate***.

Or. en

## **Amendment 79**

### **Proposal for a regulation Article 5 – paragraph 1**

*Text proposed by the Commission*

1. ***From 1 January 2030***, a ship at berth in a port of call under the jurisdiction of a Member State shall connect to on-shore power supply and use it for all energy needs while at berth.

*Amendment*

1. A ship at berth in a port of call under the jurisdiction of a Member State shall connect to on-shore power supply and use it for all energy needs while at berth.

## Amendment 80

### Proposal for a regulation

#### Article 5 – paragraph 2 – introductory part

*Text proposed by the Commission*

2. Paragraph 1 shall apply *to*:

*Amendment*

2. Paragraph 1 shall apply:

Or. en

## Amendment 81

### Proposal for a regulation

#### Article 5 – paragraph 2 – point a

*Text proposed by the Commission*

(a) containerships;

*Amendment*

(a) *by 1 January 2025, to passenger ships and all seagoing containerships above 400 gross tonnes;*

Or. en

## Amendment 82

### Proposal for a regulation

#### Article 5 – paragraph 2 – point b

*Text proposed by the Commission*

(b) *passenger* ships.

*Amendment*

(b) *by 1 January 2030 to all types of ships above 400 gross tonnes.*

Or. en

## Amendment 83

### Proposal for a regulation

#### Article 5 – paragraph 3 – introductory part

*Text proposed by the Commission*

3. Paragraph 1 shall not apply to ships:

*Amendment*

3. Paragraph 1 **and 2** shall not apply to ships:

Or. en

**Amendment 84**

**Proposal for a regulation  
Article 5 – paragraph 3 – point d**

*Text proposed by the Commission*

**(d) that are unable to connect to on-shore power supply due to unavailable connection points in a port;**

*Amendment*

**deleted**

Or. en

**Amendment 85**

**Proposal for a regulation  
Article 5 – paragraph 3 – point e**

*Text proposed by the Commission*

**(e) that are unable to connect to on-shore power supply because the shore installation at the port is not compatible with the on-board on-shore power equipment;**

*Amendment*

**deleted**

Or. en

**Amendment 86**

**Proposal for a regulation  
Article 5 – paragraph 4**

*Text proposed by the Commission*

4. The Commission is empowered to

*Amendment*

4. The Commission is empowered to



adopt delegated acts in accordance with Article 26 to amend Annex III in order to insert references to new technologies in the list of applicable zero-emission technologies or criteria for their use, where these new technologies are found equivalent to the technologies listed in that Annex in the light of scientific and technical progress.

adopt delegated acts in accordance with Article 26 to amend Annex III in order to insert references to new technologies in the list of applicable zero-emission *at berth* technologies or *modify the* criteria for their use, where these new technologies *or other uses criteria* are found equivalent *or better in term of emissions reduction* to the technologies *and criteria for uses* listed in that Annex in the light of scientific and technical progress *as well as developments in the Union's climate, environmental and energy legislation*.

Or. en

## Amendment 87

### Proposal for a regulation Article 5 – paragraph 6

*Text proposed by the Commission*

*Amendment*

6. *From 1 January 2035, the exceptions listed in paragraph 3, points (d) and (e), may not be applied to a given ship, in total, more than five times during one reporting year. A port call shall not be counted for the purpose of compliance with this provision where the company demonstrates that it could not have reasonably known that the ship will be unable to connect for reasons referred to in paragraph 3, points (d) and (e).*

*deleted*

Or. en

## Amendment 88

### Proposal for a regulation Article 5 a (new)

*Text proposed by the Commission*

*Amendment*

*Article 5a*

*Additional requirement for the energy used for voyages through the Arctic*

- 1. A ship which navigates through the Arctic shall employ for its entire energy needs distillates or sustainable renewable fuels, unless it is fully powered by zero-emission technologies as defined in Annex III.*
- 2. Paragraph 1 is without prejudice to more ambitious requirements in term of energy uses at sea or at berth that may result from the application of Articles 4 and 5.*

Or. en

**Amendment 89**

**Proposal for a regulation  
Article 6 – paragraph 2**

*Text proposed by the Commission*

2. Monitoring and reporting shall be complete and cover the energy used on-board by ships, while the ships are at sea as well as at berth. Companies shall **apply appropriate measures to** prevent any data gaps within the reporting period.

*Amendment*

2. Monitoring and reporting shall be complete and cover the energy used on-board by ships, while the ships are at sea as well as at berth, **and the necessary temporal and geographical information needed to precisely identify the energy used by ships navigating through the Arctic.** Companies shall prevent any data gaps within the reporting period.

Or. en

**Amendment 90**

**Proposal for a regulation  
Article 6 – paragraph 3**

*Text proposed by the Commission*

3. Monitoring and reporting shall be consistent and comparable over time. To that end, companies shall use the same

*Amendment*

3. Monitoring and reporting shall be consistent and comparable over time. To that end, companies shall use the same

monitoring methodologies and data sets subject to modifications assessed by the verifier. Companies shall **enable reasonable assurance of** the integrity of the data to be monitored and reported.

monitoring methodologies and data sets subject to modifications assessed by the verifier. Companies shall **ensure** the integrity of the data to be monitored and reported.

Or. en

## Amendment 91

### Proposal for a regulation Article 6 – paragraph 4

#### *Text proposed by the Commission*

4. Companies shall obtain, record, compile, analyse and document monitoring data, including assumptions, references, emission factors and activity data, in a transparent and accurate manner, so that the verifier can determine the greenhouse gas intensity of the energy used on-board by ships.

#### *Amendment*

4. Companies shall obtain, record, compile, analyse and document monitoring data, including assumptions, references, emission factors and activity data, in a transparent, **complete** and accurate manner, so that the verifier can determine the greenhouse gas intensity of the energy used on-board by ships, **the share of RFNBOs, the energy used on-board for voyages through the Arctic and any other information required to comply with this Regulation.**

Or. en

## Amendment 92

### Proposal for a regulation Article 6 – paragraph 5

#### *Text proposed by the Commission*

5. In undertaking the monitoring and reporting activities set out in Articles 7 **to 9** and 14 of this Regulation, information and data collected for the purpose of Regulation (EU) 2015/757 shall be used where appropriate.

#### *Amendment*

5. In undertaking the monitoring and reporting activities set out in Articles 7, **8** and 14 of this Regulation, information and data collected for the purpose of Regulation (EU) 2015/757 shall be used where appropriate.

Or. en

## Amendment 93

### Proposal for a regulation

#### Article 7 – paragraph 3 – point d

*Text proposed by the Commission*

(d) a description that the ship has installed and certified equipment to allow connection to onshore power supply, at a specified voltage and frequency, including the gear specified in IEC/IEEE 80005-1 (High Voltage) and IEC/IEEE 80005-3 (Low Voltage) or is equipped with substitute sources of energy or a zero-emission technology as specified in Annex III;

*Amendment*

(d) a description that the ship has installed and certified equipment to allow connection to onshore power supply, at a specified voltage and frequency, including the gear specified in IEC/IEEE 80005-1 (High Voltage) and IEC/IEEE 80005-3 (Low Voltage) or is equipped with substitute sources of energy or a zero-emission ***at berth*** technology as specified in Annex III ***together with a description of their main technical specifications, including their capacity expressed in megajoules (MJ) when relevant;***

Or. en

## Amendment 94

### Proposal for a regulation

#### Article 7 – paragraph 3 – point e

*Text proposed by the Commission*

(e) a description of the intended source(s) of energy to be used on-board while in navigation and at berth to comply with the requirements set out in Articles 4 ***and 5;***

*Amendment*

(e) a description of the intended source(s) of energy to be used on-board while in navigation and at berth to comply with the requirements set out in Articles 4, ***5, including the sources of energy intended to power the zero-emission at berth technology specified in Annex III, such as main intended energy source to charge the on board-electricity storage and to power the fuel cells, and 5a;***

Or. en

## Amendment 95

### Proposal for a regulation

#### Article 7 – paragraph 3 – point f

*Text proposed by the Commission*

(f) a description of the procedures for monitoring the fuel consumption of the ship as well as the energy provided by substitute sources of energy or a zero-emission technology as specified in Annex III;

*Amendment*

(f) a description of the procedures for monitoring **and accounting** the fuel consumption of the ship as well as the energy provided by substitute sources of energy or a zero-emission **at berth** technology as specified in Annex III;

Or. en

## Amendment 96

### Proposal for a regulation

#### Article 7 – paragraph 3 – point i

*Text proposed by the Commission*

(i) a description of the procedures used for determining activity data per voyage, including the procedures, responsibilities, formulae and data sources for determining and recording the time spent at sea between the port of departure and the port of arrival and the time spent at berth;

*Amendment*

(i) a description of the procedures used for determining activity data per voyage, including the procedures, responsibilities, formulae and data sources for determining and recording the time spent at sea between the port of departure and the port of arrival and the time spent at berth, **including for voyages through the Arctic**;

Or. en

## Amendment 97

### Proposal for a regulation

#### Article 7 – paragraph 3 – point k

*Text proposed by the Commission*

(k) a description of the method to be used to determine surrogate data for closing data gaps;

*Amendment*

(k) a description of the method to be used to **prevent data gaps and to** determine surrogate data for closing **unavoidable** data gaps **as well as methods to identify data errors**;

**Amendment 98****Proposal for a regulation  
Article 7 – paragraph 4***Text proposed by the Commission*

4. Companies shall use standardised monitoring plans based on templates. The Commission shall, ***by means of implementing acts, determine those templates***, including the technical rules for their uniform application. ***Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 27(3).***

*Amendment*

4. Companies shall use standardised monitoring plans based on templates. The Commission shall ***adopt delegated acts in accordance with Article 26 supplementing this Regulation by establishing standardised monitoring plans based on templates***, including the technical rules for their uniform application ***and use***.

Or. en

**Amendment 99****Proposal for a regulation  
Article 8 – paragraph 1***Text proposed by the Commission*

1. Companies shall check regularly, and at least ***annually***, whether a ship's monitoring plan reflects the nature and functioning of the ship and whether any of the data it contains can be improved.

*Amendment*

1. Companies shall check regularly, and at least ***twice a year***, whether a ship's monitoring plan reflects the nature and functioning of the ship and whether any of the data it contains can be improved.

Or. en

**Amendment 100****Proposal for a regulation  
Article 8 – paragraph 2 – point e a (new)***Text proposed by the Commission**Amendment*

***(ea) where methods to prevent data gaps and identify data errors have been***

*found inadequate for ensuring data  
solidity and transparency.*

Or. en

## **Amendment 101**

### **Proposal for a regulation Article 8 – paragraph 4**

*Text proposed by the Commission*

4. Modifications of the monitoring plan referred to in paragraph 2, points (b), (c) **and (d)** of this Article shall be subject to assessment by the verifier. Following the assessment, the verifier shall notify the company concerned whether those modifications are in conformity with Article 6.

*Amendment*

4. Modifications of the monitoring plan referred to in paragraph 2, points (b), (c), **(d) and (ea)** of this Article shall be subject to assessment by the verifier. Following the assessment, the verifier shall notify the company concerned whether those modifications are in conformity with Article 6.

Or. en

## **Amendment 102**

### **Proposal for a regulation Article 9 – title**

*Text proposed by the Commission*

*Certification of biofuels, biogas,  
renewable liquid and gaseous transport  
fuels of non-biological origin and recycled  
carbon fuels*

*Amendment*

*Sustainability and GHG saving criteria of  
transport fuels*

Or. en

## **Amendment 103**

### **Proposal for a regulation Article 9 – paragraph 1 – introductory part**

*Text proposed by the Commission*

1. Where biofuels, biogas, renewable fuels of non-biological origin **and recycled carbon fuels**, as defined in Directive (EU) 2018/2001, are to be taken into account for the purposes referred to in Articles **4(1)** of this Regulation, the following rules apply:

*Amendment*

1. Where biofuels, biogas **and** renewable fuels of non-biological origin , as defined in Directive (EU) 2018/2001, **and other fuels or gases** are to be taken into account for the purposes referred to in Articles **4** of this Regulation, the following rules apply:

Or. en

#### **Amendment 104**

##### **Proposal for a regulation**

##### **Article 9 – paragraph 1 – point a**

*Text proposed by the Commission*

(a) greenhouse gas emission factors of biofuels and biogas **that** comply with the sustainability and greenhouse gas saving criteria set out in Article 29 of Directive (EU) 2018/2001 shall be determined according to the methodologies set out in that Directive;

*Amendment*

(a) greenhouse gas emission factors of biofuels and biogas **shall** comply with the sustainability and greenhouse gas saving criteria set out in Article 29 of Directive (EU) 2018/2001 **and** shall be determined according to the methodologies set out in that Directive;

Or. en

#### **Amendment 105**

##### **Proposal for a regulation**

##### **Article 9 – paragraph 1 – point b**

*Text proposed by the Commission*

(b) greenhouse gas emissions factors of renewable fuels of non-biological origin **and recycled carbon fuel that** comply with the greenhouse gas emission savings thresholds set out in Article 27(3) of Directive (EU) 2018/2001 shall be determined according to the methodologies set out in that Directive;

*Amendment*

(b) greenhouse gas emissions factors of renewable fuels of non-biological origin **shall** comply with the greenhouse gas emission savings thresholds set out in Article 27(3) of Directive (EU) 2018/2001, **and the related delegated acts on additionality and GHG methodology, and** shall be determined according to the methodologies set out in that Directive;



## Amendment 106

### Proposal for a regulation Article 9 – paragraph 1 – point c

*Text proposed by the Commission*

(c) biofuels and biogas that do not comply with point (a) or that are produced from food and feed crops shall be considered to have the same emission factors as the least favourable fossil fuel pathway for this type of fuel;

*Amendment*

(c) biofuels and biogas that do not comply with point (a) or that are produced from food and feed crops, ***intermediate crops, energy crops, palm fatty acid distillates, used cooking oil, animal fats category III, molasses, soapstocks and derivatives***, shall be considered to have the same emission factors as the least favourable fossil fuel pathway for this type of fuel;

Or. en

## Amendment 107

### Proposal for a regulation Article 9 – paragraph 1 – point d

*Text proposed by the Commission*

(d) renewable fuels of non-biological origin ***and recycled carbon fuels*** that do not comply with point (b) shall be considered to have the same emission factors as the least favourable fossil fuel pathway for this type of fuels.

*Amendment*

(d) renewable fuels of non-biological origin that do not comply with point (b) ***and any other hydrogen-derived synthetic fuels or hydrogen type*** shall be considered to have the same emission factors as the least favourable fossil fuel pathway for this type of fuels;

Or. en

## Amendment 108

### Proposal for a regulation Article 9 – paragraph 1 – point d a (new)

*Text proposed by the Commission*

*Amendment*

***(da) fossil gas and any other fossil-derived fuel pathways shall be considered to have the same emission factors as the least favourable fossil fuel pathway for this type of fuels.***

Or. en

## **Amendment 109**

### **Proposal for a regulation Article 9 – paragraph 2**

*Text proposed by the Commission*

2. Companies shall provide accurate and reliable data on the GHG emission intensity and the sustainability characteristics of biofuels, biogas, renewable fuels of non-biological origin ***and recycled carbon fuel***, verified by a scheme that is recognised by the Commission in accordance with Article 30(5) and (6) of the Directive (EU) 2018/2001.

*Amendment*

2. Companies shall provide accurate, ***complete*** and reliable data on the GHG emission intensity and the sustainability characteristics of biofuels, biogas, renewable fuels of non-biological origin verified by a scheme that is recognised by the Commission in accordance with Article 30(5) and (6) of the Directive (EU) 2018/2001.

Or. en

## **Amendment 110**

### **Proposal for a regulation Article 9 – paragraph 3**

*Text proposed by the Commission*

***3. Companies shall be entitled to divert from the established default values for the tank-to-wake emission factors provided that actual values are certified by means of laboratory testing or direct emissions measurements. The Commission is empowered to adopt delegated acts in accordance with Article***

*Amendment*

***deleted***

**26, in order to supplement this Regulation by establishing the rules on conducting the laboratory testing and direct emissions measurements.**

Or. en

## **Amendment 111**

### **Proposal for a regulation Article 10 – paragraph 1**

*Text proposed by the Commission*

1. The verifier shall assess the conformity of the monitoring plan with the requirements laid down in Articles 6 to 9. Where the verifier's assessment identifies non-conformities with those requirements, the company concerned shall revise its monitoring plan accordingly and submit the revised plan for a final assessment by the verifier before the reporting period starts. The company concerned shall agree with the verifier on the timeframe necessary to introduce those revisions. That timeframe shall in any event not extend beyond the beginning of the reporting period.

*Amendment*

1. The verifier shall assess the conformity of the monitoring plan with the requirements laid down in Articles 6 to 9. Where the verifier's assessment identifies non-conformities with those requirements, the company concerned shall revise ***without undue delay*** its monitoring plan accordingly and submit the revised plan for a final assessment by the verifier before the reporting period starts. The company concerned shall agree with the verifier on the timeframe necessary to introduce those revisions. That timeframe shall in any event not extend beyond ***one month before*** the beginning of the reporting period.

Or. en

## **Amendment 112**

### **Proposal for a regulation Article 10 – paragraph 3**

*Text proposed by the Commission*

3. Where the verification assessment identifies incorrect statements or non-conformities with this Regulation, the verifier shall inform the company concerned thereof in a timely manner. That company shall then amend the incorrect statements or non-conformities so as to

*Amendment*

3. Where the verification assessment identifies incorrect statements or non-conformities with this Regulation, the verifier shall inform the company concerned thereof in a timely manner. That company shall then amend ***without undue delay*** the incorrect statements or non-

enable the verification process to be completed in time.

conformities so as to enable the verification process to be completed in time.

Or. en

### Amendment 113

#### Proposal for a regulation Article 11 – paragraph 2 – point d

*Text proposed by the Commission*

(d) the use of on-shore power supply or the presence of exceptions certified in accordance with Article 5(5).

*Amendment*

(d) the use of on-shore power supply or the presence of exceptions ***listed in Article 5(3) as*** certified in accordance with Article 5(5).

Or. en

### Amendment 114

#### Proposal for a regulation Article 11 – paragraph 2 – point d a (new)

*Text proposed by the Commission*

*Amendment*

***(da) the reported energy sources used in order to comply with the provision defined in Article 5a;***

Or. en

### Amendment 115

#### Proposal for a regulation Article 11 – paragraph 3 – point d

*Text proposed by the Commission*

(d) the relevant records of the ship are complete and consistent.

*Amendment*

(d) the relevant records of the ship are complete, ***transparent*** and consistent.

Or. en

## Amendment 116

### Proposal for a regulation Article 12 – paragraph 1

*Text proposed by the Commission*

1. The verifier shall identify potential risks related to the monitoring and reporting process by comparing reported amount, type and emission factor of the energy used on-board by ships with estimated data based on ship tracking data and characteristics such as the installed engine power. Where **significant** deviations are found, the verifier shall carry out further analyses.

*Amendment*

1. The verifier shall identify potential risks related to the monitoring and reporting process by comparing reported amount, type and emission factor of the energy used on-board by ships with estimated data based on ship tracking data and characteristics such as the installed engine power. Where deviations are found, the verifier shall carry out further analyses.

Or. en

## Amendment 117

### Proposal for a regulation Article 12 – paragraph 4 a (new)

*Text proposed by the Commission*

*Amendment*

**4a. The verifier shall provide, for each of the ships under its surveillance, an individual quality management program of measures to be taken to prevent data gaps and errors.**

Or. en

## Amendment 118

### Proposal for a regulation Article 13 – paragraph 1

*Text proposed by the Commission*

*Amendment*

1. Verifiers shall be accredited for activities under the scope of this Regulation by a national accreditation body

1. Verifiers shall be accredited for activities under the scope of this Regulation by a national accreditation body

pursuant to Regulation (EC) No 765/2008.

pursuant to Regulation (EC) No 765/2008. ***The national accreditation body shall notify without undue delay to the Commission the list of accredited verifier together with the information allowing their identification and record them in the database.***

Or. en

## Amendment 119

### Proposal for a regulation Article 13 – paragraph 3

#### *Text proposed by the Commission*

3. The Commission is empowered to adopt delegated acts in accordance with Article 26, in order to supplement this Regulation by establishing further methods and criteria of accreditation of verifiers. The methods specified in those delegated acts shall be based on the principles for verification provided for in Articles 10 and 11 and on relevant internationally accepted standards.

#### *Amendment*

3. The Commission is empowered to adopt delegated acts in accordance with Article 26, in order to supplement this Regulation by establishing further methods and criteria of accreditation of verifiers ***and to ensure the verifier's independence and impartiality.*** The methods specified in those delegated acts shall be based on the principles for verification provided for in Articles 10 and 11 and on relevant internationally accepted standards.

Or. en

## Amendment 120

### Proposal for a regulation Article 14 – paragraph 1 – point b

#### *Text proposed by the Commission*

(b) for each ship that the requirement of Article 5(1) applies, the connection to and use of on-shore power or the existence of any of the exceptions listed in Article 5(3);

#### *Amendment*

(b) for each ship that the requirement of Article 5(1) applies, the connection to and use of on-shore power or the existence of any of the exceptions listed in Article 5(3) ***as certified in accordance with Article 5(5);***

Or. en

## Amendment 121

### Proposal for a regulation Article 14 – paragraph 1 – point e

*Text proposed by the Commission*

(e) the amount of each type of substitute source of energy consumed at berth and at sea.

*Amendment*

(e) the amount of each type of substitute source of energy consumed at berth and at sea, ***including the amount of each source of energy powering the zero-emission at berth technologies, such as wind, solar energy, source of electricity stored on batteries, type of fuels powering the fuel cells.***

Or. en

## Amendment 122

### Proposal for a regulation Article 14 – paragraph 1 – point e a (new)

*Text proposed by the Commission*

*Amendment*

***(ea) where applicable, the date, time and geographic location of entering/leaving the Arctic and the amount of each type of fuel consumed at berth and at sea;***

Or. en

## Amendment 123

### Proposal for a regulation Article 14 – paragraph 2

*Text proposed by the Commission*

*Amendment*

2. Companies shall record the information and data listed in paragraph 1 ***on annual basis*** in a transparent manner, ***that enables*** the verification of compliance

2. Companies shall record the information and data listed in paragraph 1 in a ***timely and*** transparent manner ***and compile them on annual basis to enable*** the verification of compliance with this

with this Regulation by the verifier.

Regulation by the verifier.

Or. en

#### **Amendment 124**

##### **Proposal for a regulation**

##### **Article 15 – paragraph 2 – point a a (new)**

*Text proposed by the Commission*

*Amendment*

***(aa) calculate, when applicable, the percentage of RFNBOs over the yearly average energy used on-board by the ship concerned;***

Or. en

#### **Amendment 125**

##### **Proposal for a regulation**

##### **Article 15 – paragraph 2 – point c a (new)**

*Text proposed by the Commission*

*Amendment*

***(ca) assess, when relevant, the compliance with the requirements set out in Article 5a new;***

Or. en

#### **Amendment 126**

##### **Proposal for a regulation**

##### **Article 15 – paragraph 2 – point d**

*Text proposed by the Commission*

*Amendment*

***(d) calculate the amount of the penalties referred to in Article 20(1) and (2).***

***deleted***

Or. en



## Amendment 127

### Proposal for a regulation

#### Article 15 – paragraph 2 – point d a (new)

*Text proposed by the Commission*

*Amendment*

***(da) separately aggregate on an annual basis the information monitored and recorded in accordance with Article 14(1), point (c), (d), (e) and (ea) for each ship and provide it to companies for their submission to the database in accordance with Article 16(3);***

Or. en

## Amendment 128

### Proposal for a regulation

#### Article 16 – title

*Text proposed by the Commission*

*Amendment*

***Compliance*** database ***and*** reporting

***REES FuelEU Maritime*** database, reporting ***and publication of information***

Or. en

## Amendment 129

### Proposal for a regulation

#### Article 16 – paragraph 1

*Text proposed by the Commission*

*Amendment*

1. The Commission shall develop, ***ensure functioning and update an*** electronic ***compliance*** database for ***the monitoring of compliance with Articles 4 and 5***. The compliance database shall be used to keep a record of the compliance balance of the ships ***and*** the use of the flexibility mechanisms set out in Articles 17 and 18. ***It*** shall be accessible to the

1. The Commission shall develop ***a centrally managed*** electronic ***REES FuelEU Maritime*** database for ***keeping record of the main provisions of this Regulation and shall ensure its functioning, update, storage and publication of information submitted by companies, verifiers and the national***

companies, the verifiers, the competent authorities **and** the Commission.

**accreditation body.**

The compliance database shall be used to **monitor compliance with Articles (-4), 4, 5 and 5a**, keep a record of the compliance balance of the ships, **the use of the exemptions set out in Article 5(3)**, the use of the flexibility mechanisms set out in Articles 17 and 18, **the penalties set out in Article 20, the data submitted in accordance with paragraph 3 of this Article, the sanctions notified in accordance with Article 23 and the list of competent authorities referred to in Article 25(1)**. **The database shall be made publicly available in an open data format and freely accessible to the companies, the verifiers, the competent authorities, the Commission and the general public in a transparent, downloadable and user-friendly manner.**

Or. en

## Amendment 130

### Proposal for a regulation Article 16 – paragraph 2

#### *Text proposed by the Commission*

2. The Commission shall, by means of implementing acts, lay down the rules for access rights and the functional and technical specifications of the **compliance** database. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 27(3).

#### *Amendment*

2. The Commission shall, by means of implementing acts, lay down the rules for access rights and the functional and technical specifications of the database, **while ensuring the public accessibility of the data**. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 27(3).

Or. en

## Amendment 131

### Proposal for a regulation Article 16 – paragraph 3

*Text proposed by the Commission*

3. By 30 April of each year, the company shall record in the compliance database for each of its ships the information referred to in Article 15(2), as ascertained by the verifier, together with information allowing to identify the ship, the company, as well as the identity of the verifier that carried out the assessment.

*Amendment*

3. By 30 April of each year, the company shall record in the compliance database for each of its ships the information referred to in Article 15(2), as ascertained **and calculated** by the verifier, ***the yearly exceptions applied under Article 5(3), if any***, together with information allowing to identify the ship, the company, as well as the identity of the verifier that carried out the assessment.

Or. en

## Amendment 132

### Proposal for a regulation Article 16 – paragraph 3 a (new)

*Text proposed by the Commission*

*Amendment*

***3a. By 30 June of each year, the Commission shall make publicly available all the information recorded in the database for a given reporting period. Information for previous reporting period shall remain publicly available at any time. The information shall be provided in an open, downloadable and raw format without anonymization or further aggregation.***

Or. en

## Amendment 133

### Proposal for a regulation Article 17 – paragraph 1 a (new)

**1a.** *Ships shall be allowed to bank their compliance surplus between reporting periods to meet the requirements set in Article 4 only if such surplus is generated by using renewable energy sources.*

Or. en

## **Amendment 134**

### **Proposal for a regulation**

#### **Article 17 – paragraph 2 – introductory part**

*Text proposed by the Commission*

*Amendment*

2. Where the ship has a compliance deficit for the reporting period, the company may borrow an advance compliance surplus of the corresponding amount from the following reporting period. The advance compliance surplus shall be added to the ship's balance in the reporting period and subtracted from the same ship's balance in the following reporting period. The amount to be subtracted in the following reporting period shall be equal to the advance compliance surplus multiplied by 1.1. The advance compliance surplus may not be borrowed:

2. Where the ship has a compliance deficit for the reporting period, the company may borrow an advance compliance surplus of the corresponding amount from the following reporting period. The advance compliance surplus shall be added to the ship's balance in the reporting period and subtracted from the same ship's balance in the following reporting period. The amount to be subtracted in the following reporting period shall be equal to the advance compliance surplus multiplied by 1.1. ***If the ship ceases operation before fulfilling the advance compliance surplus, it shall pay a penalty calculated in accordance with Article 20.*** The advance compliance surplus may not be borrowed:

Or. en

## **Amendment 135**

### **Proposal for a regulation**

#### **Article 17 – paragraph 2 – point a**

*Text proposed by the Commission*

(a) for the amount exceeding by more than **2%** the limit set out in Article 4(2), multiplied by the energy consumption of the ship calculated in accordance with Annex I;

*Amendment*

(a) for the amount exceeding by more than **1%** the limit set out in Article 4(2), multiplied by the energy consumption of the ship calculated in accordance with Annex I;

Or. en

**Amendment 136**

**Proposal for a regulation  
Article 17 – paragraph 2 – point b a (new)**

*Text proposed by the Commission*

*Amendment*

***(ba) by a ship that is in its last year of operation;***

Or. en

**Amendment 137**

**Proposal for a regulation  
Article 17 – paragraph 2 – point b b (new)**

*Text proposed by the Commission*

*Amendment*

***(bb) by a ship that has taken over a borrowed advance compliance surplus from a ship that has ceased operation;***

Or. en

**Amendment 138**

**Proposal for a regulation  
Article 17 – paragraph 3**

*Text proposed by the Commission*

*Amendment*

3. By 30 April of the year following

3. By 30 April of the year following

the reporting period, the company shall record the advance compliance surplus, following approval by its verifier, in the *compliance* database.

the reporting period, the company shall record the advance compliance surplus, following approval by its verifier, in the database *referred to in Article 16.*

Or. en

## Amendment 139

### Proposal for a regulation Article 18 – paragraph 1

#### *Text proposed by the Commission*

1. The compliance balances of two or more ships, which are verified by the same verifier, may be pooled for the purposes of fulfilling the requirements of Article 4. A ship's compliance balance may not be included in more than one pool in the same reporting period.

#### *Amendment*

1. The compliance balances of two or more ships, which are verified by the same verifier, may be pooled for the purposes of fulfilling the requirements of Article 4. ***Pooling compliance surplus shall be restricted to ships powered by zero-emission fuels, in accordance with values in Annex II, and zero-emission technologies, in accordance with Annex III.*** A ship's compliance balance may not be included in more than one pool in the same reporting period.

Or. en

## Amendment 140

### Proposal for a regulation Article 20 – paragraph 1

#### *Text proposed by the Commission*

1. Where on 1 May of the year following the reporting period the ship has a compliance deficit, the company shall pay a penalty. ***The verifier*** shall calculate the amount of the penalty on the basis of the formula specified Annex V.

#### *Amendment*

1. Where on 1 May of the year following the reporting period the ship has a compliance deficit, ***such deficit shall be added to the ship's balance in the following reporting period, and*** the company shall pay a ***dissuasive*** penalty ***larger than the amount and cost of renewable fuels that the ships should have used to meet the requirements of this Regulation. The administering authority***

*with respect to the shipping company* shall calculate the amount of the penalty on the basis of the formula specified *in* Annex V.

Or. en

## Amendment 141

### Proposal for a regulation Article 20 – paragraph 2

*Text proposed by the Commission*

2. The company shall pay a penalty for each non-compliant port call. The *verifier* shall calculate the amount of the penalty by multiplying the amount of EUR 250 by megawatts of power installed on-board and by the number of completed hours spent at berth.

*Amendment*

2. The company shall pay a *dissuasive* penalty for each non-compliant port call. The *administering authority with respect to the shipping company* shall calculate the amount of the penalty by multiplying the amount of EUR 250 by megawatts of power installed on-board and by the number of completed hours spent at berth.

Or. en

## Amendment 142

### Proposal for a regulation Article 20 – paragraph 2 a (new)

*Text proposed by the Commission*

*Amendment*

**2a. The company shall pay a dissuasive penalty for each non-compliant Arctic voyage. The administering authority with respect to the shipping company shall calculate the penalty as the double of the cost difference between the costs of distillate and the costs of the fuel used. The costs shall be determined as the Rotterdam spot price on the day of commencement of the voyage**

Or. en

## Amendment 143

### Proposal for a regulation

#### Article 20 – paragraph 3

##### *Text proposed by the Commission*

3. Notwithstanding Article 19(1), the verifier shall issue a FuelEU certificate of compliance **once** the penalties referred to in paragraphs 1 and 2 of this Article have been paid. The actions referred to in this Article as well as the proof of the financial payments in accordance with Article 21 shall be recorded in the FuelEU certificate of compliance.

##### *Amendment*

3. Notwithstanding Article 19(1), the verifier shall issue a FuelEU certificate of compliance **after** the penalties referred to in paragraphs 1 and 2 of this Article have been paid **for a maximum of two consecutive years. For the second consecutive year of non-compliance both the penalties, referred to in paragraphs 1 and 2 of this Article, and the compliance deficit to be added to the ship's balance in the following reporting period shall be doubled. For a third year of non-compliance the verifier shall not issue a FuelEU certificate of compliance.** The actions referred to in this Article as well as the proof of the financial payments in accordance with Article 21 shall be recorded in the FuelEU certificate of compliance.

Or. en

## Amendment 144

### Proposal for a regulation

#### Article 20 – paragraph 4

##### *Text proposed by the Commission*

4. The Commission is empowered to adopt delegated acts in accordance with Article 26 to amend Annex V in order to adapt the formula referred to in paragraph 1 of this Article, and to amend the amount of the fixed penalty laid down in paragraph 2 of this Article, **taking into account** the developments in the cost of energy.

##### *Amendment*

4. The Commission is empowered to adopt delegated acts in accordance with Article 26 to amend Annex V in order to adapt the formula referred to in paragraph 1 of this Article, and to amend the amount of the fixed penalty laid down in paragraph 2 of this Article, **as soon as** the developments in the cost of energy **undermine the dissuasive effect of those penalties.**

Or. en



## Amendment 145

### Proposal for a regulation Article 20 – paragraph 4 a (new)

*Text proposed by the Commission*

*Amendment*

**4a. By 1 January 2027, the Commission shall adopt a delegated act in accordance with Article 26 supplementing this Regulation by laying down the formula for the calculation of the amount of the penalty for failing to comply with the RFNBOs mandate set out in Article 4(2), point (b), the criteria for its application and the rules for its enforcement.**

Or. en

## Amendment 146

### Proposal for a regulation Article 21 – title

*Text proposed by the Commission*

*Amendment*

Allocation of penalties to support **renewable and low-carbon fuels** in the maritime sector

Allocation of penalties to support **the just ecological transition** of the maritime sector

Or. en

## Amendment 147

### Proposal for a regulation Article 21 – paragraph 1

*Text proposed by the Commission*

*Amendment*

1. The penalties referred to in Article 20(1) and 20(2) shall be allocated to support common projects aimed **at** the rapid deployment of renewable **and low carbon fuels** in the maritime sector.

1. The penalties referred to in Article 20 shall be allocated to support common projects aimed **to fasten the just ecological transition of the maritime sector by means of** the rapid **improvement of energy and**

Projects financed by the funds collected from the penalties shall stimulate the production of greater quantities of renewable **and low carbon** fuels for the maritime sector, facilitate the construction of **appropriate** bunkering facilities **or** electric connection **ports** in ports, and support the development, testing and deployment of the **most innovative** European technologies in the fleet to achieve **significant emission reductions**.

**operational efficiency of ships, the deployment of zero-emission propulsion technologies and the uptake of sustainable renewable energy** in the maritime sector, **as well as to the help the protection, restoration and better management of marine ecosystems**. Projects financed by the funds collected from the penalties shall **apply the energy efficiency first principle** and stimulate the production of greater quantities of **sustainable** renewable fuels **and on-board renewable generation solutions** for the maritime sector, facilitate the construction of **the relative** bunkering facilities, electric connection **points** in ports, and support the development, testing and deployment of the **most innovative** European technologies in the fleet to achieve **a zero-emission, highly energy efficient and fully renewable based maritime sector as soon as possible**. **Projects financed by the funds collected shall contextually support, in dialogue with social partners, the redeployment, re-skilling and up-skilling of the workers to provide the environmentally friendly and technology-related skills required for the transition**.

Or. en

## Amendment 148

### Proposal for a regulation Article 21 – paragraph 1 a (new)

*Text proposed by the Commission*

*Amendment*

**1a. 20% of the yearly collected penalties referred to in paragraph 1 shall be used to contribute to the protection, restoration and better management of marine ecosystems impacted by global warming, such as marine protected areas, and to promote a crosscutting sustainable blue economy, such as renewable marine energy. All the projects supported by the funds collected from penalties shall be**

## **Amendment 149**

### **Proposal for a regulation**

#### **Article 21 – paragraph 2**

##### *Text proposed by the Commission*

2. The revenues generated from penalties referred to in paragraph 1 shall be allocated to the **the Innovation** Fund referred to in Article **10a(8)** of Directive 2003/87/EC. These revenues shall constitute external assigned revenue in accordance with Article 21(5) of the Financial Regulation, and shall be implemented in accordance with the rules applicable to the Innovation Fund.

##### *Amendment*

2. The revenues generated from penalties referred to in paragraph 1 shall be allocated to the **Ocean** Fund referred to in Article **3gdb** of Directive 2003/87/EC **and used to finance programmes according to the principles and objectives established in Paragraph 1 and 1a**. These revenues shall constitute external assigned revenue in accordance with Article 21(5) of the Financial Regulation, and shall be implemented in accordance with the rules applicable to the Innovation Fund.

##### *Justification*

*The EP's position on the revision of the “MRV regulation” Regulation (EU) 2015/757, calls for the creation of an “Ocean Fund” under the Directive 2003/87/EC dedicated to supporting innovation and decarbonisation in the shipping sector. This position has been re-tabled in the draft report on the Revision of the EU ETS 2021/0211(COD). We propose to be consistent with the EP's position and channel the funds collected through the penalties of this Regulation to the Ocean Fund to be allocated according to principles aligned with the EP's MRV voted position.*

## **Amendment 150**

### **Proposal for a regulation**

#### **Article 21 – paragraph 3**

##### *Text proposed by the Commission*

3. The Commission is empowered to adopt delegated acts in accordance with Article 26 to supplement this Regulation

##### *Amendment*

3. The Commission is empowered to adopt delegated acts in accordance with Article 26 to supplement this Regulation

concerning the modalities for the payment of the penalties referred to in Article 20(1) and 20(2).

concerning the modalities for the payment of the penalties referred to in Article 20(1) and 20(2) **and the modalities for making the information on the supported projects available to the public..**

Or. en

## Amendment 151

### Proposal for a regulation Article 23 – paragraph 1

#### *Text proposed by the Commission*

1. Member States shall lay down the rules on sanctions applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. The sanctions provided for must be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by *[dd/mm/20xx]*, and shall notify to the Commission without delay any subsequent amendments.

#### *Amendment*

1. Member States shall lay down the rules on sanctions applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. The sanctions provided for must be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by **31 July 2024** and shall notify to the Commission without delay any subsequent amendments. ***By 1 January 2025, the Commission shall report to the European Parliament and the Council the overview of the national measures lay down by Member States and report without delay any subsequent amendments.***

Or. en

## Amendment 152

### Proposal for a regulation Article 23 – paragraph 3

#### *Text proposed by the Commission*

3. Where a ship has failed to present a valid FuelEU certificate of compliance **for two or more consecutive reporting periods** and where other enforcement measures

#### *Amendment*

3. Where a ship has failed to present a valid FuelEU certificate of compliance and where other enforcement measures have failed to ensure compliance, the competent

have failed to ensure compliance, the competent authority of the Member State of the port of call *may*, after giving the opportunity to the company concerned to submit its observations, issue an expulsion order. The competent authority of the Member State shall notify the expulsion order to the Commission, the other Member States and the flag State concerned. Every Member State, with the exception of any Member State whose flag the ship is flying, shall refuse entry of the ship which is subject to the expulsion order into any of its ports until the company fulfils its obligations. Where the ship flies the flag of a Member State, the Member State concerned shall, after giving the opportunity to the company concerned to submit its observations, order a flag detention until the company fulfils its obligations.

authority of the Member State of the port of call *shall*, after giving the opportunity to the company concerned to submit its observations, issue an expulsion order. The competent authority of the Member State shall notify the expulsion order to the Commission, the other Member States and the flag State concerned. Every Member State, with the exception of any Member State whose flag the ship is flying, shall refuse entry of the ship which is subject to the expulsion order into any of its ports until the company fulfils its obligations. Where the ship flies the flag of a Member State, the Member State concerned shall, after giving the opportunity to the company concerned to submit its observations, order a flag detention until the company fulfils its obligations *as set out by this Regulation*.

Or. en

## Amendment 153

### Proposal for a regulation Article 23 – paragraph 5

#### *Text proposed by the Commission*

5. Sanctions against a specified ship by any Member State shall be notified to the Commission, to the other Member States and to the flag State concerned.

#### *Amendment*

5. Sanctions against a specified ship by any Member State shall be notified to the Commission, to the other Member States and to the flag State concerned. ***The Commission shall record each notified sanction in the database.***

Or. en

## Amendment 154

### Proposal for a regulation Article 25 – paragraph 1

*Text proposed by the Commission*

Member States shall designate one or more competent authorities as responsible for the application and enforcement of this Regulation ('competent authorities'). They shall communicate their names and contact information to the Commission. The Commission shall publish on its website the list of competent authorities.

*Amendment*

Member States shall designate one or more **independent** competent authorities as responsible for the application and enforcement of this Regulation ('competent authorities'). They shall communicate their names and contact information to the Commission. The Commission shall publish on its website, **and on the database**, the list of competent authorities.

Or. en

**Amendment 155**

**Proposal for a regulation**  
**Article 26 – paragraph 2**

*Text proposed by the Commission*

2. The power to adopt delegated acts referred to in Articles **4(6)**, 5(4), **9(3)**, 13(3), 20(4), and 21(3) shall be conferred on the Commission for an indeterminate period of time from [date of entry into force of this Regulation].

*Amendment*

2. The power to adopt delegated acts referred to in Articles **3a**, **4(3)**, **4(4)**, 5(4), **7(4)**, 13(3), 20(4), **20(4a)** and 21(3) shall be conferred on the Commission for an indeterminate period of time from [date of entry into force of this Regulation].

Or. en

**Amendment 156**

**Proposal for a regulation**  
**Article 26 – paragraph 3**

*Text proposed by the Commission*

3. The delegation of power referred to in Articles **4(7)**, 5(4), **9(3)**, 13(3), 20(4), and 21(3) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day

*Amendment*

3. The delegation of power referred to in Articles **3a**, **4(3)**, **4(4)**, 5(4), **7(4)**, 13(3), 20(4), **20(4a)** and 21(3) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take

following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

Or. en

## **Amendment 157**

### **Proposal for a regulation Article 26 – paragraph 6**

#### *Text proposed by the Commission*

6. A delegated act adopted pursuant to Articles **4(7)**, 5(4), **9(3)**, 13(3), 20(4), and 21(3) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

#### *Amendment*

6. A delegated act adopted pursuant to Articles **3a**, **4(3)**, **4(4)**, 5(4), **7(4)**, 13(3), 20(4), **20(4a)** and 21(3) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Or. en

## **Amendment 158**

### **Proposal for a regulation Article 28 – paragraph 1 – introductory part**

#### *Text proposed by the Commission*

1. The Commission shall report to the European Parliament and the Council, by 1 January **2030**, the results of an evaluation on the functioning of this Regulation and the evolution of the technologies and market for renewable **and low-carbon**

#### *Amendment*

1. The Commission shall report to the European Parliament and the Council, by 1 January **2027 and every 5 years thereafter**, the results of an evaluation on the functioning of this Regulation and the evolution of the technologies and market

**fuels** in maritime transport and its impact on the maritime sector in the Union. The Commission shall consider **possible** amendments to:

for **zero-emission technologies and sustainable** renewable **energy** in maritime transport and its impact on the maritime sector in the Union.

***In the report the Commission shall also examine the ambition and overall environmental integrity of the Regulation in relation to the targets under the Paris Agreement, to the Union economy-wide GHG emissions reduction target for 2030 and to the climate-neutrality objective as defined in the European Climate Law, as well as to the Renewable energy and Energy efficiency targets.***

The Commission shall consider amendments to ***the entire proposal its environmental integrity and effectiveness in relation to the Paris Agreement, the Union's GHG emissions reduction targets and the energy legislation, and at least:***

Or. en

## **Amendment 159**

### **Proposal for a regulation**

#### **Article 28 – paragraph 1 – point a**

*Text proposed by the Commission*

(a) the limit referred to in Article 4(2);

*Amendment*

(a) ***make*** the limit referred to in Article 4(2) ***more stringent***;

Or. en

## **Amendment 160**

### **Proposal for a regulation**

#### **Article 28 – paragraph 1 – point a (new)**

*Text proposed by the Commission*

*Amendment*

(aa) ***strengthen the operational and energy efficiency target in Article -4(new) and extend it, in a suitable form, beyond***



2030;

Or. en

### Amendment 161

#### Proposal for a regulation

#### Article 28 – paragraph 1 – point b

*Text proposed by the Commission*

(b) the ship types to which *Article 5(1) applies*;

*Amendment*

(b) **expand** the ship types to which **this Regulation applies to**;

Or. en

### Amendment 162

#### Proposal for a regulation

#### Article 28 – paragraph 1 – point c

*Text proposed by the Commission*

(c) the exceptions listed in Article 5(3).

*Amendment*

(c) **limit** the exceptions listed in Article 5(3).

Or. en

### Amendment 163

#### Proposal for a regulation

#### Article 28 – paragraph 1 a (new)

*Text proposed by the Commission*

*Amendment*

**1a. The European Parliament through its competent committees may provide an opinion on the report by the Commission including proposals for amending this Regulation.**

Or. en

## Amendment 164

### Proposal for a regulation Article 28 – paragraph 1 b (new)

*Text proposed by the Commission*

*Amendment*

***1b. The Commission shall reply in writing to the opinion adopted by the European Parliament as well as respond to any call for action concerning the different provisions of the Regulation, including providing justifications for foreseen inaction, and to any question addressed to it by the European Parliament or by the Council within five weeks of its receipt.***

Or. en

## Amendment 165

### Proposal for a regulation Article 29 – paragraph 1

*Text proposed by the Commission*

*Amendment*

The following point shall be added to the list set out in Annex IV to Directive 2009/16/EC: ‘51. The FuelEU certificate of compliance issued under Regulation (EU) xxxx on the use of renewable ***and low-carbon fuels*** in maritime transport’.

The following point shall be added to the list set out in Annex IV to Directive 2009/16/EC: ‘51. The FuelEU certificate of compliance issued under Regulation (EU) xxxx on the ***energy efficiency and the*** use of renewable ***energy sources*** in maritime transport’.

Or. en

## Amendment 166

### Proposal for a regulation Annex I

*Text proposed by the Commission*

#### **ANNEX I**

# METHODOLOGY FOR ESTABLISHING THE GREENHOUSE GAS INTENSITY LIMIT ON THE ENERGY USED ON-BOARD BY A SHIP

For the purpose of calculating the greenhouse gas intensity limit of the energy used on-board a ship, the following formula, referred to as Equation (1) shall apply:

Equation (1)

GHG intensity index	WtT	TtW
$GHG \text{ intensity index } \left[ \frac{gCO_{2eq}}{MJ} \right] =$	$\frac{\sum_i^n fuel M_i \times CO_{2eq \text{ WtT},i} \times LCV_i + \sum_k^c E_k \times CO_{2eq \text{ electricity},k}}{\sum_i^n fuel M_i \times LCV_i + \sum_k^c E_k}$	$+ \frac{\sum_i^n fuel \sum_j^m engine M_{i,j} \times \left[ \left( 1 - \frac{1}{100} C_{engine \text{ slip } j} \right) \times (CO_{2eq \text{ TtW},j}) + \left( \frac{1}{100} C_{engine \text{ slip } j} \times CO_{2eq \text{ TtW},slippage,j} \right) \right]}{\sum_i^n fuel M_i \times LCV_i + \sum_k^c E_k}$

where the following formula is referred to as Equation (2):

Equation (2)

Term	Explanation
<i>i</i>	Index corresponding to the fuels delivered to the ship in the reference period
<i>j</i>	Index corresponding to the fuel combustion units on board the ship. For the purpose of this Regulation the units considered are the main engine(s), auxiliary engine(s) and fired oil boilers
<i>k</i>	Index corresponding to the connection points ( <i>c</i> ) where electricity is supplied per connection point.
<i>c</i>	Index corresponding to the number of electrical charging points
<i>m</i>	Index corresponding to the number of energy consumers
$M_{i,j}$	Mass of the specific fuel <i>i</i> oxidised in consumer <i>j</i> [gFuel]
$E_k$	Electricity delivered to the ship <i>per</i> connection point <i>k</i> if more than one [MJ]
$CO_{2eq \text{ WtT},i}$	WtT GHG emission factor of fuel <i>i</i> [gCO <sub>2eq</sub> /MJ]
$CO_{2eq \text{ electricity},k}$	WtT GHG emission factor associated to the electricity delivered to the ship at berth <i>per</i> connection point <i>k</i> [gCO <sub>2eq</sub> /MJ]
$LCV_i$	Lower Calorific Value of fuel <i>i</i> [MJ/gFuel]
$C_{engine \text{ slip } j}$	Engine fuel slippage (non-combusted fuel) coefficient as a percentage of the mass of the fuel <i>i</i> used by combustion unit <i>j</i> [%]
$C_{f \text{ CO}_2,j}, C_{f \text{ CH}_4,j}, C_{f \text{ N}_2\text{O},j}$	TtW GHG emission factors by combusted fuel in combustion unit <i>j</i> [gGHG/gFuel]
$CO_{2eq \text{ TtW},j}$	TtW CO <sub>2</sub> equivalent emissions of combusted fuel <i>i</i> in combustion unit <i>j</i> [gCO <sub>2eq</sub> /gFuel] $CO_{2eq \text{ TtW},j} = (C_{f \text{ CO}_2,j} \times GWP_{CO_2} + C_{f \text{ CH}_4,j} \times GWP_{CH_4} + C_{f \text{ N}_2\text{O},j} \times GWP_{N_2O})_i$
$C_{sf \text{ CO}_2,j}, C_{sf \text{ CH}_4,j}, C_{sf \text{ N}_2\text{O},j}$	TtW GHG emissions factors by slipped fuel towards combustion unit <i>j</i> [gGHG/gFuel]
$CO_{2eq \text{ TtW},slippage,j}$	TtW CO <sub>2</sub> equivalent emissions of slipped fuel <i>i</i> towards combustion unit <i>j</i> [gCO <sub>2eq</sub> /gFuel] $CO_{2eq \text{ TtW},slippage,j} = (C_{sf \text{ CO}_2,j} \times GWP_{CO_2} + C_{sf \text{ CH}_4,j} \times GWP_{CH_4} + C_{sf \text{ N}_2\text{O},j} \times GWP_{N_2O})_i$
$GWP_{CO_2}, GWP_{CH_4}, GWP_{N_2O}$	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O Global Warming Potential over 100 years

In the case of fossil fuels, the default values in Annex II shall be used.

For the purpose of this regulation the term  $\sum_k^c E_k \times CO_{2eq \text{ electricity},k}$  in the numerator of Equation (1) shall be set to zero.

## Amendment

### ANNEX I

For the purpose of calculating the greenhouse gas intensity limit of the energy used on-board a ship, the following formula, referred to as Equation (1) shall apply:

Equation (1)

GHG intensity index	WtT	TtW
$GHG \text{ intensity index } \left[ \frac{gCO_{2eq}}{MJ} \right] =$	$\frac{\sum_i^n fuel M_i \times CO_{2eq \text{ WtT},i} \times LCV_i + \sum_k^c E_k \times CO_{2eq}}{\sum_i^n fuel M_i \times LCV_i + \sum_k^c E_k}$	$+ \frac{\sum_i^n fuel \sum_j^m engine M_{i,j} \times \left[ \left( 1 - \frac{1}{100} C_{engine \text{ slip } j} \right) \times (CO_{2eq \text{ TtW},j}) + \left( \frac{1}{100} C_{engine \text{ slip } j} \times CO_{2eq \text{ TtW},slippage,j} \right) \right]}{\sum_i^n fuel M_i \times LCV_i + \sum_k^c E_k + \sum_s^n E_s + \sum_w^n E_w}$

where the following formula is referred to as Equation (2):

Equation (2)

Term	Explanation
<i>i</i>	Index corresponding to the fuels delivered to the ship in the reference period
<i>j</i>	Index corresponding to the fuel combustion units on board the ship. For the purpose of this Regulation the units considered are the main engine(s), auxiliary engine(s) and fired oil boilers
<i>k</i>	Index corresponding to the connection points ( <i>c</i> ) where electricity is supplied per connection point.
<i>w</i>	Index corresponding to the wind installation ( <i>n</i> ) where energy is supplied per wind installation.

<i>s</i>	<b>Index corresponding to the solar installation (n) where electricity is supplied per installation.</b>
<i>c</i>	Index corresponding to the number of electrical charging points
<i>m</i>	Index corresponding to the number of energy consumers
<i>s</i>	
$M_{i,j}$	Mass of the specific fuel <i>i</i> oxidised in consumer <i>j</i> [gFuel]
$E_k$	Electricity delivered to the ship <i>per</i> connection point <i>k</i> if more than one [MJ]
$E_w$	<b>Energy delivered to the ship per wind installation (w) if more than one [MJ]</b>
$E_s$	<b>Electricity delivered to the ship per solar installation point (s) if more than one [MJ]</b>
$CO_{2eq\ WtT,i}$	WtT GHG emission factor of fuel <i>i</i> [gCO <sub>2eq</sub> /MJ]
$CO_{2eq\ electricity,k}$	WtT GHG emission factor associated to the electricity delivered to the ship at berth <i>per</i> connection point <i>k</i> [gCO <sub>2eq</sub> /MJ]
$LCV_i$	Lower Calorific Value of fuel <i>i</i> [MJ/gFuel]
$C_{engine\ slip\ j}$	Engine fuel slippage (non-combusted fuel) coefficient as a percentage of the mass of the fuel <i>i</i> used by combustion unit <i>j</i> [%]
$C_{f\ CO_2,j}, C_{f\ CH_4,j}, C_{f\ N_2O,j}$	TtW GHG emission factors by combusted fuel in combustion unit <i>j</i> [gGHG/gFuel]
$CO_{2eq,TtW,j}$	TtW CO <sub>2</sub> equivalent emissions of combusted fuel <i>i</i> in combustion unit <i>j</i> [gCO <sub>2eq</sub> /gFuel] $CO_{2eq,TtW,j} = (C_{cf\ CO_2,j} \times GWP_{CO_2} + C_{cf\ CH_4,j} \times GWP_{CH_4} + C_{cf\ N_2O,j} \times GWP_{N_2O})_i$
$C_{sf\ CO_2,j}, C_{sf\ CH_4,j}, C_{sf\ N_2O,j}$	TtW GHG emissions factors by slipped fuel towards combustion unit <i>j</i> [gGHG/gFuel]
$CO_{2eq,TtWslippage,j}$	TtW CO <sub>2</sub> equivalent emissions of slipped fuel <i>i</i> towards combustion unit <i>j</i> [gCO <sub>2eq</sub> /gFuel] $CO_{2eq,TtWslippage,j} = (C_{sf\ CO_2,j} \times GWP_{CO_2} + C_{sf\ CH_4,j} \times GWP_{CH_4} + C_{sf\ N_2O,j} \times GWP_{N_2O})_i$
$GWP_{CO_2}, GWP_{CH_4}, GWP_{N_2O}$	CO <sub>2</sub> , Global Warming Potential over 100 years, as referred to in the IPCC 6th Assessment report; N <sub>2</sub> O and CH <sub>4</sub> Global Warming Potential over 20 years.
$MULT_i$	<b>Multiplier applied to RFNBO fuel <i>i</i></b>

In the case of fossil fuels, the default values in Annex II shall be used.

For the purpose of this regulation the term  $\sum_k^c E_k \times CO_{2eq\ electricity,k}$  in the numerator of Equation (1) shall be set to zero.

**The term *MULT* in the denominator of Equation (1) shall be set to five for the amount of RFNBOs exceeding the 18% of a ship's yearly average energy used on-board during a reporting period, as referred to in article 4.2a new.**

Or. en

### Justification

$\sum_w^n E_w$  is a variable accounting directly for the amount of energy generated on board by wind. This would de facto replace the reward factor for wind (below) which is not proportionate to the actual energy generated by wind, hence not incentivising wind propulsion enough.

$\sum_s^n E_s$  is a variable accounting directly for the amount of energy generated on board by any eventual solar installation.

***MULT<sub>i</sub>***: it is a multiplier giving a bonus to the use of sustainable RFNBOs when complying with the target. This is done by adding a multiplier in the denominator of the GHG equation, as also recommended by the Commission's impact assessment. At the moment, the attractiveness and cost competitiveness of e-fuels is too low compared to other fuels and such a multiplier can help tackle this issue by making them more cost attractive. Smaller multipliers would not be sufficient to make for example e-ammonia cost competitive. The multiplier of 5 should come on top of the mandate for RFNBOs, i.e. apply to the volumes beyond the 18% mandate added in Article 4. This is because the multiplier virtually reduces the amount of fuel needed to comply with the mandate. Moreover, applying the multiplier on volumes above the 18% mandate incentivises operators to run their ships fully on RFNBOs.

## Amendment 167

### Proposal for a regulation Annex I

*Text proposed by the Commission*

#### ANNEX I

[...]

#### **Methods for determining the reward factors linked to substitute sources of energy**

In case substitute sources of energy are installed on board, a reward factor for substitute sources of energy can be applied. In case of wind power such reward factor is determined as follow:

Reward factor for substitute sources of energy- WIND ( $f_{wind}$ )	$\frac{P_{Wind}}{P_{Tot}}$
0,99	0,1
0,97	0,2
0,95	$\geq 0,3$

The ship GHG intensity index is then calculated by multiplying the result of Equation (1) by the reward factor.

*Amendment*

*deleted*

Or. en

*Justification*

*This part which is rewarding the wind energy used on board on the basis of an approximation, is not necessary after the inclusion in the equation 1 of the new variable  $\sum_w^n E_w$ . The latter can in fact better reward wind by directly account its entire contribution to the overall energy used on board.*

## Amendment 168

### Proposal for a regulation Annex II

*Text proposed by the Commission*

#### ANNEX II

[...]

**Table 1 – Default factors**

1	2	3	4	5	6	7	8	9
Class / Feedstock	Pathway name	WtT		Energy Converter Class	TtW			$C_{stip}$ As % of the mass of the fuel used by the engine
		$LCV$ $\left[\frac{MJ}{g}\right]$	$CO_{2eq\ WtT}$ $\left[\frac{gCO_2eq}{MJ}\right]$		$C_{f\ CO_2}$ $\left[\frac{gCO_2}{gFuel}\right]$	$C_{f\ CH_4}$ $\left[\frac{gCH_4}{gFuel}\right]$	$C_{f\ N_2O}$ $\left[\frac{gN_2O}{gFuel}\right]$	
Liquid biofuels	Ethanol E100	0,0268	Ref. to Directive (EU) 2018/2001	All ICEs	1,913 MEPC245 (66) Regulation (EU) 2015/757	TBM	TBM	-
	Bio-diesel Main products / wastes / Feedstock mix	0,0372	Ref. to Directive (EU) 2018/2001	ALL ICEs	2,834	0,00005 TBM	0,00018 TBM	-
	HVO Main products / wastes / Feedstock mix	0,044	Ref. to Directive (EU) 2018/2001	ALL ICEs	3,115	0,00005	0,00018	-
	Bio-LNG Main products / wastes / Feedstock mix	0,05	Ref. to Directive (EU) 2018/2001	LNG Otto (dual fuel medium speed)	2,755 MEPC245 (66), Regulation (EU) 2015/757	0,00005	0,00018	3,1
				LNG Otto (dual fuel slow speed)				1,7
				LNG Diesel (dual fuels)				0.2
				LBSI				N/A
Gas biofuels	Bio-H2 Main products / wastes / Feedstock mix	0,12	N/A	Fuel Cells	0	0	0	-
				ICE	0	0	TBM	
Renewable Fuels of non-Biological Origin (RFNBO) - (e-fuels)	e-diesel	0,0427	Ref. to Directive (EU) 2018/2001	ALL ICEs	3,206 MEPC245 (66) Regulation (EU) 2015/757	0,00005	0,00018	-
	e-methanol	0,0199	Ref. to Directive (EU) 2018/2001	All ICEs	1,375 MEPC245 (66) Regulation (EU) 2015/757	0,00005	0,00018	-
	e-LNG	0,0491	Ref. to Directive (EU) 2018/2001	LNG Otto (dual fuel medium speed)	2,755 MEPC245 (66) Regulation (EU) 2015/757	0	0,00011	3.1
				LNG Otto (dual fuel slow speed)				1,7
				LNG Diesel (dual fuels)				0.2
				LBSI				N/A
	e-H2	0,12	3,6	Fuel Cells	0	0	0	-
ICE				0	0	TBM		
e-NH3	0,0186	0	No engine	0	N/A	TBM	N/A	
Others	Electricity	-	106,3 EU MIX 2020 72 EU MIX	OPS	-	-	-	-

1	2	3	4	5	6	7	8	9
		WtT				TtW		
			2030					

*Amendment*

<b>Liquid biofuels</b>	Ethanol E100	0,0268	Ref. to Directive (EU) 2018/2001	All ICEs	1,913 MEPC245 (66) Regulation (EU) 2015/757	TBM	TBM	-
	Bio-diesel Main products / wastes / Feedstock mix	0,0372	Ref. to Directive (EU) 2018/2001	ALL ICEs	2,834	0,00005 TBM	0,00018 TBM	-
	HVO Main products / wastes / Feedstock mix	0,044	Ref. to Directive (EU) 2018/2001	ALL ICEs	3,115	0,00005	0,00018	-
	Bio-LNG Main products / wastes / Feedstock mix	0,05	Ref. to Directive (EU) 2018/2001	LNG Otto (dual fuel medium speed)	2,755 MEPC245 (66), Regulation (EU) 2015/757	0	0,00011	3,1
LNG Otto (dual fuel slow speed)				1,7				
LNG Diesel (dual fuels)				0.2				
LBSI				N/A				
<b>Gas biofuels</b>	Bio-H2 Main products / wastes / Feedstock mix	0,12	N/A	Fuel Cells	0	0	0	-
				ICE	0	0	TBM	
<b>Renewable Fuels of non-Biological Origin (RFNBO)</b>	e-diesel	0,0427	Ref. to Directive (EU) 2018/2001)	ALL ICEs	3,206 MEPC245 (66) Regulation (EU) 2015/757	0,00005	0,00018	-
	e-methanol	0,0199	Ref. to Directive (EU) 2018/2001	All ICEs	1,375 MEPC245 (66) Regulation (EU) 2015/757	0,00005	0,00018	-
	e-LNG	0,0491	Ref. to Directive (EU) 2018/2001	LNG Otto (dual fuel medium speed)	2,755 MEPC245 (66) Regulation (EU) 2015/757	0	0,00011	3.1
				LNG Otto (dual fuel slow speed)				1,7
				LNG Diesel (dual fuels)				0.2
				LBSI				N/A
	e-H2	0,12	3,6	Fuel Cells	0	0	0	-
ICE				0	0	TBM		
e-NH3	0,0186	0	No engine	0	N/A	TBM	N/A	

Others	Electricity	-	106,3 EU MIX 2020 72 EU MIX 2030	OPS	-	-	-	-
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Or. en

*Justification*

*The first change is a technical amendment to correct the 6th and 7th columns values for bioLNG. Bio-LNG is used in LNG engines, not in diesel engines. Thus, tank to wake emission factors of bioLNG should use the same factors as LNG (respectively 0 and 0.00011).*

*The deletion “e-fuel”, is to clarify that the emission factors listed under RFNBOs applies only to renewable based e-fuels, namely RFNBOs and not e-fuels in general.*

**Amendment 169**

**Proposal for a regulation  
Annex III**

*Text proposed by the Commission*

**ANNEX III**

**CRITERIA FOR THE USE OF ZERO-EMISSION TECHNOLOGY AS REFERRED TO IN ARTICLES 5(3)(b) and 7(3), points (d) and (f)**

The following table provides a list of zero-emission technologies as referred to in Article 5(3)(b), as well as, specific criteria for their use as applicable.

<b>Zero-emission technology</b>	<b>Criteria for use</b>
Fuel cells	Fuel cells used on board for power generation while at berth should be fully powered by renewable <i>and low carbon fuels</i> .
On-board Electricity Storage	The use of on-board electricity storage is allowed irrespective on the source of energy that produced the stored power (on-board generation or on-shore in case of battery swapping).
On-board Electricity production from wind and solar energy	Any ship that is capable to sustain energy needs at berth through the use of wind and solar energy.

The use of these zero-emission technologies shall continuously achieve emissions that are equivalent to the emissions reductions that would be achieved by using on-shore power supply.

*Amendment*

**ANNEX III**

**CRITERIA FOR THE USE OF ZERO-EMISSION *AT BERTH* TECHNOLOGY AS REFERRED TO IN ARTICLES 5(3)(b) and 7(3), points (d) and (f)**



The following table provides a list of zero-emission *at berth* technologies as referred to in Article 5(3)(b), as well as, specific criteria for their use as applicable.

<b>Zero-emission technology</b>	<b>Criteria for use</b>
Fuel cells	Fuel cells used on board for power generation while at berth should be fully powered by renewable <i>energy sources</i> .
On-board Electricity Storage	The use of on-board electricity storage is allowed irrespective on the source of energy that produced the stored power (on-board generation or on-shore in case of battery swapping).
On-board Electricity production from wind and solar energy	Any ship that is capable to sustain energy needs at berth through the use of wind and solar energy.

The use of these zero-emission *at berth* technologies shall continuously achieve *the same GHG and air pollutant emissions reductions at berth* that are equivalent to the emissions reductions that would be achieved by using on-shore power supply *for the entire energy needs while at berth*.

Or. en

#### *Justification*

*Changes to clarify that the relevance for the technologies and criteria listed here is in relation to at berth uses and not on a lifecycle perspective.*

### **Amendment 170**

#### **Proposal for a regulation Annex IV**

*Text proposed by the Commission*

#### **ANNEX IV**

**CERTIFICATE TO BE ISSUED BY THE MANAGING BODY OF THE PORT OF CALL IN CASES WHERE SHIPS CANNOT MAKE USE OF OPS FOR JUSTIFIED REASONS (ARTICLE 5(5)) - MINIMUM ELEMENTS TO BE INCLUDED IN THE CERTIFICATE**

For the purposes of this Regulation, the certificate referred to in Article 5(5) shall contain at least the following information:

- (1) Ship identification
  - (a) IMO number
  - (b) Ship name
  - (c) Call sign
  - (d) Ship type

- (e) Flag
- (2) Port of call
- (3) Location/terminal name
- (4) Arrival date and time (ATA)
- (5) Departure date and time (ATD)

The confirmation from the managing body of the port that the ship was found among any of the following cases:

- the ship made an unscheduled port call for reasons of safety or saving life at sea (Article 5(2), point (c))
  - *the ship was unable to connect to on-shore power supply due to unavailable connection points in the port (Article 5(2), point (d))*
  - *the on-shore power supply equipment on board was found to be incompatible with the shore installation at the port (Article 5(2), point (e))*
  - that the ship used, for a limited period of time on-board energy generation, under emergency situations representing immediate risk to life, the ship, or the environment (Article 5(2), point (f)).
- (6) Details of the managing body of the port
    - (a) Name
    - (b) contact (phone, email)
  - (7) Date of issue

#### *Amendment*

#### **ANNEX IV**

CERTIFICATE TO BE ISSUED BY THE MANAGING BODY OF THE PORT OF CALL IN CASES WHERE SHIPS CANNOT MAKE USE OF OPS FOR JUSTIFIED REASONS (ARTICLE 5(5)) - MINIMUM ELEMENTS TO BE INCLUDED IN THE CERTIFICATE

For the purposes of this Regulation, the certificate referred to in Article 5(5) shall contain at least the following information:

- (1) Ship identification
  - (a) IMO number
  - (b) Ship name
  - (c) Call sign
  - (d) Ship type
  - (e) Flag
- (2) Port of call
- (3) Location/terminal name

- (4) Arrival date and time (ATA)
- (5) Departure date and time (ATD)

The confirmation, ***proven by reasonable evidence***, from the managing body of the port that the ship was found among any of the following cases:

- the ship made an unscheduled port call for reasons of safety or saving life at sea (Article 5(2), point (c))
- that the ship used, for a limited period of time on-board energy generation, under emergency situations representing immediate risk to life, the ship, or the environment (Article 5(2), point (f)).

- (6) Details of the managing body of the port

- (a) Name
- (b) contact (phone, email)

Date of issue

Or. en

*Justification*

*Changes reflecting Amendments in Article 5*

**Amendment 171**

**Proposal for a regulation  
Annex V**

*Text proposed by the Commission*

**ANNEX V**

**FORMULAS FOR CALCULATING THE COMPLIANCE BALANCE AND PENALTY  
LAID DOWN IN ARTICLE 20(1)**

**Formula for calculating the ship’s compliance balance**

For the purpose of calculating the compliance balance of a ship the following formula shall apply:

Compliance balance [gCO <sub>2</sub> eq/MJ] =	$(GHGIE_{target} - GHGIE_{actual}) \times [\sum_i^n^{fuel} M_i \times LCV_i + \sum_i^l E_i]$
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Where:

<i>gCO<sub>2</sub>eq</i>	Grams of CO <sub>2</sub> equivalent
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$GHGIE_{target}$	Greenhouse gas intensity limit of the energy used on-board a ship according to Article 4(2) of this Regulation
$GHGIE_{actual}$	Yearly average of the greenhouse gas intensity of the energy used on-board a ship calculated for the relevant reporting period

### Formula for calculating the penalty laid down in Article 20(1)

The amount of the penalty laid down in Article 20(1) shall be calculated as follows:

Penalty =	$(Compliance\ balance / GHGIE_{actual}) \times conversion\ factor\ from\ MJ\ to\ tonnes\ of\ VLSFO\ (41.0\ MJ / kg) \times EUR\ 2400$
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*Amendment*

### ANNEX V

## FORMULAS FOR CALCULATING THE COMPLIANCE BALANCE AND PENALTY LAID DOWN IN ARTICLE 20(1)

### Formula for calculating the ship's compliance balance

For the purpose of calculating the compliance balance of a ship the following formula shall apply:

Compliance balance [gCO <sub>2</sub> eq] =	$(GHGIE_{target} - GHGIE_{actual}) \times [\sum_i^{fuel} M_i \times LCV_i + \sum_i^l E_i]$
--	--

Where:

$gCO_{2,eq}$	Grams of CO <sub>2</sub> equivalent
$GHGIE_{target}$	Greenhouse gas intensity limit of the energy used on-board a ship according to Article 4(2) of this Regulation
$GHGIE_{actual}$	Yearly average of the greenhouse gas intensity of the energy used on-board a ship calculated for the relevant reporting period

### Formula for calculating the penalty laid down in Article 20(1)

The amount of the penalty laid down in Article 20(1) shall be calculated as follows:

Penalty =	$(- Compliance\ balance / GHGIE_{actual}) \times conversion\ factor\ from\ MJ\ to\ tonnes\ of\ VLSFO\ (41.0\ MJ / kg) \times EUR\ 3000$
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Or. en

### *Justification*

*The first change is an editorial amendment needed to add a negative sign at the beginning of the equation. The second change is to make the penalty more dissuasive considering the 2020 prices.*



**ANNEX: LIST OF ENTITIES OR PERSONS  
FROM WHOM THE RAPPORTEUR HAS RECEIVED INPUT**

The following list is drawn up on a purely voluntary basis under the exclusive responsibility of the rapporteur. The rapporteur has received input from the following entities or persons in the preparation of the draft opinion, until the presentation thereof in committee:

<b>Entity and/or person</b>
Teneo Brussels 91124993695-29
EUROGAS aisbl (Eurogas) 17909506129-41
Wärtsilä Corporation 289922721213-66
European Community Shipowner's Associations (ECSA) 59004966537-01
European Sea Ports Organisation (ESPO) 01554483175-08
FEPURT (FEPURT) 801302611511-33
Conference of Peripheral Maritime Regions (CRPM) (CRPM - CPMR) 5546423688-07
Hanse Office
A.P. Møller - Mærsk A/S (APMM) 680443918500-51
Transport and Environment (European Federation for Transport and Environment) (T&E) 58744833263-19
International Council on Clean Transportation (ICCT) 06250094777-73
Seas At Risk (SAR) 625261439488-38
Hydrogen Europe (HE) 77659588648-75
European Producers Union of Renewable Ethanol (ePURE) 32591134448-30
IHK Nord e.V. - Arbeitsgemeinschaft norddeutscher Industrie- und Handelskammern (IHK Nord) 006411421255-36
Port of Copenhagen
Port of Hamburg
MAN Energy Solutions SE 101247832736-33
Rolls-Royce plc 58290033126-06
Environmental Defense Fund, Incorporated (EDF) 173460831899-75
IBERDROLA (IBE) 41816938101-07
Clean Arctic Alliance