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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)

{SEC(2021) 562 final} - {SWD(2021) 635 final} - {SWD(2021) 636 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

By contributing to around 75% of EU external trade volumes and 31% of EU internal trade volumes, maritime transport is an essential component of Europe's transport system and plays a critical role for the European economy. Every year, around 400 million passengers embark or disembark in EU ports, including around 14 million on cruise ships. Maritime transport fulfils an important role in safeguarding the connectivity of islands and peripheral maritime regions with the rest of the single market[1]. Efficient maritime transport connections are essential to the mobility of EU citizens, in developing EU regions and to the EU economy as a whole.

The maritime transport sector operates in an environment of open markets and international competition. Maritime transport services within the EU are open to all EU shipowners, maritime transport services between EU Member States, and between EU Member States and third countries (non-EU countries), can be provided by operators of all nationalities. A level playing field for ship operators and shipping companies is critical to a well-functioning EU market for maritime transport.

In September 2020, the Commission adopted a proposal to cut greenhouse gas emissions by at least 55% by 2030[2] and put the EU on a responsible path to becoming climate neutral by 2050. To achieve climate neutrality, a 90% reduction in transport emissions is needed by 2050. All transport modes, including maritime transport, will have to contribute to the reduction efforts.

Achieving significant reductions in CO_2 emissions of international maritime transport requires using both less energy (increasing energy efficiency) and cleaner types of energy (using renewable and low-carbon fuels). The Communication on the 2030 Climate Target Plan[3] explains that: *"Both the aviation and maritime sectors will need to scale up efforts to improve the efficiency of aircraft, ships and their operations and to increase the use of sustainably produced renewable and low-carbon fuels. This will be assessed in greater detail in the context of the ReFuelEU Aviation and FuelEU Maritime initiatives that aim to increase the production and the uptake of sustainable alternative fuels for these sectors. The necessary technology development and deployment has to happen already by 2030 to prepare for much more rapid change thereafter."*

Depending on the policy scenarios assessed in the framework of the 2030 Climate Target Plan (CTP) and in support of the Sustainable and Smart Mobility Strategy, renewable and low-carbon fuels should represent between 6% and 9% of the international maritime transport fuel mix in 2030 and between 86% and 88% by 2050 to contribute to the EU economy-wide GHG emissions reduction targets[4].

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1 EU Transport in figures, the statistical pocketbook 2020, https://ec.europa.eu/transport/media/media-corner/publications_en

2 COM(2020) 563 final

3 COM(2020) 562 final

4 The scenario assessing a combination of carbon pricing and regulatory measures (so-called MIX) projects a share of 7.5% for 2030 and 86% by 2050.

The CTP notes that the renewables share in the transport sector has to increase through the development of electrification, advanced biofuels and other renewable and low carbon fuels as part of a holistic and integrated approach, and that hydrogen based synthetic fuels will be crucial for the decarbonisation in particular in the aviation and maritime sector.

The push for the maritime transport sector to use cleaner fuels is also present at international level. In 2018, the International Maritime Organisation (IMO) has adopted its initial strategy on the reduction of GHG emissions from ships. In the list of identified candidate short-term measures, the IMO includes promoting the uptake of alternative low-carbon and zero-carbon fuels and providing shore-side electricity.

Currently, the fuel mix in the maritime sector relies entirely on fossil fuels. This can be explained by insufficient incentives for operators to cut emissions and by the lack of mature, affordable, and globally utilisable technological alternatives to fossil fuels in the sector. A number of market failures partly cause and reinforce these problems. These include:

– interdependencies between supply, distribution and demand of fuels;

– lack of information on future regulatory requirements;

– long life span of assets (vessels and bunkering infrastructure).

The FuelEU Maritime initiative proposes a common EU regulatory framework to increase the share of renewable and low-carbon fuels in the fuel mix of international maritime transport without creating barriers to the single market.

Considerations on possible obstacles to the single market, distortion of competition between operators and diversion of trade routes are particularly relevant to fuel requirements, since fuel costs make up a substantial share of ship operators' costs. The proportion of fuel costs in the operating costs of ships can range from around 35% of the freight rate of a small tanker to around 53% for container/bulk vessels. Therefore, variations in marine fuel prices may impact significantly the economic performance of ship operators.

At the same time, the price differential between conventional marine fuels of fossil origin and renewable low-carbon fuels remains high. To maintain competitiveness while still steering the sector towards the fuel transition that it must inevitably undertake, clear and uniform obligations are needed on ships' use of renewable low-carbon fuels.

An increased predictability of the regulatory framework is expected to stimulate technology development and fuel production and help the sector unlock the existing chicken-and-egg situation between demand and supply of renewable and low-carbon fuels. Clear and uniform obligations on ship's use of energy is necessary to mitigate the risk of carbon leakage, which maritime transport is prone to due to its international nature and the possibility to bunker fuel outside the EU. Owing to the cross-border and global dimension of maritime transport, a common maritime Regulation is preferred, over a legal framework requiring EU Member States to turn EU legislation into national law. The latter could result in a patchwork of national measures with differing requirements and targets.

- **Consistency with existing policy provisions in the policy area**

The FuelEU Maritime is part of the 'basket of measures' designed to address emissions from maritime transport while maintaining a level playing field. It is fully consistent with other measures presented as part of the 'Fit for 55' package and builds on existing policy tools such

as Regulation (EU) 2015/757 of the European Parliament and of the Council[5], which establishes an EU system to monitor, report and verify (MRV) CO_2 emissions and other relevant information from large ships using EU ports.

A basket of measures is considered necessary to address various and distinct market failures hindering the deployment of mitigation actions in the maritime sector. Beside the FuelEU Maritime initiative that aims at increasing the demand for renewable and low-carbon fuels (RLF), the Commission proposes to extend the European Emissions Trading System (ETS)[6] to the maritime sector and to review the Energy Taxation Directive (ETD)[7]. These two initiatives should ensure cost-effective emission reductions in the sector and that the price of transport reflects the impact it has on the environment, health and energy security.

In addition, the basket of measures will include the review of several other directives, including:

– the Alternative Fuels Infrastructure Directive (AFID)[8]; and

– the Renewable Energy Directive (RED II)[9].

Next to these revised laws, the Commission will address the need for additional research and innovation (R&I) activities, in particular through the co-programmed Zero Emissions Waterborne Transport partnership proposed by the Waterborne Technology Platform under Horizon Europe[10]. It will also revise the Guidelines on State aid for environmental protection and energy[11] in line with the policy objectives of the European Green Deal, which should allow sufficient funding of the sector's green transformation (including for deployment of on-shore charging infrastructure), while avoiding distortion of competition.

Looking in more detail at the proposed actions, there is currently no mechanism, either at the IMO level or at EU level, to correct for the presence of negative externalities (the indirect costs of emissions that are otherwise not considered) in the sector. This prevents operators from taking into account, in their operational and investment choices, the social cost of their activity in terms of climate change and air pollution. The economic literature indicates pricing mechanisms as the instruments of choice to 'internalise' external costs. The main examples would be a tax fixed at the level of the external cost, or a 'cap and trade' instrument, such as the EU Emission Trading System (ETS), that sets a limit to the overall emissions and lets the market determine their appropriate price. Both are described as 'market-based measures'.

However, while emissions trading can achieve GHG emissions reductions cost- effectively and provides a uniform price signal that influences decisions of operators, investors and consumers, it does not sufficiently address all barriers to the deployment of low and zero-emissions solutions.

Additional policy actions are needed to ensure that the level playing field in maintained while removing obstacles to investments in clean energy technologies and infrastructure, in turn reducing abatement costs and complementing the action of the EU ETS. This is particularly

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5 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).

6 Directive 2003/87/EC

7 Council Directive 2003/96/EC

8 Directive 2014/94/EU

9 Directive (EU) 2018/2001

10 https://www.waterborne.eu/

11 Communication from the Commission (2014/C 200/01)

relevant to support mitigation measures – such as the use of RLF in the maritime transport sector – that have a high potential to reduce emissions in the future but which, presently, face high abatement costs as well as specific market barriers.

While extending the EU ETS to the maritime sector will further drive energy efficiency improvements and narrow the price gap between conventional and low-emission technologies, its ability to support the rapid deployment of RLF technologies in the maritime sector strongly depends on its actual price level, which is unlikely to reach sufficient levels for this purpose in the short to medium term.

Similarly, legislation dealing with fuel *supply* (RED II) and *infrastructure* (AFID) has not had a significant impact on the uptake of RLF in the maritime sector and needs to be complemented by measures that are capable of creating a *demand* for RLF. In addition, the review of the RED II would not be able to address the high risk of fuel bunkering outside the EU for the shipping sector.

There is currently no EU regulatory framework specifically addressing the use of RLF in maritime transport. This initiative intends to fill this gap by increasing the demand for RLF in maritime transport while maintaining a level playing field and a well-functioning EU market for marine fuels and maritime transport.

- **Consistency with other Union policies**

This initiative aims at increasing the uptake of RLFs in EU maritime transport while maintaining a level playing field, both at sea and at berth, and contribute to achieving EU and international climate and environmental objectives. Ensuring a more diverse fuel mix and higher penetration of RLFs is critical to ensure the sector's contribution to the European ambition of climate-neutrality by 2050 as laid out in the European Green Deal. At the same time, a differentiated approach to the use of RLFs in navigation and in ports is important to account for different implications on air pollution with more stringent requirements for ships in ports and different availability of technologies (more options for ships in ports).

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

This initiative aims at maintaining high levels of connectivity, and preserving industry competitiveness in the maritime sector while stepping up its sustainability. Article 100(2) of the Treaty on the Functioning of the European Union (TFEU) empowers the Union to lay down appropriate provisions in sea transport.

- **Subsidiarity (for non-exclusive competence)**

Maritime transport is an international sector by nature. In Europe, approximately 75% of the voyages reported under the MRV are within the European Economic Area (EEA) (and could therefore be a proxy for intra-EU traffic) and only around 9% of the traffic is estimated to be domestic voyages (between ports within the same EU Member State). The cross-border dimension of the sector is therefore essential and calls for coordinated action at EU level.

Without action at EU level, a patchwork of regional or national requirements across EU Members States would risk triggering the development of technical solutions that may not necessarily be compatible with each other. Several EU Member States are already developing national maritime strategies that include specific approaches to ship emissions and in