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REGULATORY SCRUTINY BOARD OPINION

Proposal for a Regulation of the European Parliament and of the Council

on the use of renewable and low-carbon fuels in maritime transport

{COM(2021) 562}

{SWD(2021) 635}

{SWD(2021) 636}



Brussels,
RSB

Opinion

Title: Impact assessment / FuelEU Maritime - Green European Maritime Space

Overall 2nd opinion: POSITIVE

(A) Policy context

The EU has committed to cut greenhouse gas emissions by at least 55% by 2030 and achieve climate neutrality by 2050. These targets require ambitious policies to reduce emissions from all transport modes, including maritime. Maritime transport is responsible for both local air pollution and greenhouse gas emissions. EU international shipping CO₂ emissions are expected to grow by 33% between 2015 and 2050 under current trends and policies. The current maritime fuel mix relies almost entirely on liquid fossil fuels or liquefied natural gas. Increasing the use of renewable low-carbon fuels (RLF), would help maritime transport to contribute to the EU climate goals. This initiative is part of a 'basket of measures' to reduce the maritime sector's emissions. It aims to provide a clear regulatory framework to facilitate investments and increase market demand for marine RLF. It is carried out in parallel with a similar initiative for the aviation sector (FuelEU Aviation).

(B) Summary of findings

The Board notes the improvements to the revised report responding to the Board's previous opinion. It has addressed the coherence and uncertainty related to the other 'Fit for 55' initiatives and the Climate Target Plan, the origin of the assessed pathways and targets, and the design of the policy options.

The Board gives a positive opinion. The Board also considers that the report should further improve with respect to the following aspects:

- (1) The report does not sufficiently stress the importance of getting maritime renewable fuel technologies ready in time to reach the post-2030 climate target.**
- (2) The report is not clear enough about the uncertainties underlying the impact assessment.**

(C) What to improve

- (1) The report should briefly explain why the transport sector should reduce its CO₂**

This opinion concerns a draft impact assessment which may differ from the final version.

emissions only by 90% by 2050. It should similarly clarify how this margin has been distributed across the transport sectors.

(2) The report discusses the relation between the demand-side measures in the maritime sector and the cost-efficient emissions trading system, and compares the cost-efficiency and cost-effectiveness of the options. However, the report and executive summary should highlight more prominently that the choice for the preferred option is determined by the need to create lead markets for new fuel technologies to deliver on the post-2030 climate objectives. It should better explain how the monitoring and evaluation arrangements will help ensure complementarity between the various policy initiatives over time.

(3) The report should be more transparent about uncertainties underlying the analysis. In particular, it should discuss uncertainties in the costs of renewable fuels and the demand by other sectors, and their possible effects on the greening and competitiveness of the maritime sector. It could also be more nuanced on the expected effects of the preferred option's scheme for over-achievers on stimulating new technologies, by better aligning the text with the presented scenario outcomes.

(4) The report should better justify why it excludes smaller ships and certain categories of ships (e.g. fishing vessels) from the scope of the initiative, as this would significantly limit the reduction of particulate matter emissions. The report should also consider to what extent exempted ships could be affected by the supply measures of the (to be revised) Renewable Energy Directive, as their smaller size limits their bunkering capacity.

The Board notes the estimated costs and benefits of the preferred option in this initiative, as summarised in the attached quantification tables.

(D) Conclusion

The DG may proceed with the initiative.

The DG must take these recommendations into account before launching the interservice consultation.

If there are any changes in the choice or design of the preferred option in the final version of the report, the DG may need to further adjust the attached quantification tables to reflect this.

Full title	FuelEU Maritime - Green European Maritime Space
Reference number	Plan/2020/6945
Submitted to RSB on	5 February 2021
Date of RSB meeting	Written procedure

ANNEX: Quantification tables extracted from the draft impact assessment report

The following tables contain information on the costs and benefits of the initiative on which the Board has given its opinion, as presented above.

If the draft report has been revised in line with the Board's recommendations, the content of these tables may be different from those in the final version of the impact assessment report, as published by the Commission.

I. Overview of Benefits (total for all provisions) – Preferred Option – PO3 (relative to the baseline, expressed as present value over 2021-2050)		
Description	Amount	Comments
Direct benefits		
Reduction of external costs related to air pollution relative to the baseline (i.e. present value over 2021-2050)	EUR 10.0 billion	Direct benefit to society at large. It is the effect of the reduction of air pollution from ships resulting from the use of cleaner fuels and propulsion solutions. For instance, NOx and PM10 emissions associated to maritime transport are projected to decrease by 27% by 2050 relative to the baseline. These also include savings related to air pollution resulting from the use of OPS (or equally performant alternative) by the most polluting ships at berth (container ships, passenger ships and ro-pax vessels).
Reduction of external costs related to GHG emissions relative to the baseline (i.e. present value over 2021-2050)	EUR 138.6 billion	Direct benefit to society at large. These savings result directly from the gradual decrease of the GHG intensity of fuels used on-board as well as to a modest reduction in the transport activity (-2.7% by 2050 compared to the baseline).
Increased use of innovative fuels and propulsion technologies		Significant increase of innovative propulsion in the fleet reaching 18.9% of fuel cell-powered vessels and 5.4% of electric propulsion by 2050 (compared to no penetration of these technologies in the baseline).
Indirect benefits		
Reduced operation costs for ship operators relative to the baseline (i.e. present value over 2021-2050)	EUR 2.3 billion	The main beneficiary group will be the ship operators. The reduction in operation costs result from lower maintenance and crew costs. Some of this reduction will also be partly driven by lower transport activity relative to the baseline.

II. Overview of costs – Preferred option – PO3 (relative to the baseline, expressed as present value over 2021-2050)							
		Citizens/Consumers		Businesses		Administrations	
		One-off	Recurrent	One-off	Recurrent	One-off	Recurrent
Compliance costs resulting from the introduction of the GHG intensity targets of on-board energy usage	Direct costs (relative to the baseline in present value over 2021-2050)		Impact on consumer prices expected to be limited (as freight rates increase remain contained)		EUR 89.7 billion for ship operators covering capital costs (EUR 25.8bn) and fuel costs (EUR 63.9bn)		
	Indirect costs (relative to the baseline in present)				EUR 5.7 billion for ports to provide the necessary infrastructure		

	value over 2021-2050)				(OPS and hydrogen-related)		
Administrative and enforcement costs	Direct costs (relative to the baseline in present value over 2021-2050)				EUR 439.7 million resulting from additional information obligations, cooperation during audits and inspections and crew training. EUR 82 million for verification and approval	EUR 0.5 million to adapt the IT system for reporting and compliance checks (EU budget)	EUR 1 million for additional time during audits/inspections
	Indirect costs (relative to the baseline in present value over 2021-2050)				EUR 1.8 million resulting from the establishment of guidelines by ports to guarantee safe handling of RLF. Fuel certification costs could not be quantified but based on existing literature and similar systems are expected not to have significant impact on the price of RLF		



Brussels,
RSB

Opinion

Title: Impact assessment / FuelEU Maritime - Green European Maritime Space

Overall opinion: NEGATIVE

(A) Policy context

The EU has committed to cut greenhouse gas (GHG) emissions by at least 55% by 2030 and achieve climate neutrality by 2050. These targets require ambitious policies to reduce emissions from all transport modes, including maritime. Maritime transport is responsible for both local air pollution and greenhouse gas emissions. EU international shipping CO₂ emissions are expected to grow by 33% between 2015 and 2050 under current trends and policies.

The current maritime fuel mix relies almost entirely on liquid fossil fuels or liquefied natural gas. Increasing the use of renewable low-carbon fuels (RLF), would help maritime transport to contribute to the EU climate goals. This initiative is part of a basket of measures to reduce the maritime sector's emissions. It aims to provide a clear regulatory framework to facilitate investments and increase market demand for marine RLF. It is carried out in parallel with a similar initiative for the aviation sector (FuelEU Aviation).

(B) Summary of findings

The Board notes the additional information provided in advance of and during the meeting, and commitments to make changes to the report.

However, the Board gives a negative opinion, because the report contains the following significant shortcomings:

- (1) The report is unclear about how it has established the fuel specific targets and pathways for the maritime sector, and what the key assumptions and uncertainties are. It does not show how, and under what conditions, they are compatible with the overall EU 2030/2050 climate targets. The report does not analyse the implications and feasibility of alternative targets and pathways.**
- (2) The report is not sufficiently clear on how it ensures coherence with the other 'Fit for 55' initiatives. It does not explain how it takes into account the uncertainty on the future content of the most directly related climate initiatives.**
- (3) The report does not explain convincingly why the present initiative cannot be integrated into existing instruments that are part of the 'Fit for 55' package.**

(4) The report is not always clear on the content of the options and how they will function. It does not sufficiently explain the functioning of the reward mechanisms for overachievers and its possible interaction with the Emission Trading System. The report does not show clearly why it prefers the option with the reward mechanisms for overachievers.

(C) What to improve

(1) The report should explain how the fuel-specific targets (or parameters) for maritime transport were chosen. It should make clear how the proposed pathways towards these targets align with the GHG reduction targets of the Climate Law, and how they follow or differ from the Climate Target Plan modelling scenarios. The report should explain the assumptions behind the maritime fuel targets, and under what conditions they are compatible with targets for the other transport sectors.

(2) The report should justify why it does not include any alternative maritime fuel targets and pathways. Do the costs of alternative pathways disqualify them as unfeasible? It should present at least a qualitative check on the feasibility and implications of deviating from the set target, including for the overall 'Fit for 55' package.

(3) The report should better explain how the initiative is coherent with the most directly related other 'Fit for 55' initiatives (in particular the Renewable Energy Directive, the Emissions Trading System (ETS) and the Energy Taxation Directive). Would this initiative make some of the others superfluous for the maritime sector? As the baseline does not include the envisaged changes of the other 'Fit for 55' initiatives, the report should explain why it does not include alternative policy scenarios in the options, to reflect the uncertainty on the future content of these other initiatives.

(4) The report should explain why this initiative cannot be (partly) covered by the other 'Fit for 55' initiatives. For example, could the voluntary transfer of balances and a possible reward scheme for overachievers not be integrated in the ETS?

(5) The report should clarify the connection between the problems concerning greenhouse gases and local air pollution. It should properly reflect the latter throughout the intervention logic (i.e. also in the options and impact analysis).

(6) The report should provide more detail on how far scaling up of RLF demand will contribute to reducing costs and prices. It should provide more detail about the sources of greater feedstock supply and competing demands. It should explain better the cost differences between standard and advanced biofuels. The report should also acknowledge the high-energy demand for producing biofuels. The impact assessment should be explicit about how coherence will be ensured with the EU's overall renewable energy policy (e.g. for competition for feedstock, or accounting of total renewable targets), and how the risk for overlapping regulation is avoided.

(7) The report should further specify the content of the options and how they would function. In particular, it should specify the target values and technology shares, and explain better certification, reporting and enforcement under the different options. It should also specify how the scheme for overachievers would function. It should explain how the proposed options are cost-effective.

(8) The report should elaborate the assessment and comparison of options. It should justify better why the option with the reward mechanisms for overachievers is the preferred option, given that the net benefits of the option without these mechanisms are estimated to

be higher. It should explain why the preferred option does not lead to a higher GHG emission reduction than the option without rewards for overachievers.

(9) The impact assessment should discuss the importance of the sectors and activities that are excluded from the scope of the options. It should analyse the effect of these exemptions on the realisation of the targets.

Some more technical comments have been sent directly to the author DG.

(D) Conclusion

The DG must revise the report in accordance with the Board's findings and resubmit it for a final RSB opinion.

Full title	FueIEU Maritime - Green European Maritime Space
Reference number	Plan/2020/6945
Submitted to RSB on	18 December 2020
Date of RSB meeting	20 January 2021