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# Public Consultation for the FuelEU Maritime – Green Maritime Space Initiative

Fields marked with \* are mandatory.

#### Introduction

The <u>European Green Deal communication</u> published by the European Commission in December 2019, emphasised the need to accelerate the transition to a low-emission and climate-neutral economy, including through the shift to sustainable mobility. The Commission has announced a basket of measures as part of this transition, to be proposed in the course of 2020 and 2021.

As part of this, the Commission plans to adopt in 2020 the comprehensive "Strategy on Sustainable and Smart Mobility", deliveringing on ambitious sustainability and modernisation objectives, while ensuring the transport sector recovers from the COVID-19 crisis. The Strategy will set out the key areas and initiatives in transport and mobility where the Commission will consider policy actions to be taken in the coming years and beyond.

The 'FuelEU Maritime – Green European Maritime Space' initiative was announced as a legislative initiative in the context of the <a href="2020 Commission Work Programme">2020 Commission Work Programme</a>. It will be an important element of the Strategy on sustainable and smart mobility, focusing on ramping-up the production, deployment and uptake of sustainable alternative marine fuels, ensuring technological neutrality (low and zero-emissions sustainable alternative fuels and power, including but not limited to: liquid biofuels, e-liquids, decarbonised gas (including bio-LNG and e-gas), decarbonised hydrogen and decarbonised hydrogen-derived fuels (including methane, and ammonia) and electricity), regulating access of the most polluting ships to EU ports and obliging docked ships to drastically reduce their emissions, including through using shore-side electricity.

By creating a clear pathway for the demand of sustainable alternative fuels (low and zero-emissions sustainable alternative fuels and power) in maritime transport, the 'FuelEU Maritime – Green European Maritime Space' initiative aims to accelerate the achievement of low-emission, climate-neutral shipping and

ports by promoting the uptake of sustainable alternative energy and powertrain systems. This initiative is a first concrete step to bring the maritime sector in line with the European target of reaching climate-neutrality by 2050. It does not address issues related to the energy system and infrastructure, taxation, state aid or the EU Emissions Trading System, which will be subject to specific proposals and policy actions.

This initiative continues the approach already promoted by the 2016 <u>Low Emission Mobility Strategy</u>, with a clear pathway for the maritime sector to contribute to the EU's objectives to reach climate neutrality by 2050 outlined in the <u>European Green Deal</u>, the <u>Commission's long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050</u> and the proposal for a Climate Law, as well as the <u>strategic orientations of Horizon Europe</u>. It is also in line with the global Strategy for the reduction of GHG emissions from ships by the <u>International Maritime Organization</u>, which includes candidate measures and recommendations to support the development and uptake of low- and zero-carbon alternative fuels.

This public consultation invites citizens and organisations to contribute to the assessment of how to accelerate the uptake of sustainable alternative energy and power by the shipping sector. The consultation will be open for a period of 10 weeks instead of the standard 12 weeks. The consultation period has been shortened given the importance of the measure including in the recovery from the crisis. A targeted consultation with various stakeholders will complement the public consultation.

Please note that it is not mandatory to reply to all questions.

## About you

Lithuanian

anguage of my contribution
Bulgarian
Croatian
Czech
Danish
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English
Estonian
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© Greek
Hungarian
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0	Maltese
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0	Company/business organisation
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Regional

## \*Organisation name

255 character(s) maximum

Ministry of Infrastructure an Water Management - The Netherlands	Ministry of	Infrastructure	an Water	Management -	- The	Netherlands
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- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

## Transparency register number

255 character(s) maximum

Check if your organisation is on the <u>transparency register</u>. It's a voluntary database for organisations seeking to influence EU decision-making.

## \*Country of origin

Barbuda

Please add your cou	ntry of origin, or that of your of	organisation.	

Afghanistan	Djibouti	Libya	Saint Martin
Åland Islands	Dominica	Liechtenstein	Saint Pierre
			and Miquelon
Albania	Dominican	Lithuania	Saint Vincent
	Republic		and the
			Grenadines
Algeria	Ecuador	Luxembourg	Samoa
American	Egypt	Macau	San Marino
Samoa			
Andorra	El Salvador	Madagascar	São Tomé and
			Príncipe
Angola	Equatorial	Malawi	Saudi Arabia
	Guinea		
Anguilla	Eritrea	Malaysia	Senegal
Antarctica	Estonia	Maldives	Serbia
Antigua and	Eswatini	Mali	Seychelles

	Argentina		Ethiopia		Malta		Sierra Leone
0	Armenia	0	Falkland Islands	0	Marshall Islands	0	Singapore
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0	Australia	0	Fiji		Mauritania		Slovakia
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0	Azerbaijan	0	France		Mayotte		Solomon
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0	Bahamas		French Guiana		Mexico		Somalia
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0	Botswana		Guatemala	0	Netherlands		Taiwan
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0	Brazil		Guinea		New Zealand		Tanzania
0	British Indian		Guinea-Bissau		Nicaragua		Thailand
	Ocean Territory						

<ul><li>British Virgin</li><li>Islands</li></ul>	Guyana	Niger	The Gambia
Brunei	Haiti	Nigeria	Timor-Leste
Bulgaria	<ul><li>Heard Island and McDonald Islands</li></ul>	Niue	Togo
Burkina Faso	Honduras	Norfolk Island	Tokelau
Burundi	Hong Kong	<ul><li>Northern</li><li>Mariana Islands</li></ul>	Tonga
Cambodia	Hungary	North Korea	Trinidad and Tobago
Cameroon	Iceland	North	Tunisia
		Macedonia	
Canada	India	Norway	Turkey
Cape Verde	Indonesia	Oman	Turkmenistan
Cayman Islands	Iran	Pakistan	Turks and
			Caicos Islands
<ul><li>Central African</li><li>Republic</li></ul>	Iraq	Palau	Tuvalu
Chad	Ireland	Palestine	Uganda
Chile	Isle of Man	Panama	Ukraine
China	Israel	Papua New	United Arab
		Guinea	Emirates
Christmas	Italy	Paraguay	United
Island			Kingdom
Clipperton	Jamaica	Peru	United States
Cocos (Keeling)	Japan	Philippines	United States
Islands			Minor Outlying
			Islands
Colombia	Jersey	Pitcairn Islands	Uruguay
Comoros	Jordan	Poland	US Virgin
			Islands
Congo	Kazakhstan	Portugal	Uzbekistan
Cook Islands	Kenya	Puerto Rico	Vanuatu
Costa Rica	Kiribati	Qatar	Vatican City

0	Côte d'Ivoire	0	Kosovo	0	Réunion	0	Venezuela
	Croatia		Kuwait		Romania		Vietnam
	Cuba		Kyrgyzstan		Russia		Wallis and
							Futuna
	Curaçao		Laos		Rwanda		Western
							Sahara
	Cyprus		Latvia		Saint		Yemen
					Barthélemy		
	Czechia		Lebanon		Saint Helena		Zambia
					Ascension and		
					Tristan da		
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	Democratic		Lesotho		Saint Kitts and		Zimbabwe
	Republic of the				Nevis		
	Congo						
	Denmark		Liberia		Saint Lucia		

## \* Publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

# Anonymous

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

# Public

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

- I agree with the personal data protection provisions
- \*Please specify which interests you (the organisation on behalf of which you respond) represent
  - National public authorities (transport ministries, agencies)
  - Regional or local public authorities
  - Ship owning and ship management
  - Short sea shipping
  - Ports management and administrations

<ul> <li>Port terminal operator or other port services provider</li> <li>Inland waterways sector</li> <li>Shipbuilding and marine equipment manufacturers</li> <li>Academia, research and innovation</li> <li>Investment and financing</li> <li>Energy producers and fuel supply (including alternative / sustainable fuel sources)</li> <li>Technical standardization bodies and class societies</li> <li>Logistics suppliers, shippers and cargo owners</li> </ul>
Interest organisations representing societal interests, particularly on environmental and social topics  Other  General assessment and policy context
Various studies have described key options for decarbonising the maritime sector. These include the potential of energy efficiency improvements (i.e. less fuel

1. Various studies have described key options for decarbonising the maritime sector. These include the potential of energy efficiency improvements (i.e. less fuel consumed per a given volume of transported cargo or passengers) and the uptake of sustainable alternative fuels (i.e. use of low- and zero-carbon fuels).

In your view, how relevant is the uptake of sustainable alternative fuels and diversifying the fuel mix of maritime transport in order to accelerate the decarbonisation of shipping?

- Very relevant
- Relevant
- Somewhat relevant
- Less relevant
- Not relevant
- No opinion
- 2. While energy efficiency improvements have occurred over the past decade in shipping, the uptake of sustainable alternative fuels or propulsion technologies remained negligible.

What are your expectations concerning the uptake of sustainable alternative fuels in maritime transport in the nearest future, i.e. by 2025 (under the existing regulatory framework)?

- It will increase significantly
- It will increase moderately
- It will remain the same
- It will decrease
- No opinion
- 3. The EU has already set up a regulatory framework for the deployment of alternative fuels infrastructure for maritime transport. The framework includes provisions for equipment of the necessary infrastructure in ports on the <a href="Trans-European Transport Network (TEN-T)">Trans-European Transport Network (TEN-T)</a> in particular through the provisions of the Directive on the deployment of alternative fuels infrastructure (<a href="Directive 2014/94/EU">Directive 2014/94/EU</a>). Yet the existing regulatory scope is limited to the supply of Liquefied Natural Gas (LNG) and on-shore power supply (non-mandatory) and does not contain provisions related to their use in operations.

In your view, how relevant is it to complement the existing regulatory framework with policy measures focusing on the demand side (i.e. addressing the use of sustainable alternative fuels by operators) in order to achieve a better deployment or further uptake of such fuels?

- Very relevant
- Relevant
- Somewhat relevant
- Less relevant
- Not relevant
- No opinion
- 4. The development and deployment of sustainable alternative fuels requires coordination among different economic actors (e.g. operators, fuel suppliers, ports, technology providers, etc.). It also requires a consistent approach to ensure availability of the fuel and guarantee the well-functioning of the internal market.

The Green Deal foresees that EU action needs to be coordinated with action at

global level, in particular the International Maritime Organization (IMO). However, what would be, in your opinion, the governance level best suited to address these objectives in the European Union?

- The objectives would be best adressed at the EU level
- The objectives would be best addressed by Member States individually
- The objectives would be best addressed at regional level
- The objectives would be best addressed by individual stakeholders with no public intervention
- No opinion
- 5. The <u>European Green Deal</u> as well as the proposal for a European Climate Law set the objective of achieving climate neutrality by 2050 and the maritime transport sector should contribute to this decarbonisation effort. This means that most of the fuel consumed by EU maritime transport will have to be low- or zero-carbon at the latest by 2050.

In your view, how likely is it that — without specific policy intervention - a significant uptake of such low or zero-carbon fuels will take place in the following periods?

Please rate the options listed in the table below from 5 (very likely) to 1 (very unlikely). Not all options need to be rated (e.g. in case of "no opinion").

A signficant use of sustainable alternative fuels to occur:

	1	2	3	4	5
Before 2030	•	0	0	0	0
Between 2030 and 2040	0	•	0	0	0
After 2040	0	•	0	0	0

- 6. The 'FuelEU Maritime' initiative focuses mainly on the decarbonisation of the maritime sector. In your view, how relevant is it to complement this initiative with policy measures dedicated to inland navigation (provision of on-shore power supply, uptake of new sustainable alternative fuels for inland waterway vessels in operation, etc.)?
  - Very relevant
  - Relevant
  - Somewhat relevant
  - Less relevant

	Not	releva	ant
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No opinion

### If very relevant, relevant or somewhat relevant, please specify:

400 character(s) maximum

Increasing the demand of sustainable alternative fuels in maritime shipping could increase production and thus availability of those fuels for inland shipping.

## Barriers to the uptake of sustainable alternative fuels in maritime transport

7. According to the data on emissions from maritime transport collected under the <u>E</u> <u>U Monitoring</u>, <u>Reporting and Verification</u> (MRV) <u>Regulation</u>, the vast majority of the 44 million tonnes of fuel consumed in 2018 concerned conventional fossil fuels such as heavy fuel oil, gas oil, diesel oil, etc. Despite the existing framework for supporting corresponding infrastructure development, sustainable alternative fuels were only a small fraction of the fuels consumed by the monitored fleet. How would you explain this situation?

Please rate the potential barriers listed in the table below from 5 (most important) to 1 (least important). Not all options need to be rated (e.g. in case of "no opinion").

#### Reasons for the low uptake of sustainable alternative fuels

	1	2	3	4	5
Lack of predictability of the regulatory framework	0	0	0	0	•
High risk of investment in vessels technology and port infrastructure	0	0	0	0	•
Lack of mature technologies (e.g. on ships and on shore)	0	0	0	0	•
Higher price of sustainable alternative fuels	0	0	0	0	•
Lack of communication between actors and lack of transparency on the environmental performance,incl.of the fuel performance	0	0	•	0	0
Insufficient supply (fuel production and infrastructure) of sustainable alternative fuels or on-shore power supply	0	0	0	•	0
Insufficient demand for sustainable alternative fuels or on-shore power supply	0	0	0	0	•
Bunkering (i.e. fuel supply) of ships outside the EU	0	0	0	0	0
Presence of split incentives in the sector (i.e. situations where the benefits of an investment do not entirely accrue to the investor.  Example: a ship owner that is not also the ship manager may have less incentive to invest in green technologies)	0	0	0	•	0

Other reasons, please specify	0	0	0	•	0
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## If "other reasons", please specify:

400 character(s) maximum

- 1 An increase in the demand of sustainable fuels in maritime shipping could result in shipping having to compete with land-based transport for the same fuels. An increase in demand could increase the cost of fuels. This could have a negative effect on a sector where the cost of fuels have a large share in the total cost of transport.
- 2 Lack of sufficient financing for a green business case.
- 8. In your opinion, which of the identified barriers should be addressed as a matter of priority at EU level?

Please rate the items in the table below from 10 (highest priority) to 1 (lowest priority). Not all options need to be rated (e.g. in case of "no opinion").

#### Reasons for the low uptake of sustainable alternative fuels

	1	2	3	4	5	6	7	8	9	10
Lack of predictability of the regulatory framework	0	0	0	0	0	0	0	0	0	•
High risk of investment in vessels technology and port infrastructure	©	0	0	0	0	0	0	0	©	0
Lack of mature technologies (e.g. on ships and on shore)	©	0	0	0	0	0	0	0	0	0
Higher price of sustainable alternative fuels	0	0	0	0	0	0	0	0	0	0
Lack of communication between actors and lack of transparency on the environmental performance, incl. of the fuel performance	0	0	0	0	•	0	0	0	0	0
Insufficient supply (fuel production and infrastructure) of sustainable alternative fuels or on-shore power supply	•	0	0	0	0	0	0	0	•	0
Insufficient demand for sustainable alternative fuels or on-shore power supply	0	0	0	0	0	0	0	•	0	0
Bunkering (i.e. fuel supply) of ships outside the EU	0	0	0	0	0	0	0	0	0	0

Presence of split incentives in the sector (i.e. situations where the benefits of an investment do not entirely accrue to the investor.  Example: a ship owner that is not also the ship manager may have less incentive to invest in green technologies)	0	0	•	0	0	•	•	0	0	•
Other reasons, please specify	0	0	0	0	0	0	0	0	0	0

- 9. From your experience, can you give an example of a successful introduction of sustainable alternative fuel or power supply in maritime transport?
  - Yes
  - O No

If 'Yes', can you identify the main reasons that proved to be essential to succeed? Can you identify the main challenges to overcome?

1500 character(s) maximum

- 1 When bunker fuels are accounted for in the RED II obligations
- 2 Shore power installation in the port of Rotterdam for large offshore vessels, see https://www.walstroom.nu/ Challenge: creating a feasible businesscase. This was achieved with the help of public investments/subsidies. Other challenge: energy taxation on electricity. Government vouched to help bringing it to zero
- 10. From your experience, can you give an example of a failed attempt to introduce sustainable alternative fuel or power supply in maritime transport?
  - Yes
  - No

## Possible policy options

11. The table below presents possibly policy measures – both regulatory and non-regulatory – which could be taken at the EU level to address the barriers to the uptake of sustainable alternative fuels and power in the maritime sector.

Please rate them in the table below from 5 (most important) to 1 (least important). Not all policy measures need to be rated (e.g. in case of "no opinion").

Policy measures to accelerate the uptake of sustainable fuels

	1	2	3	4	5	
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Accelerate research and innovation enabling the use of sustainable alternative fuels and power (demonstration and deployment)	0	0	0	0	•
Set a clear regulatory pathway for decarbonising the current marine fuel mix	0	0	0	0	•
Increase public funding and incentivise private invesment to overcome the high investment risk in vessels powered by sustainable alternative fuels or propulsion systmes	0	0	0	0	•
Increase public funding and financial support to overcome the high investment risk in sustainable alternative fuel supply or on-shore power supply infrastructure	0	0	0	0	•
Establish economic incentives to reduce the price differential between conventional and sustainable alternative fuels	0	0	0	0	•
Define objectives for the supply of sustainable alternative fuels and power to the maritime sector	0	0	0	•	0
Define objectives and provisions for the use of sustainable alternative fuels and power in the maritime sector	0	0	0	•	0
Develop standards related to sustainable alternative fuels (incl. fuels, machinery, infrastructure, etc.)	0	0	0	0	•
Increase transparency by establishing a certification mechanism for sustainable alternative fuels	0	0	0	0	•
Other measures (please specify)	0	0	0	0	0

12. How should requirements for the use of sustainable alternative fuels and power be set in your view?

## a. For ships in navigation:

- Requirements on the share of specific sustainable alternative fuels to be used in ships fuel mix
- Performance requirements based on the carbon-intensity of energy used in marine operations
- Other (please specify)
- No opinion

## b. For ships at berth:

- Requirements on the share of specific sustainable alternative fuels to be used in ship's fuel mix while at berth (incl. use of on-shore power)
- Performance requirements based on the carbon-intensity of energy used by ships at berth

a. Types of ships:

To all ships
To certain ship types (e.g. highest emitters) or types of trade
Other (please specify)
No opinion

b. Scope coverage:
Ships calling at ports of the European Union
Ships bunkering in ports of the European Union
Ships sailing in the territorial waters and Exclusive Economic Zones of EU Member States
Other (please specify)
No opinion

13. In case new requirements on the use of sustainable alternative fuels and power

If "other", please specify:

Other (please specify)

No opinion

400 character(s) maximum

Lessons could be learned from the creation of Emission Control Area's, regulating the exhaust of Sulphur and nitrous oxide.

- 14. In your view, how should the environmental performance of sustainable alternative fuels for maritime transport be calculated?
  - On a "tank-to-wake" basis, accounting total emissions from combustion on board a ship and potential leakage
  - On a "well-to-wake" basis, taking into account emissions on board and potential leakage, but also emissions resulting from producing the fuel and making it available for use in ships
  - Other (please specify)
  - No opinion

- 15. In your view, what emissions should be considered in assessing the environmental performance of sustainable alternative fuels for maritime transport (including ships at berth)?
  - CO<sub>2</sub> emissions
  - CO<sub>2</sub> emissions and emissions of other greenhouse gases: methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O)
  - CO<sub>2</sub> emissions, methane (CH<sub>4</sub>) emissions, nitroux oxide (N<sub>2O</sub>) emissions and relevant emissions of air pollutants
  - No opinion

If both greenhouse gases and air pollutants should be considered, do you have any views on how to weigh relative advantages and assess possible trade-offs?

400 character(s) maximum

All GHG related exhaust gasses matters for ships. Not all low GHG-emitting fuels perform alike with regard to other pollutants. Weighing advantages and asses possible trade-offs is only possible if it is made transparent how emissions could impact (for example) air quality. Specific concern should be given to exhaust of air pollutants at berth.

- 16. In accordance with data collected in 2018 under the EU Monitoring, Reporting and Verification (MRV) system, emissions from ships at berth (in port) amounted to around 6% of the total CO2 emissions reported in MRV. In addition, ships at berth can become a significant source of air pollution, in particular for port cities. In your view and experience, how relevant is it to establish a regulatory framework specifically addressing emissions produced by ships at berth?
  - Very relevant
  - Relevant
  - Somewhat relevant
  - Less relevant
  - Not relevant
  - No opinion
- 17. Reducing emissions produced by ships at berth may require significant investments, for instance to install on-shore power connections. With this in mind, do you have any views on how these requirements for ships at berth should apply?
  - Addressing all ships at berth
  - Prioritising the ships and the ports already equipped with zero-emissions technologies (including on-shore power supply)

- Prioritising the highest emitters (e.g. specific ship segments)
- Taking action once critical infrastructure is made available in majority of EU ports
- Other (please specify)
- No opinion

#### If "other", please specify:

400 character(s) maximum

An in time phased and cost-effective approach is advocated. On shore power supply for example can already be quite cost-effective for RORO ferries, and that segment could therefore be addressed at first.

## Additional information

18. Are there other key aspects which you did not find reflected in the questions and you would like to comment upon?

#### Please give details.

1500 character(s) maximum

In this section we futher elaborate on our answer to question 4.

In continuing the FuelEU Maritime initiative it could be elaborated how EU action would stimulate global measures in the uptake of maritime fuels. The pathway from EU regulation to IMO could thus be elaborated.

Additionally, when considering new EU regulations that set out obligations for the maritime sector to invest in greener shipping, it is necessary that these considerations are accompanied by additional measures consisting of economic and/or financial incentives to do so.

Please feel free to upload documents, such as additional evidence supporting your responses, such as a policy brief or a position paper here. Please note that the uploaded document will be published alongside your response to the questionnaire which is the essential input to this open public consultation. The document is an optional complement and serves as additional background reading to better understand your position.

The maximum file size is 1 MB
Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

19. Please provide references to any studies, reports or other documents that you think are relevant for this consultation, with links for online download where possible.

13	500 character(s) maximum
	Answer

#### Contact

MOVE-D1-SECRETARIAT@ec.europa.eu