

# FuelEU Maritime



## Shipping will be required to switch fuel but without clear path to sustainable alternatives

### Context

Today, the maritime sector relies entirely on fossil fuels. And shipping emissions are growing rapidly. To achieve -55% emissions reduction objective by 2030, shipping would have to cut 90Mt CO<sub>2</sub> emissions in this decade, down from 140Mt today. The scale of the effort is huge: if energy efficiency can deliver up to 1/3 emissions cuts, full decarbonisation by 2050 will require gradual deployment of zero-emission vessels from 2025. The stated-objective of the FuelEU Maritime initiative is to promote green marine fuels.

**The Commission failed to include the single most important tool in the FuelEU proposal – a multiplier of 5, to boost competitiveness of e-fuels.**

The European Commission proposed to introduce a goal-based fuel GHG intensity target that increases in stringency over time, requiring ship operators calling at EU ports to reduce the carbon footprint of the energy used onboard ships. The target(s) is expressed in Well-to-Wake (WTW) CO<sub>2</sub>-equivalent emissions to account for all the life-cycle GHG emissions (CO<sub>2</sub>, CH<sub>4</sub>,

N<sub>2</sub>O) of the different fuels and relevant engine technologies.

### What's good? What's not?

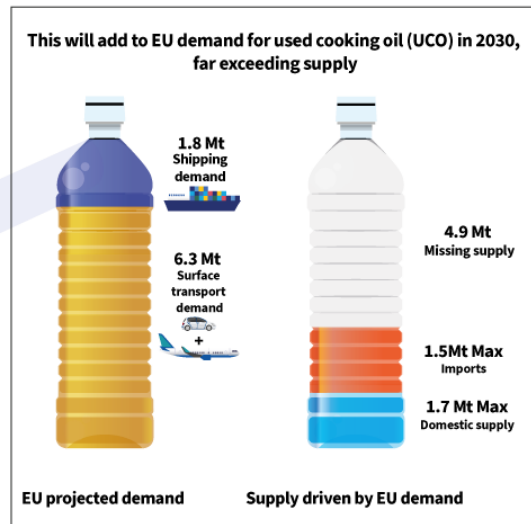
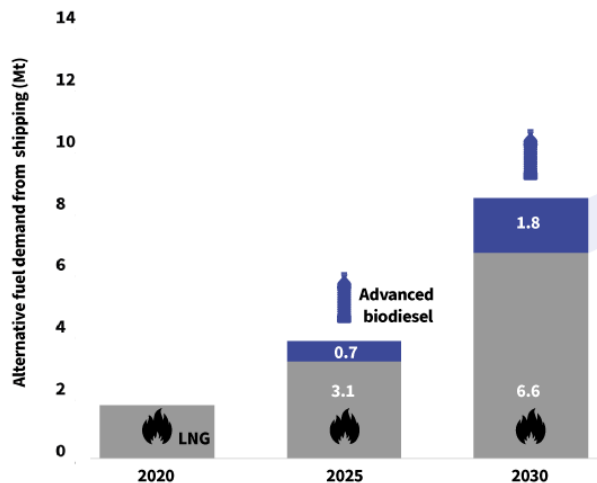
While setting GHG intensity reduction thresholds until 2050 is welcome to engage the sector in decarbonisation efforts, the targets proposed do not lead shipping to zero-emissions by 2050, but rather to a climate disaster. This is largely because the proposed Regulation fails to give appropriate signals to market operators to invest in the ultimate solutions based on green hydrogen.

Green e-fuels, notably hydrogen and ammonia produced from renewable electrolysis can be supplied in large quantities to the sector<sup>1</sup>; however, as nascent technologies, they're more expensive and require investments in new vessels and port infrastructure. In June, T&E warned that the simple goal-based (technology neutral) target envisioned in the draft proposal would likely result in the acceleration of fossil gas uptake by ships with dual-fuel LNG propulsion as the cheapest alternative fuel eligible until 2040 – well beyond a reasonable transition

<sup>1</sup> Already by 2030, e-fuels such as e-ammonia could supply up to 7% of EU shipping demand; this would require 7.5 GW electrolyzers, out of 40GW planned in the EU Hydrogen Strategy. See [T&E study](#), Decarbonising European Shipping, April 2021

period. Moreover, as bioLNG and e-LNG are projected to remain expensive, the use of drop-in biodiesel would also be given a push to comply with stricter GHG intensity targets over time.<sup>2</sup> Due to the EU's limited domestic production potential of waste-based advanced biofuels, additional shipping demand would further increase already disproportionately high imports and drive demand for unsustainable crop-based feedstocks.

## Fuel EU will incentivise fossil LNG and dubious biodiesel imports



<sup>2</sup> See [T&E analysis](#), Draft FuelEU Maritime proposal, June 2021

## How should it be improved?

If equipped by Parliament and Council with dedicated tools, FuelEU Maritime can kick-start the deployment of renewable-based e-fuels in shipping by 2030 and help decarbonise the sector by 2050 as envisaged by the EGD. This could be done by providing a multiplier of 5 to companies using these e-fuels to bridge the cost-competitiveness gap with waste-based biofuels; and/or by adopting a clear sub-target for green hydrogen-based fuels. To ensure predictability of e-fuels demand for maritime, fuel suppliers should be required to supply a minimum share to shipping under the Renewable Energy Directive (RED), which ship operators would be mandated to use under FuelEU (i.e. 6% of shipping energy demand by 2030).

Furthermore, the Regulation's credit exchange mechanism should incentivise investments in zero-emission vessels by allowing credit exchange only for ships switching to e-fuels.

## What next?

If the European Parliament and the Council want shipping to fully decarbonise by 2050, they will have to provide the FuelEU Maritime proposal with a clear and predictable investment signal for the deployment of e-fuels. Moreover, the text will need a stronger compliance system with sufficient safeguards to avoid investments being diverted to alternatives worse than the fossil fuels they replace.

Moreover, the level of ambition is too low: to be in line with the Paris Agreement and the EU Climate Law, the GHG target should be advanced by 5 years and aim for zero-emission by 2050. In addition, stringent sustainability safeguards are needed to prevent unintended consequences of the GHG target. First, the risk of fossil gas lock-in can be limited via the accounting of its global warming potential (GWP) over a 20 year perspective, instead of 100 years. Secondly, all crop-based biofuels should be excluded, and not only food and feed-based; and all eligible fuels should comply with sustainability and GHG saving criteria of the RED. Last but not least, FuelEU needs strict enforcement: there must be no "pay to comply" exempting ships from GHG intensity reduction efforts, but dissuasive penalties making non-compliance cost prohibitive. Without these safeguards, shipping risks embarking on a climate and environmental disaster scenario.

## Further information

Delphine Gozillon  
Sustainable Shipping Officer  
Transport & Environment  
[delphine.gozillon@transportenvironment.org](mailto:delphine.gozillon@transportenvironment.org)  
Mobile: +32(0) 478 10 00 88

