

EU TAXONOMY

SEA EUROPE COMMENTS ON THE EU SUSTAINABLE FINANCE PLATFORM'S DRAFT REPORT¹ PART B – ANNEX: FULL LIST OF TECHNICAL SCREENING CRITERIA

23 September 2021

Introduction

On 3 August 2021, the EU Sustainable Finance Platform published a [draft report by its Technical Working Group \(TWG\)](#) for a call for feedback on preliminary recommendations on technical screening criteria for the remaining four environmental objectives of the EU taxonomy. The present paper contains the SEA Europe position and comments on the Platform's draft report and recommendations.

SEA Europe's high concerns and comments relate to the following elements of the draft report:

1. The proposed exclusion of cruises and mega-yachts as activities "non substantially contributing" to the remaining four environmental objectives of the EU taxonomy;
2. The proposed exclusion of vessels "transporting fossil fuels";
3. The proposed pollution control's Technical Screening Criteria (air emissions).
4. The proposed DO NOT SIGNIFICANT HARM CRITERIA (DNSH), namely the use of the tailpipe approach to ship emissions.

By way of general comment, furthermore, SEA Europe wishes to question the rationale behind the taxonomy criteria's exclusive focus on the product rather than the manufacturing process, i.e. why manufacturing is assessed by the emissions produced by the products and not based on the emissions of the manufacturing process (see SEA Europe's earlier submission on the Taxonomy available [here](#)).

The following sections outline the SEA Europe's specific comments on each of the above points:

1. CRUISES AND SUPER-YACHT EXCLUSION

The following comments refer to the below sections of the draft report, and in particular the explanatory section "EXCLUSION OF CRUISE SHIPS AND SUPER YACHTS WITH CREW" on page 782:

2.16 Manufacture of other transport equipment Page 248

*"Manufacturing of Ships (passenger): The activity manufactures sea and coastal passenger water transport vessels, **excluding Cruise ships and Super Yacht with crew (vessels over 24 meters long)** and complies with all of following criteria:"*

¹ For ease of reference: the draft report published for consultation by the Sustainable Finance Platform is available here:

https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/210803-sustainable-finance-platform-report-technical-screening-criteria-taxonomy-annex_en.pdf

8.2. Sea and Coastal passenger water transport Page 776

"(...) Cruise ships and superyachts with crew are excluded (...)

8.6 Inland Passenger water transport Page 791

"(...) Cruise ships and high speed boats re excluded (...)

The above sections, and the explanatory section on page 782, in essence suggest **excluding cruises, mega yachts (as well as high speed boats)** as activities not significantly contributing to the Taxonomy's (non-climate related) environmental objectives.

SEA Europe strongly opposes these suggestions and the accompanying explanations which are based on factually incorrect information, as illustrated in the table below, refer to outdated sources (i.e. a 11 year-old report), and present discriminatory aspects by singling out specific maritime segments notwithstanding the fact that the EU Taxonomy should be goal based and provide objective criteria.

The recommendation to "exclude cruises and super-yachts" is also openly in contrast with a core conclusion of the **DG MOVE Study on Maritime taxonomy**² which, on the contrary, suggests in the context to access to green finance to *"Prioritize green projects for which the maritime value chain is fully developed in Europe (i.e. passenger and special ships). This ensures that all relevant European stakeholders are involved, from SMEs to large shipyard integrators, allowing for a consistent technological growth for the entire sector. And also to prioritize support to the deployment of new green technologies patented in Europe and with a European value chain"*.

The recommendation to exclude cruises also fails to take into account that the cruise sector is generally falling well below all regulatory limits for emissions already before adoption of those through technology development and (very) early implementation of emission reduction technologies. The **cruise sector has been indeed pioneering the development of new sustainable technologies which have later been taken over by shipping in general.** In SEA Europe's view:

- **Unresolved sustainability issues of the cruise and yacht sector do not justify a general a priori exclusion of these ship types. Cruise ships and yachts deserve the same consideration and distinction between sustainable and non-sustainable solution, which is necessary to promote innovation in order to reduce the environmental footprint of maritime tourism;**
- **European failure to do so will not contribute to the sustainability of global marine tourism, but will just initiate the extinction of the European shipbuilding industry, which is highly specialized and technology leader in design and construction of sustainable passenger ships.**

² CE DELFT/COWI (2021) Development of a methodology to assess the 'green' impacts of investment in the maritime sector and projects: <https://op.europa.eu/en/publication-detail/-/publication/8aa9a115-aedd-11eb-9767-01aa75ed71a1>

As stated above, SEA Europe draws attention to the following comments and concerns on the statements contained in the Explanatory Box on the **“EXCLUSION OF CRUISE SHIPS AND SUPER YACHTS WITH CREW”** on page 782 of the draft report .

PLATFORM's DRAFT REPORT EXPLANATORY SECTION " EXCLUSION OF CRUISES AND SUPER -YACHTS WITH CREW ", page 782	SEA EUROPE COMMENTS
<i>"While the cruising activity started a century ago with boats carrying up to 300 passengers, recent boats are floating cities with more than 6000 passengers on-board".</i>	Such size increases have been initiated in many ship types in order to implement efficiency gains. It is not stated why this is a serious problem with cruise ships justifying exclusions, whereas it does not seem to be a problem with container vessels, tankers or bulk carriers.
<i>"Each passenger can use up to 40 litres of water per day through the 'black water' system (heavily contaminated wastewater from toilets) and 340 litres of 'grey water' containing harmful chemicals as well as plastic microfibers from washing machine wastewater as well as 4 kilos of solid waste per day (Carić, 2010b).</i>	These figures seem to be historic and not representative for state-of-the-art cruise ships. Cruise ship waste production are in principle not different from land-based hotels. Moreover, wastewater rules and regulation for passenger ships are even more stringent than for other ship types. EMSA/CE Delft concluded in <i>"The Management of Ship-Generated Waste On-board Ships"</i> in 2016 that: ▪ Section 5.2 Sewage management and technology. Roughly a quarter of cruise ships have Advanced Wastewater Treatment System (AWTS) installed which mix and treat grey and black water producing a bio-residual or sewage sludge that needs to be retained for discharge ashore (HELCOM, 2013). In cruise ships it is common to have a separated tank for galley water, which is discharged in accordance with the regulations for food waste. For cruise ships it is common to comminute, mix and disinfect the water prior to discharge to the sea. Actually, the annual Environmental Technologies and Practices 2020 overview shows: <i>99% Of new capacity (ALBs) on order is specified to have Advanced Waste Water Treatment systems on board with already 70% of global capacity served by advanced wastewater systems now. These systems usually require mixing of black and grey water, which is never put overboard untreated.</i> Hence, presenting this as <i>"a passenger can use (...)"</i> is erroneous as anything mixed with black water per regulation should be considered as black water, including grey water. ▪ Section 5.2 Sewage management and technology EMSA/CE Delft: <i>"For passenger vessels the amount ranged from 0.0004 to 0.002 m3 per person per day. The average amount of waste production per day from the literature</i>

	<i>lies within the range provided in this study."0.002 m3 = 2 liter, NOT 4 kg".</i>
<i>"Such volumes raise some concerns in terms of sustainability,"</i>	These waste volumes only become hazardous if they are not properly handled by either sustainable treatment systems or delivery to port reception facilities with subsequent sustainable aftertreatment on land.
<i>"especially in terms of energy needs to supply all the treatment systems"</i>	The energy needs of treatment systems are only a small percentage of the overall energy balance of a cruise ship.
<i>"plus the daily life with shops and attractions"</i>	No difference to a land-based amusement park or shopping center.
<i>"as well as means of transport to the cruise ships usually reliant on long-haul flights".</i>	Especially in Europe an increasing number of cruise ships passengers are arriving at the port of embarkation from nearby locations. Tourist travelling from Europe to e.g. the Caribbean contribute significantly to GHG emissions, but this contribution is independent of the type of destination (cruise ship or beach resort). The same draft report does allow for the manufacturing of aircraft in section "8.9 Manufacturing of aircraft". It is hence hard to understand why manufacturing of aircraft can be considered as a sustainable investment but the use of those same airplanes by a specific sector is not. It is noted that almost all other tourism activities are included in the Taxonomy under "10.1 Hotels, holiday, camping grounds and similar accommodation". Needless to say, many of these activities also receive guests transported via long haul flights (or other means of fossil based transport). Lastly, the statement that cruise "usually reliant on long-haul flights" is erroneous and the source is missing.
<i>"Although innovation could provide some solution, the first round of Taxonomy will not take this sector into account as no examples of zero discharge and zero pollution cruise boats are available on an asset base".</i>	The zero-emission cruise ship is a challenging task, which is a high priority item on the research agenda of the industry and Member States. First results have been achieved (Aidanova by MW, Lürssen FC yacht, MSC Seashore by FINECANTIERI, Ponant "Le Commandant Charcot" by VARD), but it is still a long way to go, requiring political support instead of unjustified exclusions. The statement is not objective and is furthermore discriminatory since the problem is not relevant only to the cruise segment of shipping.
<i>"In brief, the cruise sector cannot make a Substantial contribution to the environmental objective":</i>	If innovation is stopped based on this exclusion, no contribution can be expected.
<i>"evidence of generation of high volumes of solid waste (1:4 ratio in comparison with residents of</i>	Unproven claim based on a 11 year old report (see above). It could be a historic figure of a bad cruise ships in comparison to a good land-based holiday resort.

<i>inland destinations visited by cruises);"</i>	
<i>"generation of large quantities of black and grey waters (up to 40 litres of water per day through the 'black water' system (heavily contaminated wastewater from toilets) and 340 litres of 'grey water')"</i>	Repetition of 3.; see earlier comment
<i>"which are discharged mainly in coastal and sensitive areas due to vessels destinations and"</i>	Highly incorrect statement: according to MARPOL requirements discharges into Special Areas (Baltic Sea) are prohibited if not treated to a discharge standard (Ref. IMO Resolution MEPC.200(62)), by far stricter than applicable for land-based installation (which are responsible for the overwhelming majority of emissions from sewage treatment plants); discharges in general have to be performed with a mandatory distance from the coast (ref. IMO Resolution MEPC.157(55)).
<i>"long time spent at berth, contribution to local air pollution due to large power demand onboard while docked";</i>	For long time at berth EU regulations exist requiring onshore power supply or zero emission technology. For a long time already, the cruise industry is very supportive of the development of Shore Side Electricity shore side and heavily invested in SSE equipment onboard.
<i>"in addition review of the economic benefits brought by cruise line industry to inland destinations revealed low contribution to local economies due to business model incentivising spending on board"</i>	This point criticizes onboard spending limiting the economic benefits of the destinations, while points 2. and 15. imply that overcrowding of cruise destination is the problem. Also, no source is referenced for this statement and the supposed "review of the economic benefits" is not available. But, more specifically, it should be recalled that the building of cruise ships, which has constituted for years the backbone of European shipbuilding activity in particular, is of vital importance to Europe's local and regional economy. With cruise vessels accounting nowadays for more than 80% of the European Civilian Shipbuilding Orderbook in tonnage (CGT, Compensated Gross Tons), the cruise sector is therefore of importance to the European shipyards, their workforce as well as the wide and extensive European supply chains involved in cruise building projects. As illustrated in European Commission's reports, European (cruise) shipbuilding is characterized by a high employment multiplier, generating positive spill-over effects in regions in which its activities are allocated. With 75% of a cruise ship value being represented by purchases from External Suppliers (e.g. equipment, materials, technologies), thousands of European companies (mainly SMEs) are involved in cruise building projects and heavily depend on a healthy and growing cruise industry. The cruise (and mega-yachts) represent the most innovative segments in the maritime sector and one of the few remaining niche market segments where Europe is still globally leading after having exited

	in the course of the last decades all the “merchant cargo” ship markets following fierce and often unfair competition from Asia.
<i>“Looking at the large yacht fleet, the carrying capacity of the main sectors’ destinations has already reached major impacts on marine habitats though seabed destruction by massive anchors (Medtrix, 2019) which prevention through a Technical Screening Criteria definition is not possible for the moment.”</i>	Large yachts usually carry a limited number of passengers not posing overcrowding threat to destinations; therefore an increase of berthing capacity should not be a problem if anchoring should be avoided. In addition large yachts are potentially capable of performing dynamic positioning, which could be a sustainable solution if clean fuels and suitable energy conversion technology is used.

2. EXCLUSION OF VESSELS DEDICATED TO TRANSPORTING FOSSIL FUELS

2.16 Manufacture of other transport equipment Page 248

*“The activity manufactures sea and coastal freight water transport vessels, **not intended to transportation of fossil fuels(...)**”*

8.1 Sea and coastal freight transport Page 770

*“The activity is **not** related to **transportation of fossil fuels(...)**”*

8.5 Inland freight water transport Page 787

*“The activity is **not** related to **transportation of fossil fuels(...)**”*

As already highlighted in its [Comments on the Draft Taxonomy’s Climate Delegated Act](#), SEA Europe recommends this criterion should be reconsidered for the following reasons:

- It is unclear why transport of fossil fuels should be not permissible if performed under safe conditions not posing a significant harm to the environment and the ship itself is using sustainable propulsion systems. It should be noted that what a ship is carrying as a cargo is not directly related as to how environmentally friendly that ship may be.
- The criterion lacks clarity also as to what its intended goals are precisely. Ships are seldom dedicated to carry one specific fuel as cargo, but a variety from one voyage to the next. As currently drafted, the criterion makes it difficult to assess whether a ship is eligible or not. On top of that, the ship operator will not be informed of whether his cargo originates from fossil fuel (ammonia is a good example hereof).

SEA Europe recommends that transport of fossil fuels by ships should be eligible if performed under safe conditions not posing a significant harm to the environment and the ship itself is using sustainable propulsion systems.

3. POLLUTION PREVENTION (AIR EMISSIONS) : TECHNICAL SCREENING CRITERIA

Section 2.16 Manufacture of Ships (page 246-255)

Section 8.1 and 8.2. Sea and Coastal freight and passenger transport (page 767-780)

“Substantial contribution to pollution prevention and control

- a) *Zero direct emissions (exhaust stack) fleet SO_x, NO_x, PM*
- b) *Until 31st December 2025 vessels are compliant with the general requirements of MARPOL ANNEX VI for Emission Control Areas (ECA) for SO_x, NO_x and PM regardless of the area of operation and having zero direct emission technology at berth”.*

Rationale (Technical Screening Criteria – Air emissions), page 779-780

“Air emissions screening criteria refer to the existing IMO Emission Control Areas (ECAs) designated under MARPOL Annex VI, which require specific stringent limitations to emissions of SO_x, NO_x and PM within designated sensitive/Emission Control Areas (such as Baltic Sea, North Sea and North American area). The SC requires that vessels comply with these requirements regardless of the area in which they operate. In addition, the vessels have to be able to “plug in” into onshore power supply (OPS) and not run the auxiliary engines while at berth. Compliance with MARPOL Annex VI for Emission Control Areas (ECA) for SO_x cannot be met through application of the exhaust gas cleaning systems (EGCS or SO_x scrubbers), due to their detrimental impacts on water quality and biodiversity - see DNSH for Sustainable use of water and marine resources. Recognising that alternative fuels such as biofuels, hydrogen and ammonia can be related to NO_x emissions, the reduction of such emissions to levels compliant with MARPOL Annex VI for Emission Control Areas (ECA) for NO_x should be achieved through design of the engine or use of Exhaust Gas Recirculation (EGR) or Selective Catalytic Reduction (SCR)”.

As currently drafted, these technical screening criteria are problematic because they reduce the Internal Combustion Energy (ICE)-related energy options for NO_x pollution prevention to electricity only. The proposed exclusion of engine design, EGR or SCR as from 2026, in combination with the absence of threshold values (substituting the “zero” criterion), would basically extinguish all technical options to address NO_x pollution prevention. The proposed SC should be amended by means of suitable threshold values replacing the “zero” criterion which is not an appropriate criterion for any technology.

SEA Europe, furthermore, opposes the inappropriate approach of excluding means of compliance currently allowed under international and EU rules due to alleged detrimental impacts. It should be recalled that IMO rules as well as the European Sulphur Directive do explicitly allow for alternative means of compliance, which includes EGCS (scrubbers), contrary to what stated in the rationale of the draft report (*“Compliance with MARPOL Annex VI for ECAs for Sox cannot be met through application of EGCS”*). To combat climate change, the scrubbing technology will remain an important technology, in particular for the capture of CO₂ onboard ships. Furthermore, confidence in scrubbing technology is needed to foster the development of this technology as a means to remove CO₂ from ship’s exhaust and store it onboard ships as well as of other technologies necessary to transform the waterborne (transport) sector to a truly zero-emission sector and mode of transport. Indeed, to combat climate change, the scrubbing technology will remain an important technology, in particular for the capture of

CO₂ onboard ships. Beside the need for legal certainty, as an important means to underpin significant investments into a zero-emission waterborne (transport) sector, it is key for the EU policy-makers to base their decisions on (scientific) evidence-based facts. Without any scientific approach, any future technology or fuel may be confronted with a situation in which it is first politically promoted and/or (financially) stimulated, to thereafter being rejected and/or banned.

SEA Europe wishes to reiterate the need for technological neutral criteria. As already noted in the [SEA Europe comments to the Taxonomy's draft Climate Delegated Act](#), to stimulate technology innovation, legal certainty as well as goal-based and scientifically justified criteria should be used for all sustainability goals, with a view to provide clear guidance for the implementation of emission reduction as well as for the protection of water and marine resources and the transition to a circular economy. Hence, in SEA Europe's view, it is highly recommended in the context of the Taxonomy to refer, instead, to threshold values rather than excluding specific technologies.

4. DO NOT SIGNIFICANT HARM CRITERIA (DNSH) –TAILPIPE APPROACH

The “Do Not Significant Harm” (DNSH) Criteria under Section 2.16 “Manufacture of other Transport Equipment” – Manufacturing of Ships (Sea and coastal passenger water transport) on page 255-256 state:

Section 2.16 “Manufacture of other Transport Equipment” – Manufacturing of Ships (Sea and coastal passenger water transport)

“Climate Change Mitigation - The activity complies with one or more of the following criteria:

- a) The vessels have **zero direct (tailpipe) CO₂ emissions**;*
- b) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, hybrid and dual fuel vessels derive at least 25% of their energy from zero direct (tailpipe) CO₂ emission fuels or plug-in power for their normal operation at seas and in ports;*
- c) where technologically and economically not feasible to comply with the criterion in point a), until 31 December 2025, the vessels have an attained EEDI value 10% below the EEDI requirements applicable on 1 April 2022, if the vessels are able to run on zero direct (tailpipe) emission fuels or on fuels from renewable sources.”*

SEA Europe strongly opposes the proposed inclusion of the above (tailpipe approach based) climate change mitigation screening criteria as DNSH criteria under the remaining environmental objectives of the Taxonomy as suggested in the draft report.

First and foremost, it is not clear why the same (inappropriate) technical screening criteria that were established to define activities “contributing significantly” to the Climate Change Mitigation objective under the Climate Delegate Act should now become automatically, if not complied with, the criteria defining “significantly harmful” activities under the DNSH section pertaining to the other environmental Objectives.

But, more importantly, these criteria, which are based on a “tailpipe approach” to ship emissions, are totally inadequate for the maritime applications as already outlined on several occasions by SEA Europe, other maritime players and stakeholders (including Member States) in response to recent

public consultations³. The approach of assessing ship emissions exclusively at the funnel ("tailpipe" approach), and not the climate neutrality of a ship's propulsion holistically (based on a "lifecycle" approach), is wrong, does not solve the climate crisis and will hamper the innovation and competitiveness of the European maritime industry. A "tailpipe" approach to ship emissions is not only inadequate but also detrimental for the European maritime sector, and ultimately for the EU as a sustainable, future-proof and competitive maritime industrial base, for the following reasons:

- Such an approach falls short in recognizing the specificities of the waterborne transport sector compared to other transport modes (e.g. diversity of ship types/sizes/range of operations/modi operandi), notably the need for a broad fuel portfolio offering a sufficient energy density necessary at least for long distance ship-types.
- Such an approach will exclude technologies that can have a lower impact on the basis of a life cycle approach. It will strongly penalize the scale-up of several sustainable and promising solutions in maritime transport such as use of renewable and low carbon fuels (e.g. climate neutral e-fuels) which will provide a drastic decrease of GHG emissions during the transition.
- Focusing solely on "zero direct (tailpipe) CO₂ emissions" leads to misperceptions of the overall emissions of individual energy carriers and thereby reduces the shipping fuel portfolio to hydrogen, ammonia, and battery power. Even if these energy sources do not emit GHG on board, this does not mean that they are also the best solution for GHG mitigation from a holistic perspective.
- Instead, biofuels and climate-neutral e-fuels, such as synthetic methanol, which are better suited for maritime applications due to their moderate hazard profile, are prevented. These technologies have already been developed to a high level of technological maturity, predominantly with high R&D expenditures by industry and the public sector. Furthermore, hydrogen and batteries can hardly be integrated into ships for longer distances due to their low energy density, and at best represent a technically feasible alternative for short-distance transport on the high seas and inland waterways, albeit not an economically viable one at present. Moreover, it is highly unlikely that sufficient quantities of green hydrogen and ammonia will become available as well as the associated logistics and supply infrastructure can be built by the end of 2025. In principle, application of such disruptive maritime criteria already from January 1, 2026 is unrealistic for several reasons: in addition to the availability of fuels, infrastructure, and safety regulations, long project development intervals of ships, the incremental innovation process for the design of commercially utilized prototypes do not allow for revolutionary changes in ship propulsion technology in less than five years.
- Also, the recently approved "Zero Emission Waterborne Transport" partnership would be hampered in case that this misguided technical approach should be adopted for the legal framework for research, development and innovation.

SEA Europe wishes to reiterate that such a restrictive approach based on tailpipe emissions will rather hinder than support maritime climate protection and is at odds with other climate initiatives taken by the EU, such as the new **FuelEU Maritime Regulation** proposal which correctly implements a technology-open assessment of life-cycle emissions and calls for a gradual reduction in GHG intensity for marine fuels and which could also be a benchmark for assessing more sustainable investments and financial products.

³ See the following SEA Europe submissions and statements:

- a) [sea-europe-comments-on-taxonomy-delegated-acts---final-.pdf \(seaeurope.eu\)](#)
- b) [final sea-europe-response-to-environmental-state-aid-guidelines-consultation -16-july-2021.pdf \(seaeurope.eu\)](#) and
- c) [tailpipe-approach-in-the-taxonomy---sea-europe-statement-august-2021.pdf \(seaeurope.eu\)](#)

To conclude, the maritime energy transition requires a holistic climate protection strategy based on uniform technical assessment criteria for the design, production, financing, start aid, certification and operation of ships. In order to progress towards climate protection, a life cycle assessment (LCA) is needed for maritime applications. By contrast, a narrow “tailpipe approach” is detrimental to the viability of the maritime manufacturing and transport operators as well as the climate neutral transition and also contradicts holistic approaches followed in other EU initiatives. SEA Europe hence urges the EU and the Sustainable Finance Platform to immediately reconsider and rectify the misguided “tailpipe approach” in favor of a consistent application of a LCA approach for the waterborne transport sector.

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SEA Europe trusts the above comments will be taken duly into account and remains available to provide any further clarification that may be required.

About SEA Europe:

SEA Europe, European Shipyards and Maritime Equipment Association, represents close to 100% of the shipbuilding industry in 16 nations, including EU Member States, Norway and Turkey. The industry, otherwise known also as “maritime technology industry”, encompasses the building, maintenance, repair, retrofitting and conversion of all types of ships and floating structures – commercial as well as naval – including the full supply chain with the various producers of maritime systems, equipment material, technologies and services. For more information, see the SEA Europe website <https://www.seaeurope.eu/>

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