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## **Submission to the European Commission's Call for evidence on the EU Maritime Industrial Strategy**

28 July 2025

We welcome the European Commission's ambition to develop a new **Industrial Maritime Strategy**. This strategy is timely and essential to address the competitive pressures, sustainability challenges, and innovation gaps facing Europe's maritime manufacturing sector and its wider value chain.

As a Horizon Europe project consortium (No 101138013) focused on advancing circularity in ship design, maintenance, and end-of-life management, CirclesOfLife (hereafter COL) **strongly supports** the **explicit reference** in the EU Maritime Industrial Strategy to **digital, circular, and performance-based solutions** as key enablers to enhance sustainability, traceability and competitiveness.

The COL consortium is actively developing such solutions, including a Ship Lifecycle Passport (SLP), a Ship Circular Materials Passport (SCMP), and a Shipyard Environmental Performance Index (SEPI), which are expected to deliver strategic benefits not only within shipyards but across the entire maritime value chain.

The consortium also encourages the European Commission to continue **supporting cross-industry research initiatives** of this kind, as they are key to driving innovation, enhancing competitiveness, and strengthening the resilience of the European maritime sector.



## **Driving competitiveness and circularity through digital and performance-based tools**

### **1. Ship Lifecycle Passport (SLP) and Ship Circular Material Passport (SCMP)**

One of the project's main objectives is the development of a blueprint for the Ship Lifecycle Passport (SLP) and the Ship Circular Materials Passport (SCMP). These passports enable a full lifecycle and material traceability system of ships that will offer various strategic advantages:

- Documenting high impact materials and components used in shipbuilding, from origin to recycling, will support data-driven decisions on maintenance, repair, reuse, and safe dismantling.
- They support alignment with EU waste legislation and circularity, by extending material lifespans, reducing waste, and optimising the use of high-value materials, particularly steel.
- They will ease shipyards' compliance with upcoming requirements on component and emission traceability, aligning with Ecodesign for Sustainable Products Directive (ESPR) and Digital Product Passport (DPP) principles, accounting for product carbon footprints, and enhancing emissions reporting practices.
- Manufacturers and yards that adopt lifecycle and material passports can position themselves as leaders in sustainability and traceability, gaining competitive differentiation in a global market increasingly driven by ESG and green procurement criteria.
- Lifecycle data provides important information for retrofitting, maintenance planning, and investment in modular and zero-emission technologies, lowering risks and unlocking new financing opportunities.

In a nutshell, by documenting component reuse potential, hazardous materials, and recycling options, these passports support reuse, refurbishment, remanufacturing, and material recovery, going beyond recycling and aligning with the 9R frameworks and the upper tiers of the EU Waste Hierarchy.

### **2. Shipyard Environmental Performance Index (SEPI)**

The second objective of the project COL is the development of a Shipyard Environmental Performance Index (SEPI). This tool provides a standardised framework for shipyards, whether in new builds, repairs, or end-of-life operations, to assess and identify hotspot, refine measurement, report and improve their environmental footprint. It integrates stakeholder requirements gathered through user stories and workshops,



ensuring relevance across the maritime value chain, from shipowners and shipyards to equipment suppliers and classification societies.

Once finalised and validated, SEPI will enable widespread benchmarking and supporting environmentally responsible practices across the industry. Among SEPI's benefits to the EU maritime sector:

- SEPI offers a digital, harmonised, data-driven tool to evaluate environmental impacts (e.g. emissions, energy use, waste management, material recovery rates) across shipyards, boosting trust among clients and regulators.
- Using a shipyard with high SEPI scores enables shipowners to showcase low-impact shipbuilding, retrofitting, or repair activities; strengthens their green brand and decarbonisation roadmap; improves access to green finance and subsidies tied to sustainability KPIs; and reduces reputational and operational risks related to pollution, waste, and resource use, especially in ship recycling.
- By linking SEPI ratings to clear decision-making incentives, public procurement, or access to EU funding, shipyards are encouraged to adopt Best Available Techniques (BATs) and go beyond minimum compliance.
- By driving internal process improvements and identifying emission hotspots, SEPI supports targeted investments in clean technologies and workforce upskilling, thereby advancing the green and digital transformation of the maritime sector, revitalising local economies, and creating sustainable job opportunities that embed shipyards at the heart of thriving regional ecosystems.

As sustainability performance becomes a commercial differentiator in international contracts, SEPI can help EU shipyards compete on value and responsibility, not just cost.

### **Coherence with EU policies**

To maximise impact, digital, circular, and performance-based solutions such as the one proposed by COL should be explicitly referenced in the EU Maritime Industrial Strategy, helping to signal market direction, stimulate stakeholder investment, and accelerate their uptake as part of the Strategy's digitalisation, sustainability, and competitiveness pillars.

The concepts of SEPI, SLP and SCMP are anchored in existing EU legislation and initiatives, including the Circular Economy Action Plan, the Ecodesign for Sustainable Product Regulation/Digital Product Passport, the Industrial Emissions Directive, the Waste Shipment Regulation, and the Ship Recycling Regulation.

Funding innovation programmes, such as Horizon Europe, support the development and uptake of such tools to boost the competitiveness and decarbonisation of the EU maritime industry.

## Way Forward

The COL consortium strongly supports the Commission's efforts to revitalise the EU maritime industrial base. We urge the inclusion of clear references to digital and performance-based solutions such as the SLP, SCMP, and the SEPI as pillars of this strategy. Green Marine Europe, as the environmental certification programme part of COL, with its rigorous and transparent process of self-evaluation and verification, will constitute the legacy of that collective work. This will be added to its method of evaluation and criteria.

The COL consortium is developing these concepts to:

- Boost industrial competitiveness and innovation while easing compliance with EU maritime and environmental standards;
- Enhance business decision-making regarding environmental performance and circularity;
- Support resilience, transparency, and skilled employment across the maritime ecosystem.

In this respect, the COL consortium recommends developing a comprehensive legal framework for ship lifecycle management under the upcoming EU Circular Economy Act and through the improvement of the EU Ship Recycling Regulation to reduce operational and recycling expenses over the ships' lifetime. This should encompass all lifecycle stages, from efficient design and sustainable material sourcing to the safe, environmentally sound dismantling, waste treatment, and recycling of materials, providing valuable resources to Europe. This framework should be supported by a dedicated financial instrument.

We are available to provide further technical input from the COL project to support the Commission's work.

The following organisations participate CirclesOfLife: Damen, BALance Technology Consulting GmbH, Center of Maritime Technologies GmbH, Green Marine Europe, Netherlands Maritime Technology Foundation, Flensburger Schiffbau-Gesellschaft & Nobiskrug, Bureau Veritas M&O, VTT Technical Research Centre of Finland, Delft University of Technology, NGO Shipbreaking Platform, University of Genoa, GALLOO, SEA Europe, ERIKS.

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