

UPCOMING EU CIRCULAR ECONOMY ACT

SEA EUROPE RECOMMENDATIONS

Executive summary

The European Commission's Circular Economy Act aims to boost demand for secondary materials and create a unified waste market, focusing on critical raw materials. This initiative is crucial for the maritime technology industry, particularly in shipbuilding, maintenance, repair, conversion, and dismantling. SEA Europe advocates for a life-cycle approach to ships, supported by regulatory, competitiveness, and financial measures, to enhance sustainability, innovation, and market resilience in European shipbuilding.

European shipyards face stiff competition from subsidized Asian counterparts, leading to a decline in market share and capacity. To counter this, the EU needs to shift the competitive landscape towards non-price factors like technological innovation, operational efficiency, resilience, and life-cycle value. The Circular Economy Act, along with the FuelEU Maritime Regulation and European Ship Recycling Regulation, should establish comprehensive framework conditions for ship lifecycle management, enhancing the competitiveness of European shipyards and maritime equipment manufacturers.

1. Context and objectives

The European Commission has announced a **Circular Economy Act**, aimed at fostering market demand for secondary materials and creating a unified market for waste, with a particular focus on critical raw materials. This initiative holds significant relevance for the maritime technology industry, particularly in the areas of **shipbuilding, ship maintenance, repair, and conversion (SMRC) and ship dismantling**.

The forthcoming Circular Economy Act presents an opportunity to advocate for a **life-cycle approach to ships**, supported by a comprehensive package of regulatory, competitiveness and financial measures. The goal is to **leverage the circular economy as a competitive advantage** for European shipbuilding, SMRC, and maritime equipment manufacturing. This can strengthen the global position of the European industry by enhancing sustainability, technological innovation, and market resilience.

2. Problem definition

European and International Maritime Organization (IMO) policies have set a course towards decarbonizing maritime transport, generating a **robust market for both new ships and retrofitted ships**. However, European shipyards face stiff competition from Asia, where government support and subsidies give their shipbuilding industries a significant advantage. As a result, Europe has gradually lost a significant share of the global shipbuilding market, including its entire large cargo market. Currently, European shipyards specialize in the production of short sea shipping vessels, complex, high-tech ships, and in maritime equipment. However, Asian competitors are aggressively moving into these markets, further eroding Europe's share.

This decline in market share has reduced shipbuilding and retrofit capacity across Europe, perpetuating a cycle of decline and solidifying Asian dominance in shipbuilding. This dominance presents a strategic

risk for European shipowners, as it increases their reliance on Asian suppliers, gradually undermining the resilience of the European maritime sector.

In the current market, shipbuilding and retrofitting are predominantly cost-driven, putting European yards at a disadvantage compared to heavily subsidized and more cost-efficient Asian competitors. To reverse this trend, European shipyards need EU policy action to shift the competitive landscape toward **non-price factors**, such as:

- **Technological innovation:** Leading in sustainability and digitalization.
- **Operational efficiency:** Reducing long-term operational costs for shipowners.
- **Resilience:** Minimizing the hidden strategic costs of over-reliance on a few suppliers.
- **Life-cycle value:** Offering greater certainty throughout a ship's life span, from construction to dismantling.

The EU's Circular Economy Act can play a pivotal role in emphasizing these non-price factors, thereby enhancing the attractiveness of European shipyards and increasing their market share and capacity.

3. Policy recommendations to the EU

The FuelEU Maritime Regulation, set to take effect in 2025, establishes targets to gradually reduce the greenhouse gas intensity of fuels used in maritime transport and promotes renewable, low-carbon fuels and clean energy technologies for ships. In addition, the European Ship Recycling Regulation lays down requirements that ships and recycling facilities must fulfil to make sure that ship recycling takes place in an environmentally sound and safe manner. The Circular Economy Act should complement these regulations by **establishing framework conditions for new build, retrofit, maintenance, repair, and dismantling operations for all vessels and platforms** calling at European ports, regardless of their flag.

The framework should include the following principles:

A. Regulatory and competitiveness measures and principle of lifecycle approach

1. **Require ships to undergo a predefined list of operations throughout their lifecycle, such as specific maintenance tasks, as a condition for accessing European ports, while harmonizing requirements on documentation of material passports, inventory of hazardous materials, and administration of substances of concern.**
 - Core element to be considered is a mandatory **Digital Ship Passport**¹ promoting the reuse and recycling of components, reducing waste and fostering a circular economy within the wider maritime industry, in line with the Ecodesign for Sustainable Products Regulation (ESPR²) aiming at improving product sustainability by enhancing circularity, energy performance, recyclability, and durability.

¹ E.g. the Cradle to Cradle Ship Passport, as currently developed by the Circles of Live project (Funding from the European Union's Horizon Europe Research and Innovation Programme under grant agreement No 101138013)

² A key component of the ESPR is the **Digital Product Passport** (DPP), which contains relevant information to support sustainability and circularity for each component and material. Lifecycle Assessment (LCA) reporting at the ship level, covering the entire lifecycle, will highlight the use of recycled content and provide owners with necessary information for compliance with the Corporate Sustainability Reporting Directive (CSRD).

In this respect, the feasibility and opportunity of imposing a **'recycling content'** of the maritime equipment and certain segments of ships visiting EU ports should be considered, with the aim of circularity while promoting the competitiveness of the European market.

- Whilst the FuelEU Maritime Regulation and the European Ship Recycling Regulation have respectively ships above 5000 GT and 500 GT in scope, a **ship's threshold under 500 GT** should be considered for a full and coherent lifecycle approach at European level.
2. **Establish unified regulatory standards for retrofit, maintenance, repair, and dismantling operations under the Digital Ship Passport across the maritime sector, in conjunction with classification societies.**
 - The unified regulatory standards should encompass the **procedure for selecting the shipyards, equipment suppliers, and dismantling facilities** certified for the above-mentioned lifecycle operations under the Digital Ship Passport. Selection should be based on transparent criteria, including technological capability, resilience (with local content requirements for specific strategic markets), and working conditions.
 3. **Establish and facilitate a unified market for waste to increase the value of waste from both shipyards and dismantled ships, and create a viable business model for ship recycling.**
 - New business models could entail the European shipbuilders to keep the ownership of the ships and all the materials that compose them and the responsibility for the full lifecycle, with the aim at full circularity while promoting the European market.
 - In a similar approach, a **unified market for second hand equipment** with a certification scheme of remanufactured or refurbished parts can further support the transition to a circular economy.
 - It is crucial that the entire value chain is covered, including both dismantling and the reuse of recycled materials. This will provide a stable **supply of high-value raw materials** (e.g. high grade steel) for the shipbuilding and SMRC industry, aligning with the European Commission's upcoming metals action plan and Advanced Materials Act. There is a need to mature the recycled material supply chain by addressing the restrictions from REACH and the Waste Framework Directive, which may limit access to high-value 'pure' steel because of potential unknown hazardous substances present in the recycled steel.

B. Financial measures

1. **Allocate specific funding, including resources from the upcoming EU Competitiveness Fund, to modernize shipyards and their supply chains toward circular models.**
2. **Incorporate circularity transparency for the maritime sector throughout the Green Taxonomy and the Corporate Sustainability Reporting Directive.**
 - Key objective is to incentivize shipowners engaging in lifecycle approaches, offering benefits like improved ESG rankings and easier access to private and public financing. Working with a **certified circular European supply chain** should be regarded as the gold standard.

- Making **access to some EU incentives or funding conditional upon the achievement of targets of recycling content for newbuilds or rebuilds**. In this respect, creating a reverse supply chain in Europe should ensure that used products can be sent back to suppliers. This allows for remanufacturing parts, which produces fewer emissions, and recycling steel, which helps reduce carbon emissions in the European steel industry.
- 3. **As part of the Competitiveness Fund, establish a financial instrument linked to the EU Ship Recycling Regulation: laying the ground for incentivizing the dismantling of ships at EU-approved facilities (the "EU List of Approved Facilities").**
- Shipowners conducting circular operations and dismantling their ships in EU approved facilities should benefit from **lower insurance premium**, or any other benefits.

These measures aim to **establish a strong business case for ship lifecycle management in Europe**, starting from newbuild and including fully automated, efficient, safe, health and environmentally sound ships dismantling and waste treatment downstream management, positioning Europe as a frontrunner in this market and ultimately enhancing the competitiveness of European shipyards, maritime equipment manufacturers, and shipowners. **That business case should be profitable for both the shipbuilding supply chain and shipowners.**

The implementation of strong business cases should be addressed by an industrial alliance, such the Industrial Alliance for the Blue Economy Value Chain proposed by SEA Europe.

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Background note:

SEA Europe represents close to 100% of the European shipbuilding industry in 17 nations, encompassing the production, maintenance, repair, 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, and services. As an NGO observer at the International Maritime Organisation (IMO), CESA represents the shipbuilding industry and its supply chain from EU Member States, Norway, and Turkey. For further information please visit www.seaeurope.eu or contact: ct@seaeurope.eu