



POLICY BRIEF

End-of-Life-Boats
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WHAT IS AN ELB?

End-of-Life Boat is a boat that is no longer useful for its main activity or when the owner has decided to dispose of the boat or has abandoned the boat.¹

THE PROBLEM?

Mass production of boats manufactured of other materials than wood and metal was started in the 1970s. Now, fifty years later, these early materials are facing the end of their lifespan at the latest and are becoming an environmental issue in regard to littering.

Boats that create the biggest challenge are made of Fiber Reinforced Plastic, FRP. FRP is a composite material made of plastic polymer matrix reinforced with fibers of other materials such as glass, carbon or basalt.

An old boat has little or no monetary value, and this may tempt to abandon the boat to boatyard, scuttle it in the sea, or on land somewhere, as proper disposal usually costs more than the boat is worth of.

¹ EU Commission, Assessment of the impact of business development improvements around nautical tourism, 2016

ANTIFOULING PAINTS – ADDING TO THE PROBLEM

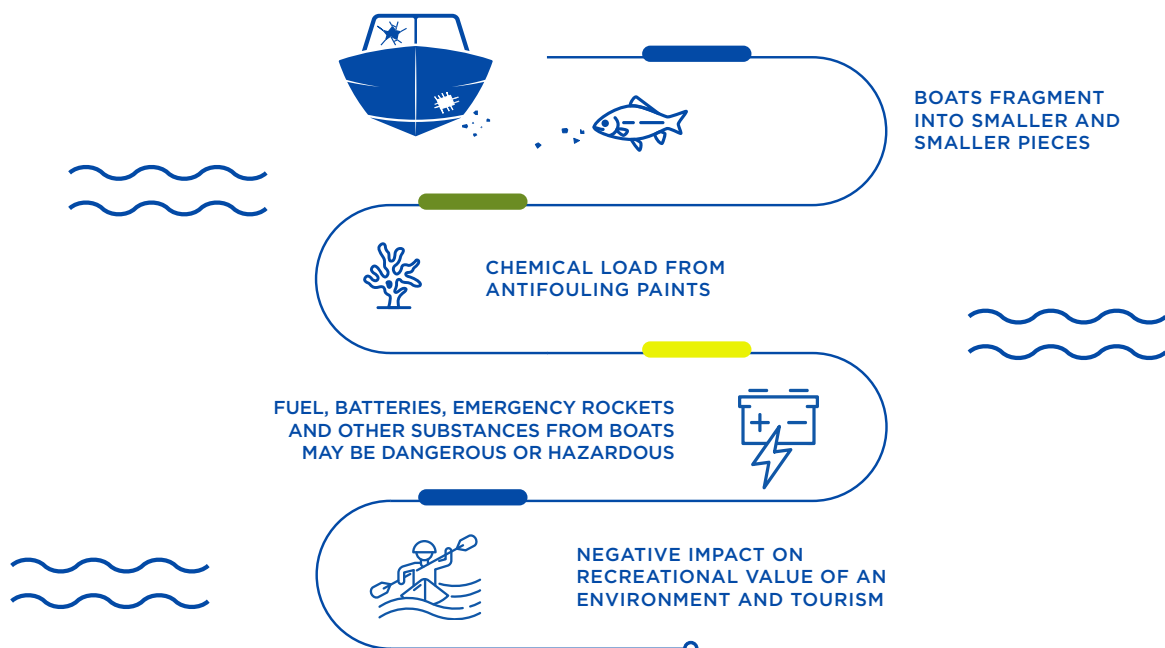
There may still be traces of toxic antifouling paints present in old boats. Copper (Cu) and zinc (Zn) are the active biocide components in the antifouling paints on the market today, while in the past also organotin compounds such as tributyltin (TBT) and triphenyltin (TPT) were used.

The use of TBT in recreational boats was forbidden in 1989. A global ban for all ships to use TBT was introduced as late as in 2008. Due to the past use of organotins in the antifouling paints, there may still be layers and traces of it in recreational boats, which are in need of disposal today.

WHY IS THIS AN ISSUE FROM THE PERSPECTIVE OF THE BALTIC SEA?

Boats that need to be disposed of, but are not disposed of properly, are a threat to the marine environment, but they may also have economic impacts:

1. Abandoned boats fragment slowly during time into smaller and smaller pieces, which may potentially enter coastal chain.
2. The boat can contain fuel, batteries, emergency rockets and other substances that are directly dangerous if they come out in an uncontrolled situation.
3. Leaching of the remains of antifouling paints increase the chemical load both on land and in the sea.
4. Abandoned boats lower the recreational value of an environment and may thus have negative impact on tourism as well as the well-being of local inhabitants.



NUMBER OF BOATS?

There are approximately 6 - 6,5 million boats in the EU (pre -Brexit/EU28), of which 95% are less than 12 meters in length.² Approximately 45% of all recreational boats in the EU are in HELCOM countries (excluding Russia).³

COUNTRY	NUMBER OF BOATS	PERCENTAGE OF ALL BOATS	SOURCE	YEAR	BOAT REGISTER IN THE COUNTRY (Y/N)
Finland	1 157 500	40	ICOMIA	2017	Y
Sweden	754 300	26	ICOMIA	2015	N
Germany	480 000	16	ICOMIA	2016	N/A
Denmark	400 000	14	TrygFonde	2010	Y
Poland	77 364	3	ICOMIA	2017	Y
Estonia	29 097	1	Traffic Register	2018	Y
Lithuania	21 371	1	Inland Watercraft Register of the Republic of Lithuania	2018	Y
Latvia	643	0	Maritime administration of Latvia	2017	Y
Russia	N/A				N/A
Total	2 920 275	100			

BOAT REGISTRIES

It is often difficult and sometimes impossible to identify the owner of an abandoned boat. Especially in the case of abandoned ELB's. This problem could partly be avoided by having boat registries on national level.

Boat registries are in operation, with different national nuances, at least in Denmark, Finland, Estonia, Latvia, Lithuania and Poland. It would serve the purpose to have all national boat registries to adapt the qualifications from Dir. 2013/53/EU, to ensure harmonization of the registries.

² EU Commission, Assessment of the impact of business development improvements around nautical tourism, 2016

³ Development of best practice on the disposal of old pleasure boats, 2016



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AFTER-LIFE OF AN (FRP) BOAT

When a boat has reached its end-of-life and is removed from its original use and eventually will be scrapped, the boat needs to be depolluted and dismantled from such parts that can be reused or recycled.

These types of parts usually are engine, batteries, electronic appliances which have not been sold by the owner prior to recycling, and sails. The market for these items is at the moment nearly non-existent. After these measures and the possible paint removal from hull are completed, the boat is ready to be scrapped.

After the hull has been scrapped there are a few options what to do with the FRP material:

- 1. LANDFILLING** – In those countries where landfilling is still possible, this option may be used. Landfilling of materials consisting of organic material is regulated in Council Directive 1999/31/EC. So far, landfilling with FRP has been restricted in at least the following HELCOM countries: Germany, Sweden, Finland and Denmark.⁴
- 2. ENERGY RECOVERY AND USE IN CEMENT MANUFACTURING**
- 3. RECYCLING** – Used FRP is a challenging material to recycle. Some promising efforts have been made by private companies, such as Conenor and Stena Recycling. They make hollow composite decking boards, with 1/3 of the material being FRP-waste. Another example is the company "Miljøskærm", which makes traffic shields/noise barriers.

⁴ Plastics Europe, 2019

WAY FORWARD

The problem of ELBs is growing and thus needs rapid solutions. These rapid solutions require joint efforts from boaters, boating industry and individual countries. All need to play their part in order to avoid the situation not being taken care of properly.

So far, the cost of dismantling the boat has fallen on the boater and/or the society. Their contributions are needed in the future too, and the boating industry needs to start giving contribution.

SUGGESTIONS FOR SOLUTIONS

- 1.** The waste management of ELBs needs to be clarified, including potential financial arrangements (e.g. producer's responsibility, eco-fee for registered boat). The applicable collection, transport and management methods (especially for hazardous waste) need to be explored. The development of recycling opportunities as well as the impacts of different financial options to the economic sector of boating industry should be explored.
- 2.** Implementation of national voluntary green deal agreements with the aim of including FRP ELBs into standard waste collection system. The voluntary agreement could be formed with the interest groups of the manufacturers and importers of new boats, possibly including also municipalities. Within such an agreement, the opportunities for developing ELB management and recycling methodologies can be investigated, and the waste management systems developed.
- 3.** Develop awareness raising campaigns on the issue together with relevant actors on the EU level, such as European Boating Association (EBA) and European Boating Industry (EBI). The campaigns are to be implemented on national level through respective national organisation.

