RECYCLABLE STRUCTURAL COMPOSITES FOR MARINE RENEWABLE ENERGY

Research question?

In the marine environment:
• metals corrode
• wood rots
• composites survive

Can we make a sustainable composite structure that is not a problem at end-of-life?

University of Plymouth research activities

Manufacture by monomer infusion under flexible tooling (MIFT)
- natural fibre reinforcement
- acrylic (PMMA) or polylactic acid (PLA) matrix

Demonstrator component ... to be decided/informed by you?

Life Cycle Assessment (LCA) using SimPro software

keep in touch:
http://www.seabiocomp.eu/interest_group/

GOALS

Drive for innovation in new composite materials

Reduce the environmental impact of composite maritime industry components

Evaluate durability and long-term ecological impact from microplastics

http://www.seabiocomp.eu/

The University of Plymouth Team

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