Sustainable, safe and environmental friendly technologies and infrastructures for sea transportation of passengers and freight.
Research at the University of Bologna covers a wide range of issues:

- Naval Engineering including eco-development in engineering design process, shipbuilding, maintenance, and operation of marine vessels and structures
- Nautical design and drones based on innovative materials to reduce weight and improve performances
- Marine shipbuilding and manufacturing supporting the complex marine structures for the most challenging applications
- Assessment of safety and environmental aspects of alternative technologies for ship propulsion
- Safety of LNG supply chain for ship propulsion and port machinery fueling
- Design of port areas, focusing on innovative design of breakwaters docks, quays or harbor furnishings
- Environmental effects of ports and their activities, their habitability, and mitigation
- Development of novel eco-engineering designs and technologies for functional, aesthetic and recreational port infrastructures
- Water quality in marina modelling and assessment in the marinas, harbors and sea
- International, European and national legislation on environmental protection for port activities and maritime transport
- Analysis of the legal aspects related to the use of new eco-technologies and new energy efficiency solutions in the transport field

**HIGHLIGHTS**

The University of Bologna research, efficient networking and training has been funded at International and European level through different funding programs.

Interreg ADRION – V-B Adriatic Ionian - **SUPER-LNG** – Sustainability Performance of LNG-based maritime mobility.

**Australian Research Council Linkage Projects** - Marine urban sprawl: Using ecology to design multifunctional artificial structures.

FP7 – **MarUrbe** – Sustainable Urban Development: solutions to promote the biological and conservation value of marine urban structures.

LIFE **Marina Plan Plus** - reliable and innovative technology for the realization of a sustainable marine and coastal seabed management plan.