

FIBRE composite manufacturing technologies FOR the automation and modular construction in shipYARDS



CONCEPT

Today, Fibre-Reinforced Polymers (FRP) materials are extensively used for building lightweight hull structures of vessels with length up to about 25 m. FRP are also used for even larger lengths of up to 50 m, not exceeding this length due to the restriction of IMO-SOLAS (<500GT). In fact, most of the leisure craft and sailing yachts, small naval ships, patrol and rescue vessels below 25 m length are built with FRP materials.

However, the production capacity in numbers of FRP ships does not achieve its full potential due to high total production costs. One of the main reasons for this limitation is the lack of automated procedures, and the current semi-artisanal methods used in FRP shipbuilding.



MAIN OBJECTIVES

The main objective of **FIBRE4YARDS** is to maintain European global leadership in ship building and ship maintenance, through implementation of the Shipyard 4.0 concept.

FIBRE4YARDS focuses on the entire value chain of the shipyards and their ecosystem, cooperatively working on small and medium length fibre-based ships in a digital environment.



Introduce smart and secure engineering, manufacturing and data sharing concepts in ship production



Embed advanced and highly automated FRP production technologies in the Shipyard 4.0 while applying these technologies in ship production, maintenance and dismantling



Develop and validate new digitalised engineering and analysis simulation solutions to support modular ship design and construction in the Shipyard 4.0 concept

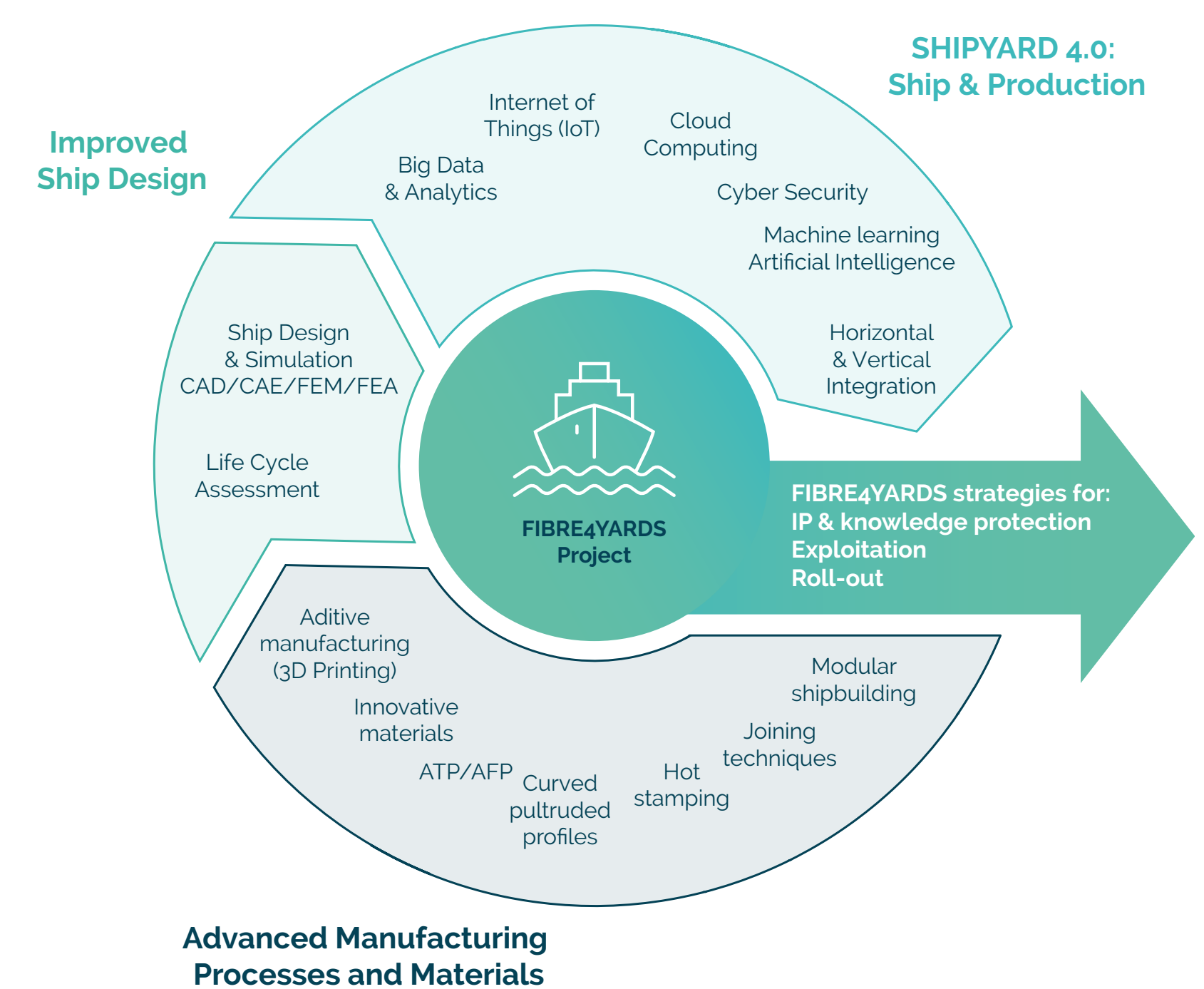


Facilitate industrial deployment of the FRP Shipyard 4.0 by providing guidelines for design, production, certification, and staff training

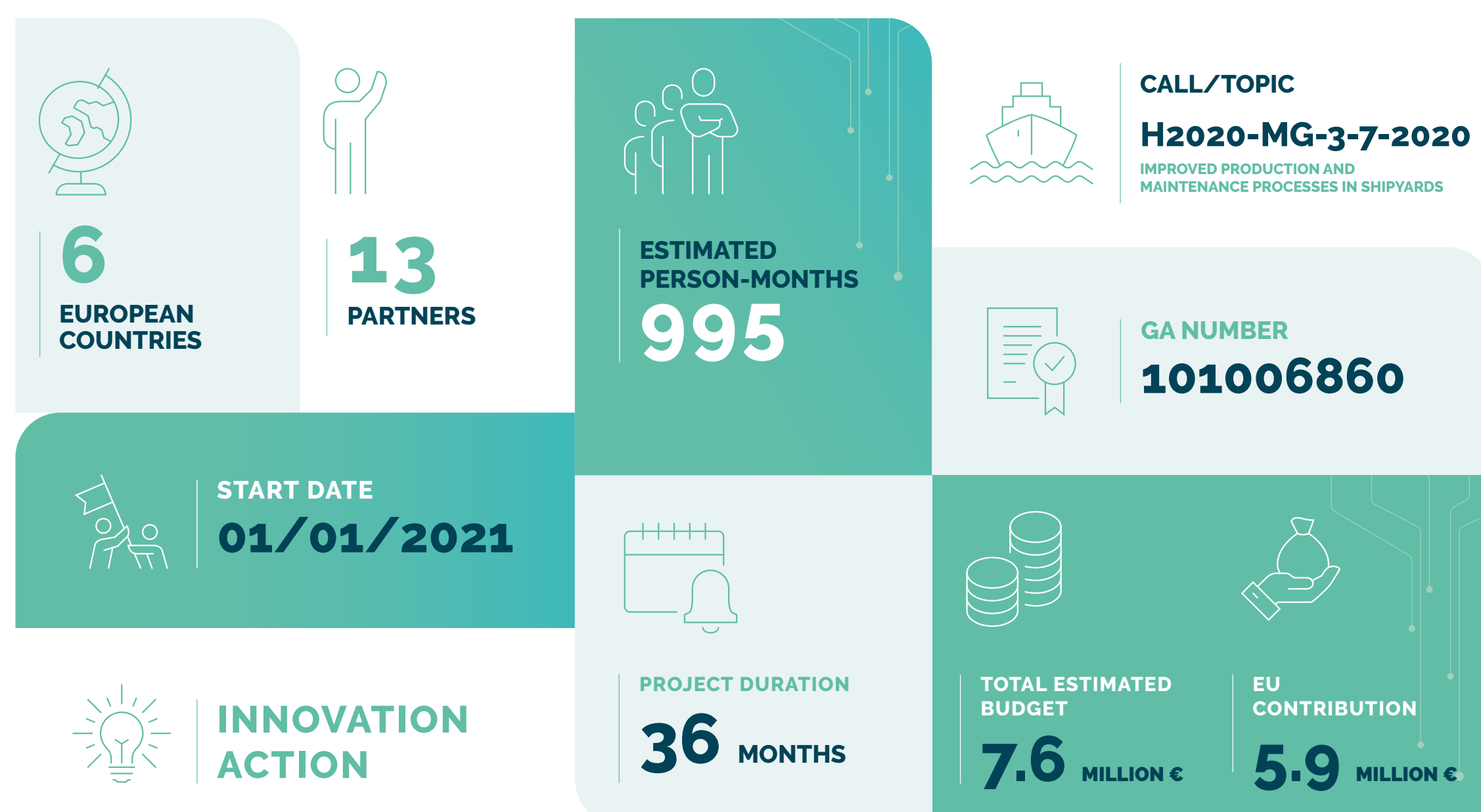


Develop business plans and Intellectual Property Rights (IPR) strategies for shipyards

FIBRE4YARDS CONCEPT AND ITS UNDERPINNING TECHNOLOGIES



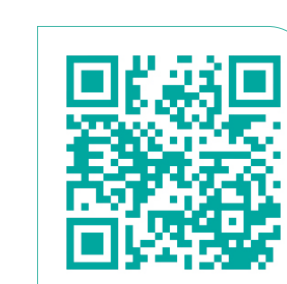
IN A NUTSHELL



CONSORTIUM



WEBSITE & SOCIAL MEDIA



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