

## **Future Ocean Innovation Hub (National Centre for Marine Technology)**

The South West UK is a natural location for maritime and marine business and innovation. The Maritime UK SW and the Great South West initiatives highlight this national strength across Dorset, Somerset, Devon and Cornwall. To ensure that the growth prospects of this sector are fully supported, a working group from industry, academia and government has developed a proposal for the '**Future Ocean Innovation Hub**' – an initiative for the UK to help determine the future of the oceans and develop tomorrow's marine technology specifically autonomous and digital systems, clean propulsion and future cyber-secure Smart Ports.

The marine and maritime sector is already one of Britain's biggest industries, supporting just over £47 billion in business turnover, £17 billion in direct GVA and 1,066,000 supported jobs for UK employees in 2017 (The state of the Maritime Nation 2019, Maritime UK), and all evidence shows that the sector will experience further growth, with the blue economy projected to double in size to \$3 trillion by 2030 (Foresight Future of the Sea, 2018).

The Government Office for Science identified that "**Autonomy is likely to be the single most important marine technological development**" (Foresight Future of the Sea: Industry Perspectives on Emerging Technology, 2017), and there is an estimated global market of \$136 billion for marine autonomy over the next 15 years. Maritime 2050 set the goal that "**the UK will be a world-leader in the design, manufacture, uptake, and use of maritime autonomy and other innovative ship-board technologies**". Carbon Zero is also driving rapid roll out of Floating Wind and alternative propulsion for shipping against targets in the Government's Clean Maritime Plan, and the new technology foundation required for Smart Ports, as we move towards integrating smart ships with digital rail and road are providing further opportunities.

South West UK has a key role to play in the development of solutions for these pressing drivers, and areas of focus for the Future Ocean Innovation Hub will include:

1. Marine Autonomy, Seabed Mapping and Geospatial Data
2. Marine Clean Propulsion
3. Smart Marine Technology to support Offshore Renewable Energy
4. Smart Ports and Intermodal Connectivity
5. Marine Science and Aquaculture - sustainable ocean economy

**The Future Ocean Innovation Hub ambition** establish deliberate projects and programmes to strengthen capability and skills, building on pre-existing knowledge and facilities in these technology areas. Our ambition is to raise the profile of the work already underway in the South West and to use 2020/21 time period to super-charge this growth.

This sector has the potential to enable cross Government and regional collaboration to develop and attract high value jobs, increase productivity and economic activity. In an international context, it will boost collaboration with other leading Marine and Maritime Clusters around the world, allowing the South West to more effectively combine its specialisations, with others leading in other, complementary areas to drive the development of solutions for the rapidly growing, global ocean economy.

