H2OCEAN DEVELOPMENT OF A WIND-WAVE POWER OPEN-SEA PLATFORM EQUIPPED FOR HYDROGEN GENERATION WITH SUPPORT FOR MULTIPLE USERS OF ENERGY.

WELCOME TO H2OCEAN

Oceans offer good opportunities for sustainable economic development. More and more, energy, fisheries and transport infrastructures are being established offshore. However, this growing demand for maritime transport, resource extraction, offshore energy, fisheries and aquaculture, is threatening marine ecosystems and sustainable maritime activities.

The rational exploitation of ocean space and resources is seen as crucial to enhance European competitiveness in key areas such as renewable energy and aquaculture. In particular, offshore platforms that can combine many functions within the same infrastructure could offer significant benefits in terms of economics, optimising spatial planning and minimising the impact on the environment.

H2OCEAN is a project aimed at developing an innovative design for an economically and environmentally sustainable multi-use open-sea platform. Wind and wave power will be harvested and part of the energy will be used for multiple applications on-site, including the conversion of energy into hydrogen that can be stored and shipped to shore as green energy carrier and a multi-trophic aquaculture farm.

Figure 35. H2OCEAN Website