



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 785921.

An advanced open source suite of tools for the selection, development, deployment and assessment of tidal and wave energy systems

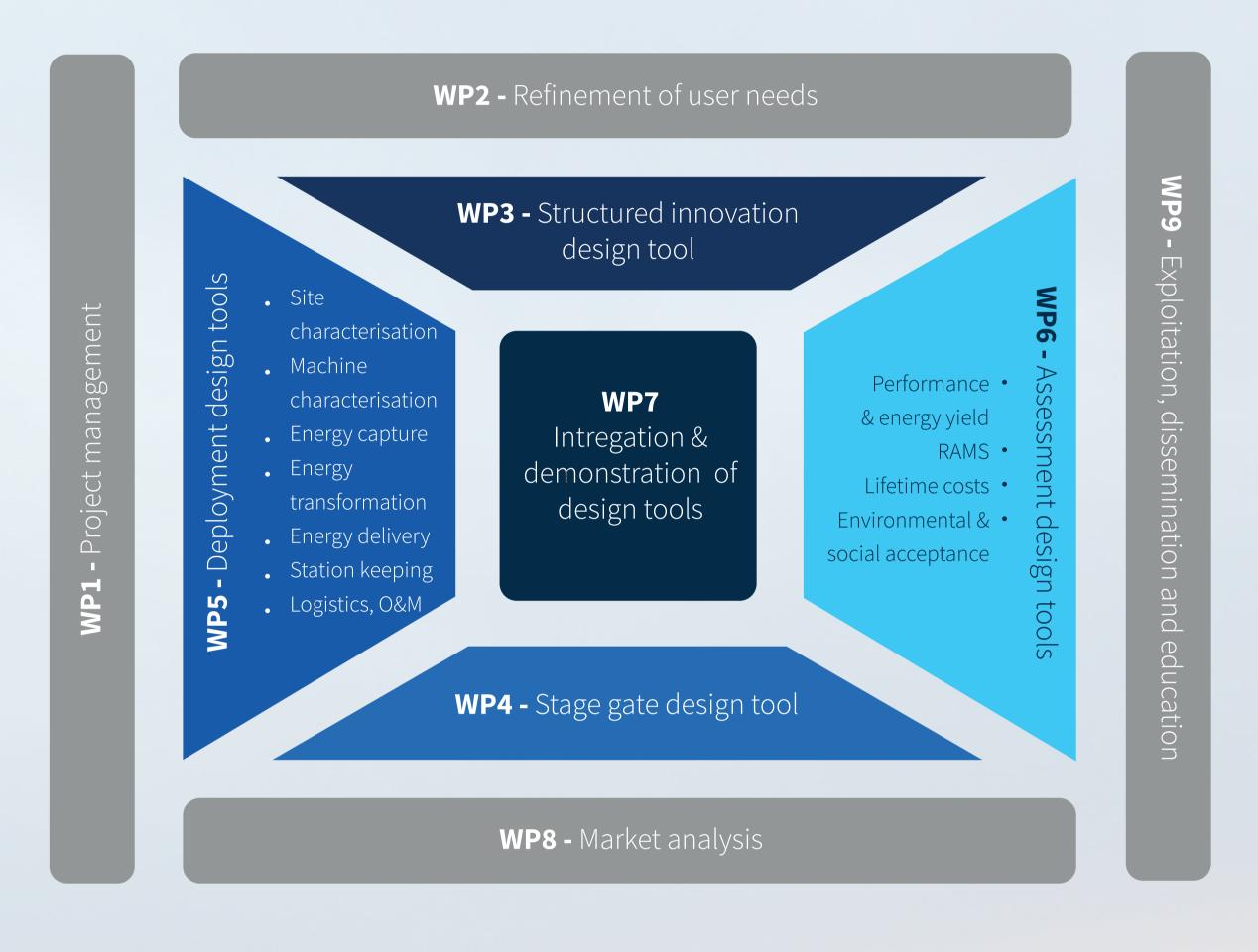


Description

This 3-year project (May 2018 – April 2021) with a total budget of 8 million euros, will continue the development of DTOcean which produced a first generation of freely available, open-source design tools for wave and tidal energy arrays.



Structure





Objectives

- support the entire technology innovation process, from concept to deployment.
- >- To propose advanced design tools for **sub**systems, energy capture devices and arrays.
- >- To bring tools to TRL6 by demonstration scenarios in real world cases.
- >- To make freely available tools as open source to the entire ocean energy sector.
- >- To develop an integrated suite of tools that will be a professional user-friendly product.



Results

- >- Structured innovation design tool
- >- Stage gate design tool
- >- Deployment design tools

7 modules: Site characterisation,

Machine characterisation, Energy capture, Energy transformation, Energy delivery, Stationkeeping, Logistics and O&M



4 modules: Performance & Energy Yield, RAMS, Lifetime Costs, Environmental and Acceptance

































STAGE GATE TOOL

Development

ASSESSMEN'

TOOLS

Underlying **DIGITAL MODELS**

& GLOBAL DATABASE