

OceanSET is a 3-year H2020 project with a total budget of 1 million euros which is focussed on providing support to the ocean energy implementation plan of the European Strategic Energy Technology Plan (SET Plan).

Data gathering for ocean energy sector

The principle aim of the OceanSET project is to give support to the activities of the SET-Plan Implementation Working Group on ocean energy to identify a development path towards commercially viable wave and tidal technologies. By gathering data across all Member States, the project will help to track progress of the ocean energy sector and help shape appropriate supports for the future development of the industry.

OceanSET focuses on three key areas of data collection:

- **Technical** – Data is collected on all technologies supported at all TRL levels; additional focus is given to technologies higher than TRL 7;
- **Financial** – Data is collected on all grant and investment supports being provided by Member States and the Commission;
- **Environmental** – Data is collected on environmental and consenting requirements.

Data is gathered from stakeholders such as funding agencies and developers, through questionnaires sent to Member States and Region representatives on an annual basis. The first monitoring exercise is now under way with the first part (Survey 1) aiming to gather high-level mapping of current ocean energy activities and a second part (Survey 2) devoted to gathering details on more advanced technologies. This second survey includes measures of technical maturity aligned with stage gate metrics, enabling tracking the progression towards recognised ocean energy targets.

Data will be gathered through an annual survey and will be available at: oceanset.eu/documentation/public-delivrables.

Pre-commercial procurement (PCP)

OceanSET is developing a cross-border collaborative model for wave energy technology development based on PCP principles, fulfilling one of the financial actions in the SET-Plan. The proposed model is based on Wave Energy Scotland's wave energy technology development programme, adapted to reflect the pan-European multi-partner nature of the purchasing body.

The technological aspects considered to be hindering commercialisation, and which would benefit from concerted and focussed public support for R&D, have been assessed to identify priority technology areas which focus on device sub-systems, system integration and logistics. Regardless of the technological aspect, a learning by doing at a meaningful scale approach is consistently stated as being essential. This is compatible with ambitions and priorities of Member States and Regions. **The overarching common challenge of a**

European PCP programme for wave energy technology should be the development of technically and economically viable wave energy converters. This challenge is best addressed through sub-challenges focusing on subsystem development, system integration and logistics.

An approach to funding a cross-border multi-partner joint PCP action has been proposed to encourage the widest possible participation of Member States and Regions and to maximise the use of their available funding whilst complying with the EU PCP model.

Ongoing work is designing the PCP calls, adding greater detail to the priority technology areas, the phases of development that will be addressed with the PCP programmes, and, relevant metrics for evaluating progress and identifying successful technology.



1st knowledge sharing workshop

The 1st knowledge sharing workshop was held on the 30th of September 2019 alongside the Ocean Energy Europe (OEE) conference in Dublin and was presented by Declan Meally, chair of the SET-Plan for ocean.

The workshop covered 4 areas:

- Technology gaps in wave and tidal stream;
- Financing for effective development;
- Stage gate metrics: the new TRL;
- Transparency on costs.

The event began with an overview of the SET-Plan objectives and key actions concerning ocean energy. The OceanSET project was described and the workshop was used to launch the first OceanSET survey to gather data across all Member States in order to track progress of the ocean energy sector.

The 1st presentation was by Henry Jeffrey (University of Edinburgh) who presented on the technology gaps. A description of the recent work under ETIP OCEAN project was given which focused on the identification of key priority challenge development areas. Challenges and opportunities were plotted to establishing main priorities in wave and tidal development. These will feed into the Strategic Research and Innovation Agenda (SRIA) that will be published in January 2020.

The 2nd presentation was by Tim Hurst (Wave Energy Scotland) who presented the financial challenges faced in different development phases of ocean energy projects. One of the concepts presented was the Pre-Commercial Procurement (PCP) as described above.

The 3rd presentation was by Jonathan Hodges (Wave Energy Scotland) who described stage gate metrics system concepts as well as the efforts made so far towards its effective implementation – like IEA-OES Task 12 and DTOceanPlus.

The 4th presentation was by Gianmaria Sannino (ENEA) who talked about costs, environment and the supply chain. LCOE contributions such as device costs, influence of site resource on energy production, availability of environmental risk assessments, supply chain development, consenting and licensing procedures, were all referred to this presentation.

Discussions focused on the need for setting up common objectives, declining priorities and recommendations and developing toolsets to further support the sector. All presentations are free access to: oceanset.eu/knowledge-sharing-crossview-from-partners.



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Upcoming...

1st OceanSET annual report: April 2020

1st dissemination workshop: Summer 2020



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