



## **Validation of offshore wind forecast for Basque Coastal area.**

I.R. Gelpi (1,2), S. Carreño (1,2), S. Gaztelumendi (1,2), R. Hernandez (1,2), K. Otxoa de Alda (1,2)

(1) TECNALIA - Energy and Environment Division - Meteo Area, Miñano - Alava, Spain, (2) Basque Meteorology Agency (EUSKALMET), Miñano - Alava, Spain

BIMEP (Biscay Marine Energy Platform) is an ocean infrastructure for research, demonstration and operation of wave-energy capturing system on the open sea. Offering services aimed at the acceleration and development of marine energy technologies including the offshore wind sector.

A high resolution forecast system based on a mesoscale numerical model was implemented in BIMEP area with a dual objective. Generate accurate wind data to make wind power and wave energy resource estimation, using this data as regional meteorological forcing for wave forecast models, and generate oceanometeorological forecasts enabling make best planning of maintenance works in order to reduce costs and avoid accidents

A validation study was made to test the skill of the system on wind forecast. The results of the system are validated against the data of a buoy installed in BIMEP area in 2012 year.