



# Caisson OWC site data requirements

## **Minimum data required to assess a wave power site for the application of nearshore OWC technology**

The following information is required for an initial assessment :

- Local bathymetry from nautical chart
- Tidal range
- Scatter diagramme of annual wave climate at a point near to the site
- Distance to a high voltage grid
- Free capacity of local grid (fault level)
- Access for construction and maintenance
- Location of population centres near to site
- Any competition for use of sea space
- Estimate of sea floor condition

## **Additional data, which will be required later for more in-depth site development**

- Wave resource study over a period of at least 5 years which is specific to the chosen site
- Bathymetric survey covering a 1km swathe 1km to seaward and 500m landward
- Site investigation including measurement of sea floor soil or rock quality .
- Information for environmental impact study.

## The ideal site will have

- Incident wave power input  $>20\text{kW/m}$
- Mean water depth of 7.5m
- Tidal Range  $<2\text{m}$
- Rocky sea floor with a minimum of protrusions
- Sea floor with a uniform slope to seaward of  $>1:50$
- No competing sea users
- Close to a stiff high voltage electricity grid
- Close access to port facilities
- Close access to a potential manufacturing site

***Engineered reliability.***