

# Offshore Renewable Energy Assessment Project Lifecycle

AXYS Technologies has 40 years of experience in the development, deployment and maintenance of offshore systems that accurately record and transmit ocean data in near real time, equipping offshore energy developers with the information that they need in order to make sound financial decisions.

#### COMPLETE DATA SETS

AXYS can integrate a wide range of sensors onto a buoy system in order to meet the data needs of the offshore renewable energy sector. Sensor suites can be customized to supply data sets commonly used in this industry including:

- wind speed, direction & gust
- atmospheric pressure
- air temperature
- water temperature
- dissolved oxygen
- conductivity

- wave period and direction
- significant and maximum wave height
- current speed and direction
- relative humidity
- pH
- position (GPS)

AXYS also offers full data hosting and a suite of software data display and management tools.

## Design

- Offshore wind resource assessment
- Wave and tidal energy assessment
- Buoys provide reliable, high-quality data needed for design and contract management

## Construction

• Met ocean and wave buoys monitor the environment during the build of the offshore renewable energy farm

### **Production**

- Met ocean and wave buoys provide data to improve operational effciency
- Regular servicing maintains the farm over time

### **U**PGRADE

- WindSentinel, met ocean and wave buoys assess the environment for the addition of energy converted/wind turbine systems
- Met ocean and wave buoys monitor the environment for safe installation of new systems