

A partnership between the universities of Plymouth and Exeter

A world-class team of academic and technical experts

For more info see: www.primare.org

Research Programmes Knowledge Exchange Engagement Process **Enterprise Solutions** 

**Success Stories** 

## **Research** Programmes







### **Environmental Impact**

Continuous monitoring of seabed and shoreline to assess impact and viability

#### **Resource Characterisation**

Wave and tidal modelling for device design and development

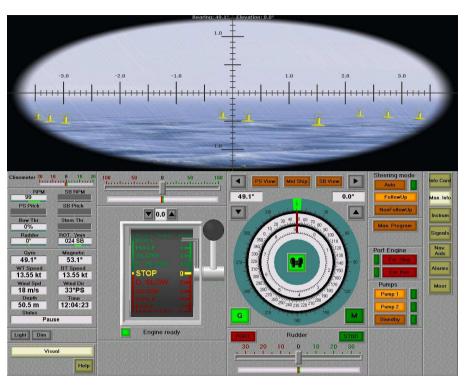
#### **Marine Operations**

Investigation of mooring dynamics for array optimisation

cont...

### **Research** Programmes





#### **Safe & Economic Operations**

Passive and proactive alerting systems for fishing, shipping and leisure users

#### **Marine Electrical Systems**

Reliability and compliance issues from power take-off to grid connection

#### **Socio-Economic Factors**

Improving the investment environment for Marine Renewables

### Knowledge Exchange Team



Rupert Lorraine Leo McLeman Clare Tremlett Neil Crudgington

A dedicated team of 'frontline' knowledge exchange staff

Realising value from PRIMaRE's world-class research and expertise

Supporting the regional business community by:

- Connecting industry with the knowledge base
- Promoting the transfer of knowledge and expertise
- Building relationships between academics and businesses
- Establishing and maintaining an active presence within the networks

### **Modes** of Engagement



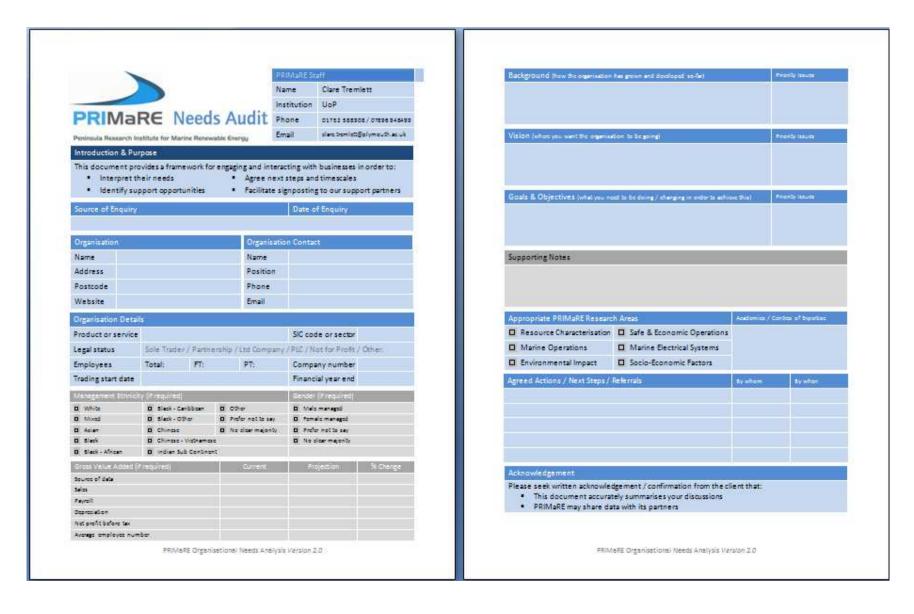
- Enterprises Solutions Service
  - Single telephone number to access University and PRIMaRE
- Attendance at PRIMaRE Seminars/Conferences
  - Regular events to update the research and business community and
- Direct contact
- Regen SW's company directory of Marine and Offshore Wind
- Referrals from Business Link, Regen SW, SWMAS, and other network organisations

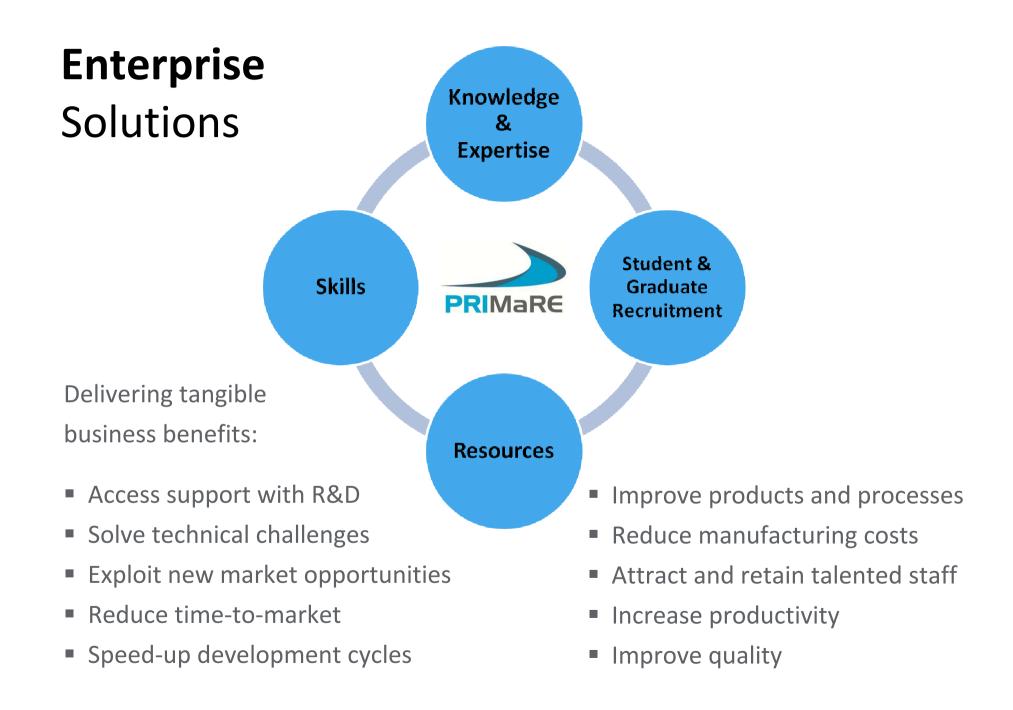


### **Engagement** Process



## **Needs** Analysis Document





## Methods of Knowledge Exchange used in PRIMaRE



- Student projects
- KTP's
- PhD
- Research Collaborations
- PRIMaRE Seminars/Conferences
  - Regular events to update the research and business community and stakeholders
- Presenting at National and International Conferences
- Direct contact
- Collaborations and links with regional/national networks eg Regen SW,
  British Marine Federation, SWMAS, Business Link
- Marketing communications .....

### **How PRIMaRE Fits**





Knowledge **Base** 

- Knowledge & Expertise
- Research
- Facilities & Equipment
- Students & Graduates
- Higher Level Skills & CPD



**Supply Chain Support** 

- Understanding Regional Capability
- Highlighting Business Opportunities
- Encouraging Uptake of Resources
- Producing Company Directories



**Physical Test Facility** 

- Demonstration Site for WEC Arrays
- Grid Connectivity
- Capacity for 30 Devices in 4 Berths
- Online in 2011

#### -South West RDA-

Looking to support the growth of Marine Renewable Energy in the **South West** 

Have commissioned several initiatives, leveraging central finance and additional EU funding through the ERDF **Competitiveness & Convergence Programmes** 













#### **Other Agencies**





























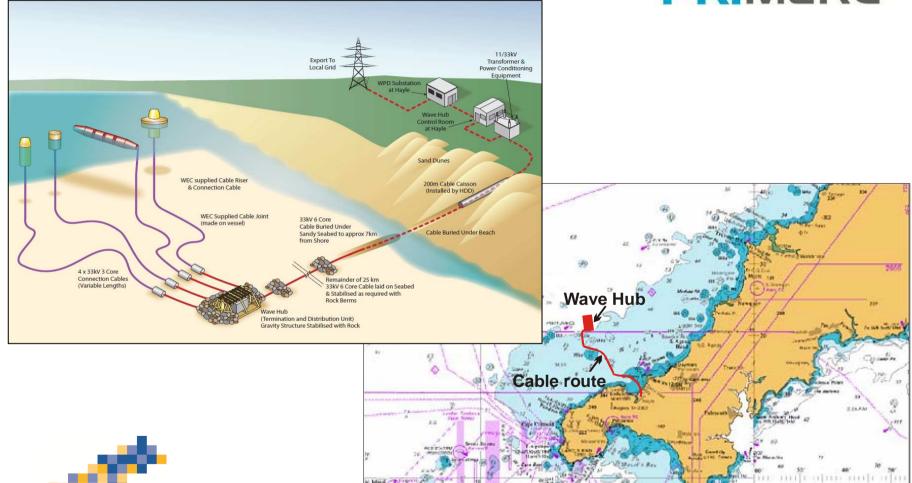






## Wave Hub - Hayle





South West RDA

### **Example** Projects



- CFD modelling of wave device for HydroGen Kinetics
- Student projects with TNEI Services on wave interactions with a Wave Device
- Spot surveying cable route at the Wave Hub for JP Kenny
- Use of Rapid Prototyping to develop concept hull models for a boatbuilding firm
- Potential project to develop a tidal stream energy device in collaboration with another university
- Technical marketing / sales graduate internship for an engineering firm
- In planning new PRIMaRE Business Event June
  With Regen, RDA, BMF and others



# **Any Questions / Comments!**