THE BUSINESS

• A new, focussed business, with expertise in all aspects of offshore renewable energy generation.

• Aims to be a global player in marine energy.

• Established 2004.
• 135 people across the business
• 45% Engineering, 23% project services, 13% site development.
• Delivering a turn-key solution.

KEY FIGURES

- 250 Employees at the end of 2016
- Shareholding distribution:
  - 36% BPI France
  - 55% Naval Group
  - 9% Others
- An estimated turnover of 1 billion € within 10 years
- 8 years of continuing investment in R&D equivalent to €150 millions
Open-Centre Turbine

**Subsea Base**
Foundation to support the turbine on the seabed.

**Slator**
Supports the rotor and connects the turbine to the subsea base foundation.

**Permanent Magnet Generator**
Converts the kinetic energy of the spinning rotor into electricity.

**Bearing System**
Low friction bearings which allow the rotor to spin within the stator.

**Inter Array Cable**
Subsea electrical cable connecting to other turbines and the grid.

**Turbine Control Centre**
Conversion of electricity produced by the turbine into grid compatible electricity.

**Venturi Duct**
Directs flow of water into the turbine.

**Blades**
Extracts energy from the water flow.

**Rotor**
Rotating part of the turbine which includes blades, generator and bearing components.
DEVELOPMENT STRATEGY

Demonstration Projects

• Cape Sharp Tidal – 4 MW demonstration array, Nova Scotia
• Paimpol-Bréhat – 4 MW demonstration array, NW France
• Goto Islands – 2 MW demonstration project, Japan

Commercial Projects

• OpenHydro have an additional portfolio of commercial projects under development with a total capacity in excess of 900 MW in the UK, France, Canada, and Asia.
UK PROJECT OPPORTUNITY

Socio-economic impact

- Opportunity in the UK for **266MW** of OpenHydro deployment by **2030**.
- Field-proven technology and maritime skills are required – cross sectoral skills and experience.
- Delivery of a UK portfolio creates almost **£700m** in investment, two thirds of this in GVA.
- Premium wage rates between 14% and 26% above average in peripheral economies.
- Creating a new industry, **21,000 ftes** with a high percentage of skilled roles and up to 70% permanent jobs for a 20 year period.
WHAT IS REQUIRED TO DELIVER BENEFIT

• Commitment from Government(s).
• Provision of structural funding.
• Motivated and informed supply chain.
• Excellent professional services.
• Regulatory bodies engaged and active.
• Management of collaboration opportunities.
• Improve viability of R&D spend.
• Support revenue models.
• Advance National commercial objectives to spur economic development.
HIGHLIGHTING SOCIO-ECONOMIC BENEFITS

• See this outcome as an important deliverable of a project.
• Bad stakeholder relations costs time / money and adds risk to projects.
• Identification of your key stakeholders and supply chain (who you should be talking to) is critical.
• **Supply chain integration can provide key cost reduction.**
• Highlighting SE benefits will be critical to align with BEIS Industrial Strategy.
• Raise awareness of the **specific** benefits of wave and tidal.
• Spend time on the basics.
HOW CAN ORE SUPERGEN MEET THIS CHALLENGE

• Specific engagement with industry, supply chain and stakeholders.
• Identification of opportunities to promote and develop SE benefits within projects & supply chain.
• Analysis of key issues to reaching full benefits – cost, revenue, clustering.
• Building on existing investment – city deal, test centres, funded projects.
• Dissemination and exploitation – selling the story.