

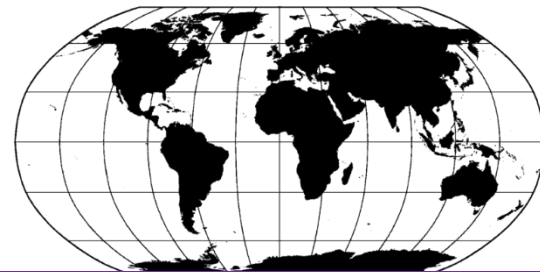
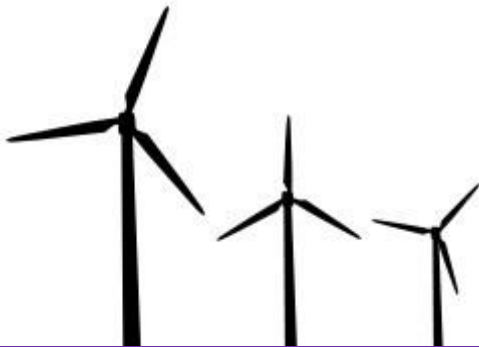
MARLIN

Modular Floating Platform for Offshore Wind

'Global Energy Access for Coastal Communities'

Trevor Hardcastle

BSc MSc MBA CEng CMarEng MIMarEST



Existing Technical Concepts



'Fixed' Foundations



'Floating' Foundations

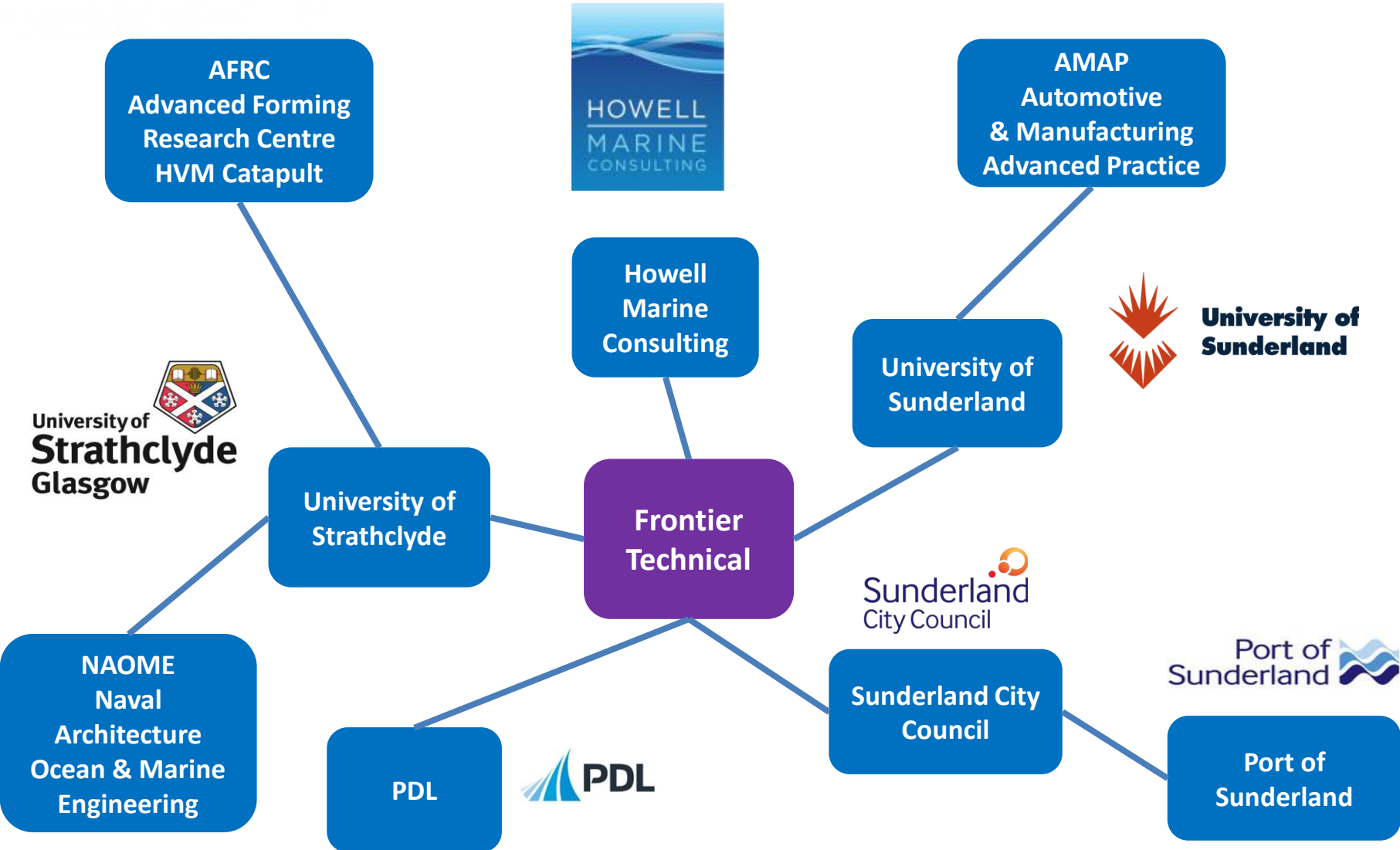


Problem

- Coastal Location ✓
- Good Offshore Wind Conditions ✓
- Energy Mix 'MW' Power Requirements ✓
- Basic Quayside ✓
- Fossil Fuel dependency ✗
- Nearshore Water too Deep ✗
- Distance from Marine Construction Yards ✗
- Economically Viable Options ✗

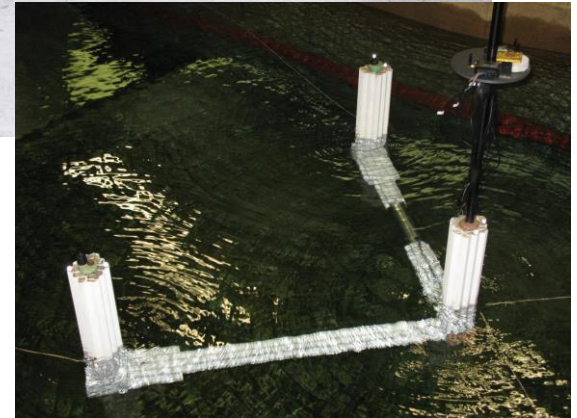
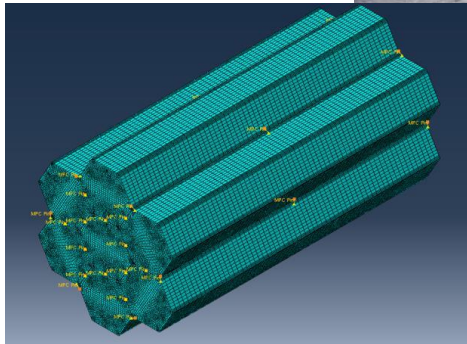
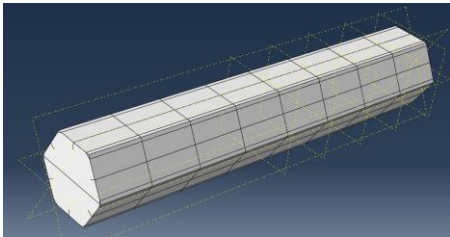
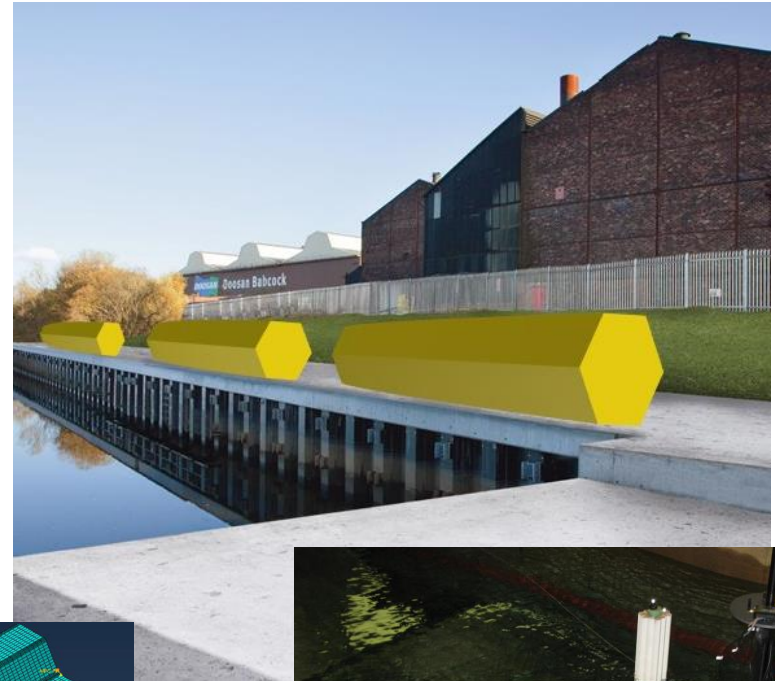


The MARLIN Project consortium

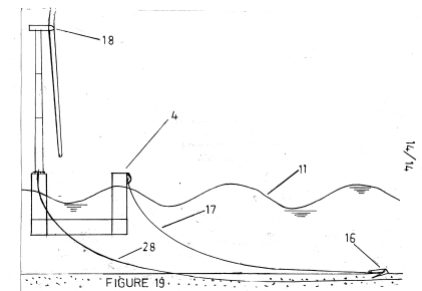
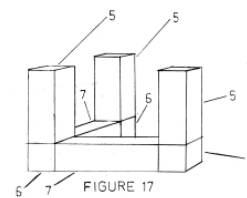
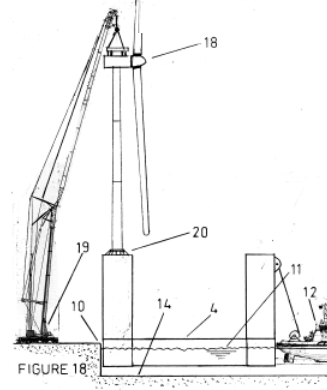
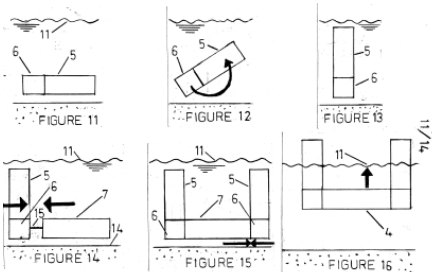
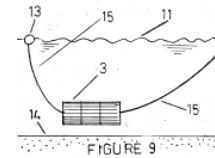
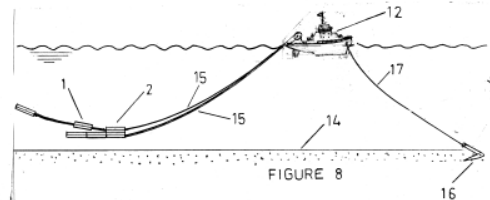
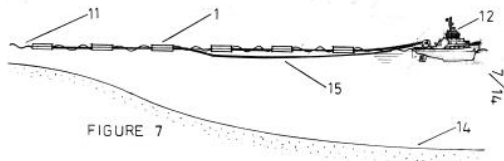
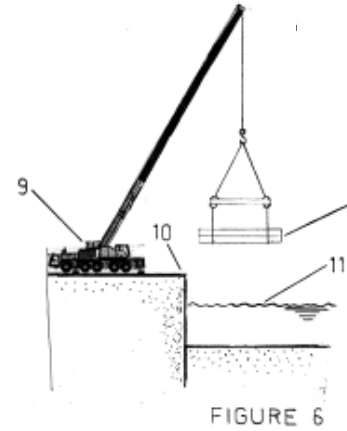
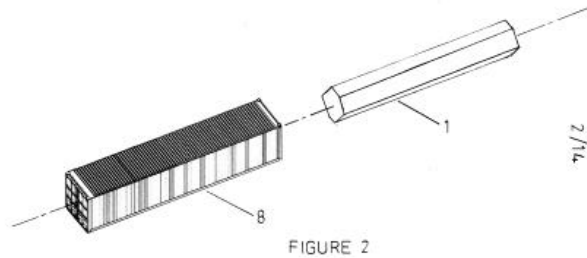


Solution

- Floating Offshore Wind
- Configurable Modular System
- Standardised Freight Transport
- Subsea Construction
- Patent Pending



'Modular Floating Structure' Patent Pending



Infrastructure Not Required



Innovation Overview

- Floating offshore wind in Range of water depths
- Shipping Containers
- Mobile cranes
- Conventional vessels
- Underwater final assembly - Remotely
- Sub-assembly from multiple rivers, ports quays



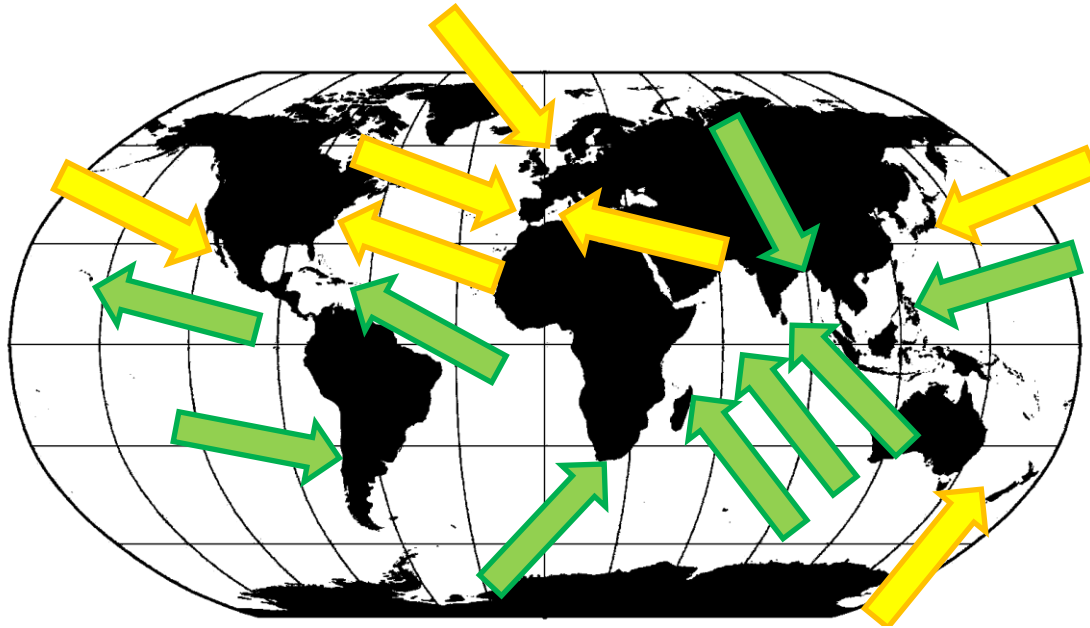
Configurable Designs



Logistics



Markets



Funding & Support

- UK IP Office Award
- Innovate2Succeed
- ERDF Software Spec.
- Innovation Grants
- Innovate UK



Assumptions

- Competitor Product Size
- Regional Mobile Crane Services
- Regional Vessel Operators
- Demonstration
- Certification and Compliance

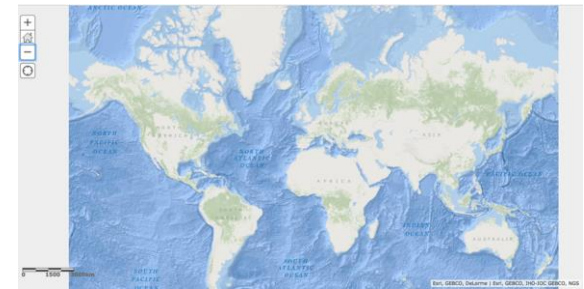
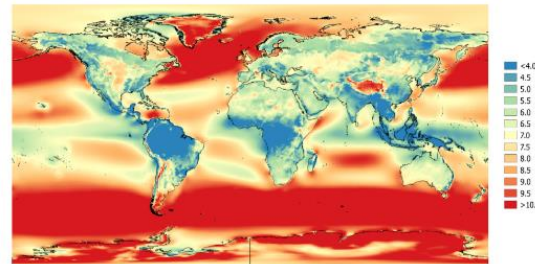
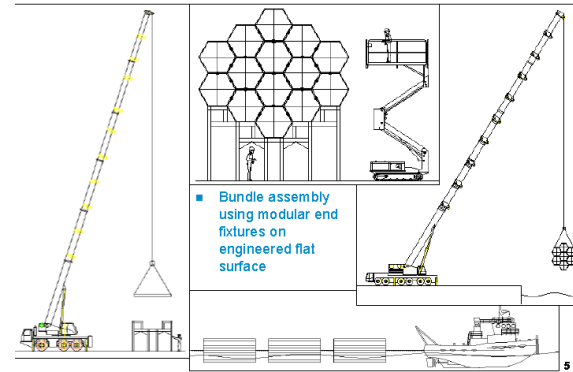
Commercialisation

- 5 Year plan to full production
- Ex Works Sales of Basic Product
- Sell Modules
- Remote Subsea Assembly
- Training and licences
- SIDS Initial Markets



Next Steps: Market Knowledge & Funding

- Specific Country requirements
- Public Grant Funding
- Private Investment
- Sector Specific Business Expertise



Thank You



trevor@frontier-technical.com

