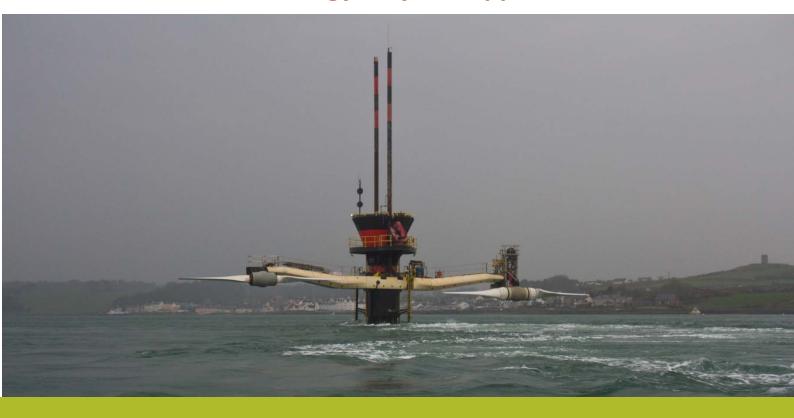


Marine Energy Project Support Services



MARINE ENERGY PROJECT SUPPORT SERVICES

Introduction

ITPEnergised was formed when Energised Environments Limited acquired Bristol-based IT Power Consulting Limited. ITPEnergised is a trusted advisor providing client-focused, commercially minded, energy and environmental consulting services to clients in onshore & offshore energy, transport & infrastructure, property and corporate sectors.

Since 1992 we have had a specialist team dedicated to wave and tidal device design, engineering and support services.

Our marine energy track record is unprecedented and our team have successfully launched new technologies such as the landmark installation of world's first commercial-scale 'marine current turbine', Seaflow, in 2003, and the Pulse Stream 100 in the Humber Estuary in 2009.

ITPEnergised's team operate globally, with projects in China, Korea, Australia, Europe, India, North America, Canada and South America.

Our Capabilities

We pride ourselves on providing a level of detail to meet the needs of clients in an easily understood and technically robust manner. ITPEnergised's expert team has in-depth knowledge of the technical and economic challenges this market faces. Our clients include international governments, technology and project developers, and supply chain manufacturers.

Our team offers strategic advisory, technical design and project support services to the marine energy sector.

We offer a comprehensive range of consulting and technical services in everything from market assessments and feasibility studies; to R&D detailed design and array optimisation modelling.

For details of our full service offerings, visit our website: www.itpenergised.com

Marine Energy Strategy Advisory Services:

Market Entry

- Company development strategy
- Business opportunities / customer identification
- Competitor review / state of the art
- Investment & grant opportunities
- Site finding and suitability advice

Techno-Economic Feasibility Studies

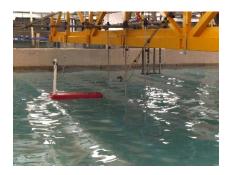
- Levelised cost of energy calculations
- Technical suitability
- Prediction of future capital and operational costs

Macro-Level Government Roadmaps

- Policy recommendations
- Tariff and research support mechanisms
- Resource assessments
- Supply chain mapping
- Knowledge transfer

Due Diligence Reviews

- Financial, technical and environmental
- Risk assessments and red flags



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Marine Energy Technical Design Services:

- Concept feasibility review & valuations
- Numerical modelling and tank testing
- Motions and seakeeping analysis
- Structural and mooring load analysis
- Detailed device design
- Mechanical, electrical and control systems
- Prototype installation and testing
- Techno economic modelling

Marine Energy Project Support Services

Site Assessment

- Site Finding
- Constraint Mapping
- Feasibility Assessments

Project Management

- Project Management
- Contract Management
- Owners Engineer

Resource Assessment

- Resource modelling
- Site surveys
- Yield predictions

EIA and Consents

- Scoping
- Stakeholder engagement
- Rochdale Envelope specification
- Survey specification and management

Grid Connection and Electrical Design

- Connection assessments
- Cost analysis
- Connection application

Balance of Plant and Infrastructure Specification

- FEED studies
- Cable sizing and routing
- Cost models

Moorings and Foundation Design

- Concept design
- Numerical modelling
- Installation methodology

Site Design and Layout Optimisation

- Array & device modelling
- Layout optimisation
- Loss prediction
- Cumulative impact assessment

Operations and Maintenance Planning

- Risk assessments
- Standards guidance
- Vessel selection & planning

Construction and Operating Support

- Health and Safety guidance
- CDM management



Our dedicated team of experts includes:

- Mechanical and Electrical Engineers
- Naval Architects
- Hydrodynamicists
- Oceanographers
- Environmental Scientists
- Numerical Modellers

Having previously developed projects and technologies, as well being as a consultant, we are very familiar with technologies, projects and the environments they are deployed in; we want to ensure that your development is as successful as possible.