

Marine Energy Pembrokeshire Conference

Funding Workshop

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A decorative graphic at the bottom of the slide consisting of three overlapping, wavy bands in shades of blue and dark blue, flowing from left to right.

Wales is ideally placed to be a hub of low carbon innovation...



Political context



- › Legally binding targets
- › Devolved power
- › WAG Climate Change Strategy for Wales

Capabilities and resources



- › World-class academic capabilities
- › Relevant industrial expertise
- › Significant natural resources
- › Innovative companies



Our role is unique

- › Not-for-profit company with the mission to accelerate the move to a low carbon economy
- › 9 years unparalleled experience
- › Business like approach to deliver cost effectively
- › Focused on action to overcome barriers to low carbon investment

“The Carbon Trust provides some excellent help and guidance to businesses as they wrestle with the challenge of climate change.”

FTSE company

A long-exposure photograph of a highway at night, showing vibrant light trails from cars in shades of blue, white, and red. The road curves into the distance, with dashed white lines and solid yellow lines marking the lanes. The background is dark, making the light trails stand out prominently.

**Our mission
is to accelerate
the move to
a low carbon
economy**

We cut carbon now by

- ▶ **Providing specialist advice and finance to help organisations cut carbon**
- ▶ **Setting standards for carbon reduction**

We cut future carbon emissions by

- ▶ **Opening markets for low carbon technologies**
- ▶ **Leading industry collaborations to commercialise technologies**
- ▶ **Investing in early stage low carbon companies**

Opening markets:

accelerating technology cost reduction

- Our technology accelerators address barriers to technology development and deployment
 - Tackle sector specific market barriers
 - Emphasis often on cost reduction
 - We work closely with industry partners
- Current technology accelerators include:
 - Offshore wind
 - Marine energy
 - Biomass heat
 - Micro combined heat and power (CHP)
 - Low carbon buildings
 - Industrial energy efficiency

Technology commercialisation:

Entrepreneurs Fast Track

- New service to 'turbo-charge' and stimulate investment in UK low carbon technology start-ups
- A single entry point and streamlined application process for grants and/or expert advice
- Provides a customised package of:
 - R&D grant funding
 - Expert advice
 - Networking opportunities
- All successful applicants assigned an experienced Relationship Manager to mentor them along the journey

R&D Grants

up to £500,000

£70,000

in expert advice

Unrivalled

networking opportunities

Technology commercialisation:

Entrepreneurs Fast Track

Grant funding

» Available for:

- Technology development
- Proving the viability of technical concepts
- Building and testing prototypes



» Our track record so far:

- Over 2,000 research proposals
- £24 million in funding committed to 168 projects
- £33 million leveraged from the private and public sectors
- Over 67% of completed projects have gone on to generate new patents, receive further investment or make commercial sales, or expect to do so shortly

Technology commercialisation: Entrepreneurs Fast Track

Expert advice and networking

- Up to £70,000 available
 - Advising on patenting and intellectual property strategies
 - Prioritising markets and providing advice on how to enter them
 - Building capable management teams
 - Help finding customers, partners and investors
 - Developing an investor ready business plan and pitch
 - Boosting marketing and PR capabilities
 - Providing expert engineering, modelling and product development
 - Meeting product texts and regulations
 - Assistance with scale-up for manufacture
- To date, we have supported over 100 companies who have gone on to leverage £100 million of private investment
 - Equivalent to £12 of private funding for every £1 provided



Supported in Wales...

- University of Glamorgan
- Econotherm
- Sustainable Energy Ltd.
- G-Volution
- Lomox Ltd.
- Tidal Energy Ltd.
- Nanogan
- SenseLogix

“With the support of the Carbon Trust and after almost a year of developing our product, we are currently conducting trials with some public sector organisations and hope to launch the product to market this summer.”

Jonathan Luke, Director of SenseLogix



www.carbontrust.co.uk

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Opening markets: accelerating technology cost reduction

Offshore Wind Accelerator



Opportunity

- › Generate 25% of UK's total energy needs by 2020
- › 220,000 new jobs, £65 billion economic value by 2050, £2.5 billion a year global industry

Challenge

- › Make cost of offshore wind energy competitive

Solution

- › Up to £50 million, 5-year Offshore Wind Accelerator to cut costs of offshore wind energy by at least 10%
- › Collaborating with co-funders from across the sector

Opening markets: accelerating technology cost reduction

Marine Energy Accelerator



Opportunity

- Supply up to 20% of UK's electricity needs from marine energy

Challenge

- Reducing cost of wave and tidal stream devices by up to 20% by 2020

Solution

- £3.5 million Marine Energy Accelerator to accelerate cost reduction focusing on new device concepts, component technologies and installation, operation and maintenance
- £22.5 million Marine Renewables Proving Fund to finance the demonstration of wave and tidal technologies