



The Carbon Trust Accelerating the move to a low carbon economy

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A long-exposure photograph of a road at night, showing vibrant light trails from cars in shades of blue, red, and white, curving into the distance.

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

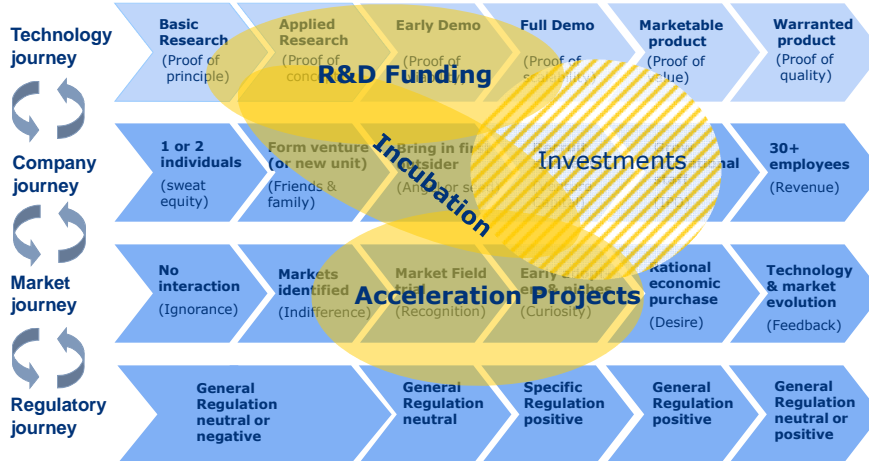
We cut carbon now by

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

We cut potential future carbon emissions by

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

Why we do what we do.



Investments:

using our expertise to analyse and price risk in early stage venture capital investment

- Support growth of innovative, low-carbon businesses with strong commercial potential
- Catalyse private sector investors and generate attractive ROI
- Current portfolio of 25 venture capital investments
 - £250,000 to £3 million invested per company
 - £26.8 million invested to date
 - £138 million of private funding leveraged



Technology acceleration:



- 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
- Topics and work programmes defined by Carbon Trust
 - Then we issue calls for proposals
- Current technology accelerators include:
 - Offshore wind
 - Marine energy
 - Biomass heat
 - Micro combined heat and power (CHP)
 - Low carbon buildings
 - Industrial energy efficiency

Research acceleration:



- Research accelerators target innovation gaps
- Build on areas where UK research capabilities are world-class
- New model for accelerating the commercialisation of R&D
 - Combination of longevity and public good objective of state support with commercial focus and cost-effectiveness through equity for investment model
- Topics and work programmes defined by Carbon Trust
- » Significant scopes of work and investment – typically up to £10 million over 3-5 years
- » Looking for substantial private co-investment in latter phases
- » Current research accelerators include:
 - Organic solar photovoltaics (PV)
 - Pyrolysis (biodiesel from waste)
 - Algae biofuels



Applied research grants:

- Develop and commercialise technologies with potential to reduce UK carbon emissions
- Focus on supporting the progress of low carbon technologies towards scale deployment
 - Commercialisation
- Open competitive process
 - Over 1,900 research proposals screened
 - £23 million in funding offered to 190 projects
 - £32 million leveraged from the private and public sectors
- Grants range from £50-500k
- 40-60% contribution from Carbon Trust
- Over 65% of completed projects have gone on to generate new patents, receive further investment or make commercial sales, or expect to do so shortly



AR grants - evaluation criteria:

Is it a good idea?

- Builds on successful proof of concept work
- Meets a market need – is distinctive
- Is innovative and advances the current 'state of play'

Can the team deliver it?

- Appropriate mix of expertise and stakeholders
- A workable project plan (realistically priced)
- Defined and reasonable end point
- Awareness of their market and the key players

Should the Carbon Trust fund it?

- Credible mechanism that shows potential for, and route to, substantial carbon savings
- Ability to develop a low carbon market area in the UK
- Represents good value for money
- The funding is proven to be additional
- The funding will make a material difference



Business incubation:

- Supports the development of scalable businesses
- Working with promising low carbon technology companies
- Provides strategic and business development support to accelerate growth
- Companies typically spend 12-18 months in incubator
- To date we have:
 - incubated 100 companies who have gone on to raise £88 million in private investment
- Delivery via specialist incubator service providers

Incubation can help with:

- Intellectual Property protection
- Product development and engineering
- Identifying & engaging customers and partners
- Market sizing and risk
- Route to market
- Management team competencies
- Finding experienced directors and non-execs
- Mentoring
- Sources of funds
- Profitable business model
- Investment support



Summary

- The Carbon Trust helps promising low carbon innovators by offering an integrated and comprehensive range of tailored, expert support.
 - How these services are accessed is currently being reviewed and access to the schemes will be much simplified and streamlined
 - In light of this the Applied Research call scheduled to open on 24th May has been delayed
- We also lead large scale collaborative projects where we work with relevant partners to deliver commercial breakthroughs for key low carbon technologies.

Further details:

www.carbontrust.co.uk

www.lowcarboninnovation.co.uk



www.carbontrust.co.uk

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