

## Low-carbon economy



IMAGE: © Danny Bailey

# Low-Carbon Economy - What are the opportunities?

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In the last 12 months, creating a low-carbon economy in the UK has become an important priority for government, business and investors alike. As the effects of climate change become more apparent, cutting carbon emissions – the key cause of climate change – has to become a core focus for all types of business.

However, cutting carbon does not have to stifle economic development. Tackling climate change will not necessarily require businesses to rein in their operations and lose market share or competitive advantage.

Instead, the low-carbon economy offers significant opportunities – in fact, one recent study estimates that so called 'green business' could inject a £530bn boost to the global economy. This is an exciting opportunity that businesses cannot afford to ignore.

### **But what is a low-carbon economy? What should a business do now to thrive and survive?**

Forward-thinking businesses are already looking to the future and adapting their business models. Improving energy efficiency is a first step for any organisation, as it results in lower energy bills and therefore fewer carbon emissions. This should be followed by looking up and down the supply chain to work out the carbon footprint of your products and services. If a business can identify the carbon chain relating to its products and services, it can identify areas where energy use is high and changes can be made in order to cut carbon, lower costs and, ultimately, create low-carbon products. With the rise of the ethical consumer, supplying products and services with a low-carbon footprint could well prove to be a competitive advantage for companies that are quick on their feet.

Businesses also need to show that they are prepared for the potential problems posed by climate change, whether to their operations, sourcing or markets. Investors and analysts already examine a company's environmental credentials when looking at where to place funds and this will become increasingly important in the future.

Creating a low-carbon economy requires innovative solutions, including new technologies and new energy sources. Supporting new ideas and bringing fledgling

technologies from prototype to mass market, presents significant investment opportunities. These can include renewable energy sources such as marine or wind energy, or other low-carbon technologies such as hydrogen fuel cells. Investment in clean technology is currently growing at 30 per cent year on year, according to a report from Library House, and if it continues at this rate, the UK market alone has the potential to grow to a size in excess of £2bn by 2015.

The Carbon Trust's investment team has been investing in early-stage clean technologies for the last four years with the aim of proving the commercial potential of the low-carbon economy. Our investment record speaks for itself. Other venture capital funds are appearing as demand from investors grows, which is further proof of the money-making opportunities. Businesses like CMR Fuel Cells and Ceres Power have successfully launched on AIM and a recent report from Library House showed that equity values of clean-technology companies have risen sharply in the last 18 months.

However, the low-carbon economy does not just present good investment opportunities; there is also potential for new businesses as new markets emerge. Some of these new markets are widespread and growing but others are not yet being exploited. This is why we have created Carbon Trust Enterprises – a commercial arm that aims to set up businesses that open up new markets and prove the investment credentials of low-carbon technologies and companies.

We think of ourselves as being a serial entrepreneur in the low-carbon space. A key part of our role is to demonstrate to others that there are strong commercial opportunities in moving to a low-carbon economy and we can act as a catalyst for further investment.

Our first venture, Connective Energy, is a joint venture with Mitsui Babcock and Triodos. The company will capture and recycle heat that would otherwise have been wasted, taking it to nearby businesses that can use this heat alongside existing energy sources.

Our second is Partnerships for Renewables (PFR).

Towards the end of 2005 the Carbon Trust identified a business opportunity to accelerate the delivery of renewable-energy projects on public-sector land, where to date there has been little development, despite there being significant potential. Following a year of business development, PFR was launched in September 2006 when the Carbon Trust received £10M of funding from Government to support PFR in accelerating its development and aiming to leverage around £500M of private investment. PFR has been established to unlock this new market for renewable developments, primarily wind power, on public-sector land.

PFR was created in support of the Carbon Trust's role in accelerating the move to a low-carbon economy. It is unique as it was set up to work exclusively with public-sector bodies to develop 1-10MW renewables projects on public land. We believe this market has a great deal of potential that has not been exploited to date due to issues such as a lack of pre-planning consent funding. PFR aims to overcome these barriers and offer best-value solutions to public-sector bodies through the economies of scale we can generate both in implementing projects and raising funds.

PFR aims to develop 500MW of capacity working with around 150 public sector bodies. This is equivalent to the needs of 250,000 homes and has the potential to save up to 190,000 tonnes of CO<sub>2</sub> each year.

Our aim with all these initiatives is to prove to the private sector that the low-carbon economy offers significant commercial potential and encourage other organisations to enter the market and compete for the revenues that are available.

The message is clear – the low-carbon economy is fast becoming a reality. Forward looking businesses that act now have exciting opportunities – both to secure a competitive advantage by responding first to consumer demands for products and services with a low-carbon footprint; and by generating significant financial returns from investing in clean technologies and low-carbon businesses. Embracing the low-carbon economy now will secure both our economic and environmental future – what more incentive do you need? ●