

# Sustainability Committee

SC(3)-04-07 (p2): 4 October 2008

## Carbon Trust Presentation

Thank you for the opportunity to present to this committee today. My name is Mike Batt and I manage delivery of Carbon Trust activity in Wales. My presentation today will cover the following areas:

Introduction to the products and services provided by the Carbon Trust.

Summary of Wales Energy and Carbon Emissions Study

What Carbon Trust has done so far in Wales.

Overview of future opportunities within Wales.

### 1. Introduction to the products and services provided by the Carbon Trust.

1.1. The Carbon Trust is an independent company set up by government to accelerate the move to a low carbon economy

We act as a catalyst for enterprise by developing commercially viable low carbon technologies and help public and private sector organisations to reduce their carbon emissions.

Our activity is restructured around five complementary business areas as follows.

1.2. Carbon Trust Insights explains the issues and opportunities surrounding climate change and carbon reduction, developing low carbon strategies and technologies. We help to inform business and policy decision makers on our thinking from working in the field to reduce emissions and to accelerate the development of low carbon technology e.g. studies on the competitive implications of the EU ETS and how the EU ETS could evolve in ways that both materially reduce emissions while maintaining or enhancing competitiveness,

1.3. Carbon Trust Solutions delivers practical solutions, working with business and the public sector to identify carbon emissions and find ways of cutting them: and providing the know-how and resources to help them do so. To date we have saved nearly 11m TCO<sub>2</sub> across the UK (I will speak about our numbers in Wales shortly). As well as providing support to all organisations we provide targeted support to SMEs via an interest free energy efficiency loan scheme

1.4. Carbon Trust Innovations helps develop commercially promising low carbon technologies, through partnership, funding, expert advice and large scale demonstration. E.g. we provide capital grant for to take forward innovative technology ideas, we provide advice and incubator support to early stage low carbon technology companies to help them raise commercial finance, we run technology acceleration programmes across a range of promising technologies wave and tidal stream, biomass, metering, microCHP, low carbon buildings

1.5. We have two commercial arms - Carbon Trust Enterprises creates new, high growth, low carbon businesses by identifying opportunities and bringing together key skills and resources e.g. connective...

1.6. Carbon Trust Investments finances low carbon enterprises that demonstrate commercial potential.

1.7 We are a mission driven business. Our mission is simple: to accelerate the UK's transition to a low carbon economy by developing commercial low carbon technologies and helping organisations reduce their carbon emissions. Any profits from our two commercial arms are reinvested against our mission

1.8. '

Accelerating move to low carbon economy	Supporting UK's global leadership on climate change
Helping organisations cut carbon	Meeting the UK's carbon targets
Accelerating development of key low carbon technologies and industries	Promoting competitive markets and sustainable economic growth with significant value creation potential

### 2. Summary of Wales Energy and Carbon Emissions Study (WECE)

2.1. Welsh industry is very large accounting for 13.9% (2003:12.6%) of the U.K.'s total emissions, i.e. approximately 2.8 times larger than the pro - rata population due to major contributions from steel, aluminium and other metals, food and drink, paper, cement, glass, chemicals and engineering organisations. Wales is also home to 17.5% of the UK oil refining capacity.

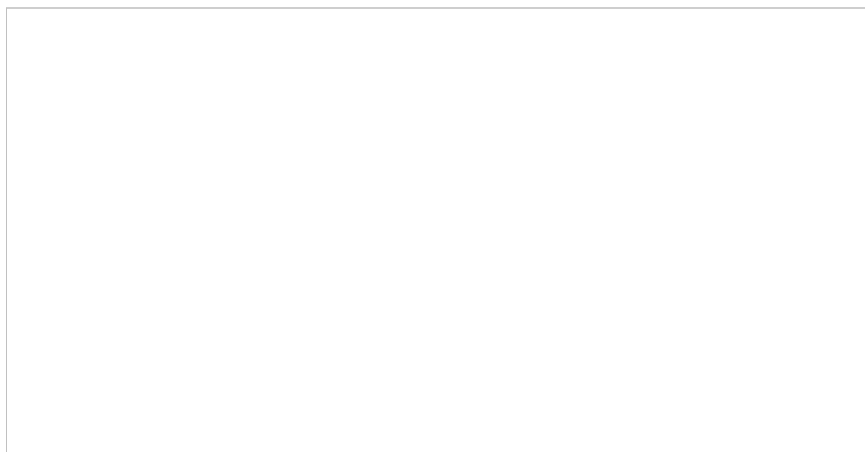
2.2. Evidence suggests ([www.statswales.wales.gov.uk](http://www.statswales.wales.gov.uk)) that the turnover from large energy intense industries such as Iron and Steel increased between 2002-03 and further increased in 2004.

WECE study	2002	2003	2004
	kt CO <sub>2</sub>	kt CO <sub>2</sub>	kt CO <sub>2</sub>
Energy CO <sub>2</sub>	34,700	35,927	38,868
Non-Energy CO <sub>2</sub>	1,600	1,328	1,368
Totals	36,300	37,255	40,236

Table 1: CO<sub>2</sub> emissions in Wales, based on WECE data: 2002 - 2004

2.3. The Wales Energy and Carbon Emissions study is unique in that it takes into account figures for energy consumed in Wales. Historically these figures were interrupted from the UK national database. Our approach was formulated in conjunction with the Welsh Assembly Government to take into account all of the energy consumption in Wales and includes figures relating to Industrial, domestic, public sector, air transport (including shipping and aviation ) within Wales

2.4. Historical Carbon Emissions figures compiled by the National Atmospheric Emissions Inventory show that the overall trend for emissions in Wales is downward since 2000, but some increased in 2003 and 2004



Graph1

### 3. What Carbon Trust has done so far in Wales.

3.1. Throughout the last year climate change has once again been high profile news. The Stern report has highlighted the need for business and government to realise not only the environmental impacts but also the projected financial impact of the greatest challenge facing us all. In Wales many organisations are waking up to the advantages of proactively addressing climate change from a business perspective and are taking the opportunity to improve business performance whilst reducing their carbon emissions.

3.2. Now in our sixth year of delivering cost effective support, helping a wide range of organisations across Wales to save energy, reduce carbon emissions and cut costs. We value the strong working relationships we have with both industry and government, which enable us to keep abreast of the technical and political issues whilst retaining independence. This ensures our advice and support is as effective as possible.

3.3. The Carbon Trust work in partnership with organisations throughout Wales to Identify and implement carbon reduction measures which make both environmental and business sense.

These measures fall into three main categories, No Cost, Low Cost and Capital Expenditure projects.

The no and low cost measures can be implemented swiftly and generate immediate environmental and business benefits.

The Capital Expenditure projects need to be formulated into organisation business plans. We provide support in this area to help develop implementation plans and our 'next step' advice helps to ensure real opportunities can be implemented in a manner

complementary to our partners business needs.

During 2006-7, we helped organisations in Wales identify annual potential cost savings in the order of £16m equating to 163,000tonnes of CO2 emissions.

Following on from 2005-6, our clients have implemented further annual savings of over 109,300 tonnes of CO2 emissions which will result in over £29m of lifetime savings. As a result of working in partnership with the Carbon Trust, organisations in Wales have implemented cost saving measures equivalent to £19m per annum This is helping Wales take a significant step towards the development of a low carbon economy whilst making a strong contribution to the competitiveness of Welsh business.

3.4. Through our Client Relationship Management system, implemented during 2006-7, we are able to track all of our recommendations made to clients and manage the client relationship through to implementation. Our in house system has been audited by Price Waterhouse Coopers and the Carbon Trust received Limited Assurance regarding our process. This demonstrates that we achieve real carbon savings actually implemented by organisations working in partnership with the Carbon Trust. As well as being pleased with the progress made implementing real auditable emissions reduction measures within the industrial sector we have a working relationship with all 22 local authorities throughout Wales and are currently moving forward with Carbon Management for the Welsh Assembly Government. We are delighted with the progress made in the education and leisure sectors of local authorities. During 2006-7 we worked with local authorities throughout Wales to optimise their building controls within schools and leisure centres, a number of opportunities have been identified through this programme which make real carbon and financial savings within the authorities This programme is being rolled out across Wales and as a result schools and local authority leisure centres in Wales will be reducing their carbon emissions by over 26,000 tonnes per annum which equates to a £5m reduction in their annual energy bills.

Public Sector Carbon Management was initially piloted within Wales and a number of Local Authorities have taken part in this programme. We have extended this service into the Health and Higher Education sectors where we believe real carbon and financial benefits can be derived.

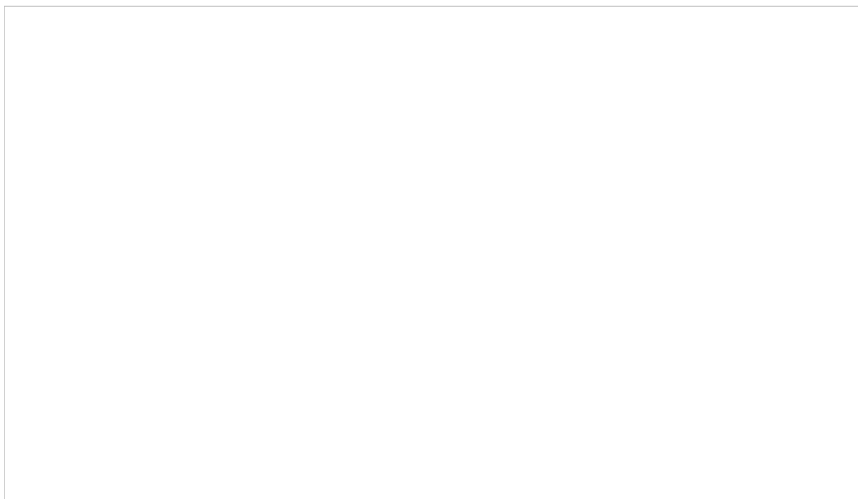
3.5. Cardiff City Council are working in partnership with the Carbon Trust to reduce their carbon emissions by 60% over the next ten years. Interest has already been expressed by two North Wales Authorities to commit to the same undertaking and these projects will be moving forward during 2007-8.

3.6. Small and medium size enterprises throughout Wales are pushing forward with efficiency improvement measures, many with the assistance from our interest free loan scheme. During 2006-7 20 businesses in Wales made use if our interest free loans scheme and over £1m of loans were awarded.

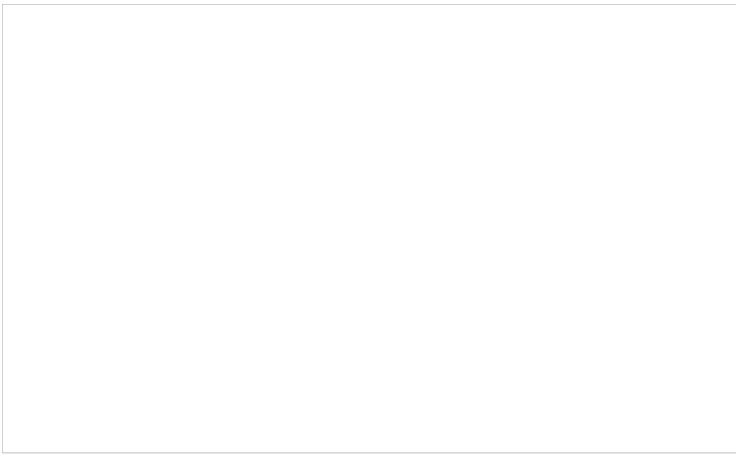
3.7. We have also run an extremely successful event programme and media campaign throughout the year raising awareness of the impact of climate change, highlighting the responsibility of all organisations to take action, and promoting the range of practical and cost effective measures that can be implemented. Our work is helping to move towards the Welsh Assembly Government's objective of a low carbon economy.

3.8. To date we have committed over £1m of funding to research development and demonstration projects in Wales which we believe could help to develop the emerging low carbon technology sector.

The Carbon Trust Low Carbon Building Acceleration programme is supporting the development and implementation of two large projects within Wales. The refurbishment of the Swansea Leisure Centre and the North Wales Police headquarters. This is a UK wide programme and Wales has attracted more the 17% of the UK support and funding to develop these two exemplar projects.



Graph 2



Graph 3

#### **4. Projecting of future opportunities within Wales.**

- 4.1. Continued programme of direct support as laid out in our business plan agreed with the Welsh Assembly Government.
- 4.2. Ongoing delivery of customised support to large energy users.
- 4.3. Continued Delivery on Events programme to educate and inform business at all levels throughout Wales.
- 4.4. Wales Energy and Carbon Emissions study -which will be published during the third quarter of the financial year.
- 4.5. Market potential study to identify further market opportunities within Wales. Initial findings to be available during Q3.
- 4.6. Promotion of Research Development and Demonstration Projects within Wales.
- 4.7. Continued support for low carbon design within Wales such as or work with the estates department of the Welsh Assembly Government.