Climate change: the business opportunity

Tom Delay, Chief Executive
Carbon Trust
27 April 2009

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

We cut carbon emissions now

- By providing business and the public sector with expert advice, finance and accreditation
- By stimulating demand for low carbon products and services

We cut future carbon emissions

- By developing new low carbon technologies through project funding and management, investment and collaboration
- By identifying market barriers and practical ways to overcome them

Focus on efficiency today and future low carbon growth

CARBON TRUST

Building efficiency into organisations today

- Access to **advice** and information
- Access to **loan finance**
- Low carbon public sector **procurement**
- Current regulations **enforced**

→ **Jobs today**

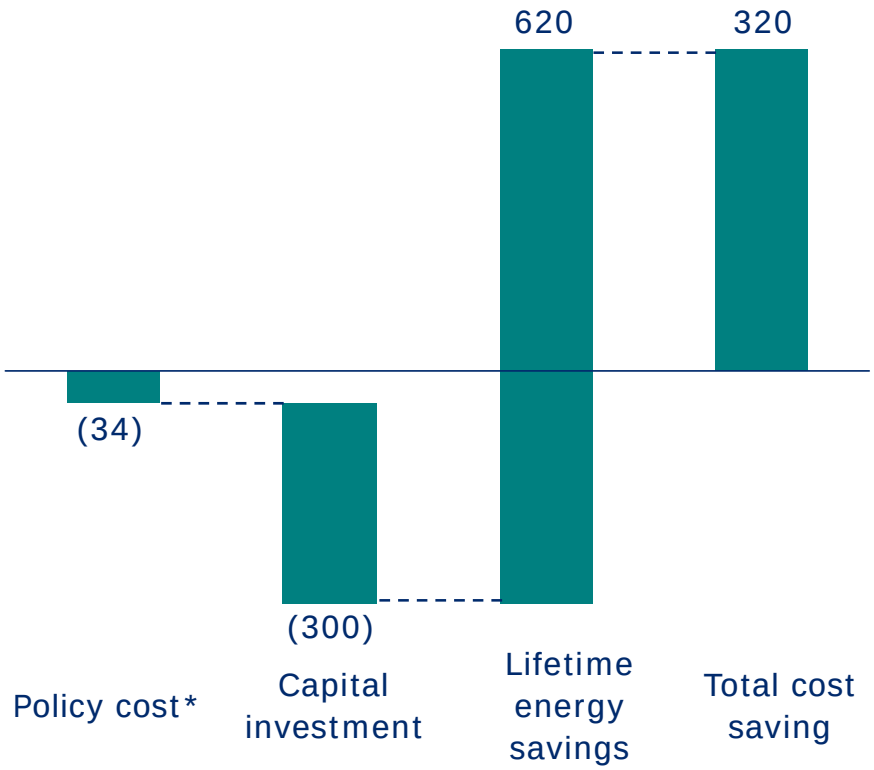
Investing in the sustainable industries of tomorrow

- Access to **investment finance -** VC funding to support a portfolio of unproven early stage technologies and businesses
- Access to **targeted support** to accelerate development of more certain priority industries
- **Enhanced** regulations and standards

→ **Jobs of the future**

We overcome barriers to energy efficiency with advice, finance and accreditation

Net present value of costs and benefits to Carbon Trust customers in 2007/8, £m



* Policy cost covers the annual policy cost; capital investment is the investment required to get the energy savings; and lifetime energy savings is the present value of total energy savings

Weak business drivers limit organisational commitment

- Energy is not relevant to "core business"
- Lack of sustained senior level commitment

Lack of an identified solution prevents action

- Perceived risk of new technologies
- High transition costs

  "The new energy efficiency motors do not fit in the old imperial frames…"

Lack of funding prevents investment

- Measures may be NPV positive but with paybacks of over 2 years fail to meet company investment criteria

  "Engineers write specifications but don't have budget and don't get financial benefit for energy efficiency improvements."

We work with over half the FTSE 100, more than 50,000 SMEs and over a third of public sector organisations

Energy bill range	Market size (# of Orgs)	Cost effective services	Activity (07/08)
£1m+	~2,800	Carbon Management	235 Orgs
£50k - £1m	~28,000	Site Surveys	3,300 visits
£0 - £50k	~1.9m	Helpline, website, training	35,000 calls, 600,000 unique web users

- **Cost-effective advisory services open to all (general measure)**
- **Co-funding (up to 70%) from large organisations**

- Since 2006, the Carbon Trust has invested £90m in working with SMEs
  - 70% of calls to our Customer Centre (largest in Europe) were from SMEs
  - 60% of our face-to-face site surveys were with SMEs

Interest-free loans for SMEs enable investment in energy efficiency

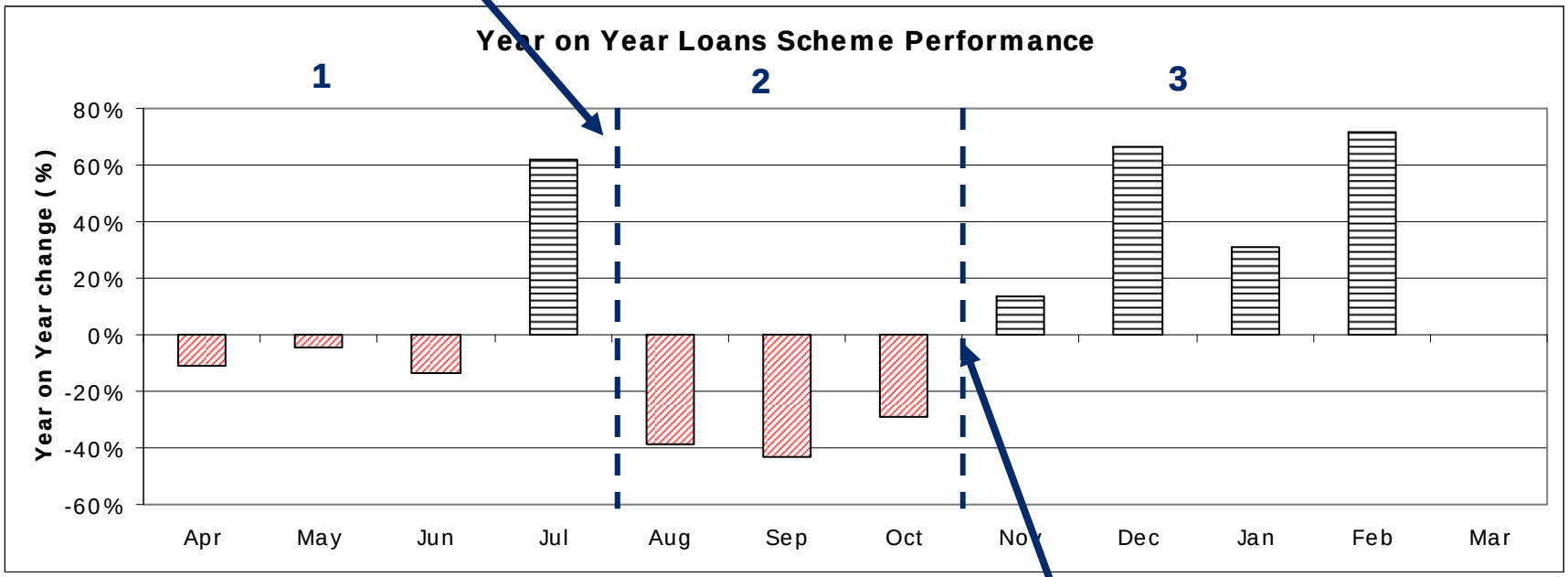
- All UK SMEs can apply for a loan up to £200,000 on energy efficiency equipment, unsecured, interest-free and repayable over up to 4yrs
  - High additionality: 96% of applicants would not have purchased the equipment at the time without a loan (NAO VFM review 2007)

- In 2007/8 we offered 722 interest-free loans to SMEs worth over £21.5m
  - reducing carbon emissions by over 60,000 tCO_2 p.a.
  - saving £9m p.a. in energy bills and leveraging a further £23m of private capital

- We made ~£25m loans available to SMEs in 08/09

Carbon Trust loans programme adapted to address financial crisis

Severe loss of market confidence and credit restrictions (by banks) hit SME market.



Carbon Trust adjusts carbon threshold and size of maximum loan in October

Note: performance based on loan volumes

The Carbon Trust Standard rewards year-on-year carbon reduction

The aims of the Standard are to:

- Encourage organisations to measure, manage and reduce their carbon emissions
- Build on established approaches through the Greenhouse Gas Protocol/ISO14064
- Reward good performance

To be awarded the standard:

- Organisations must demonstrate either an absolute reduction or reductions relative to output (e.g. tCO2e/£m turnover)
- Certification is for two years. Every two years further improvement must be demonstrated
- Offsets do not count towards reduction

Organisations certified at launch

What is the Carbon Reduction Commitment (CRC)?

- ***Mandatory*** emissions trading scheme focusing on large non-energy-intensive organisations
  - Means of extending cost of carbon across broader parts of the economy (critical to meeting UK's long term carbon targets)
  - Up to 5,000 companies, equating to emissions of ~50 $MtCO_2$ not covered by the EU ETS and CCAs
    - Minimum ½hrly metered electricity consumption of 6000MWh; equivalent to >~£500k spend

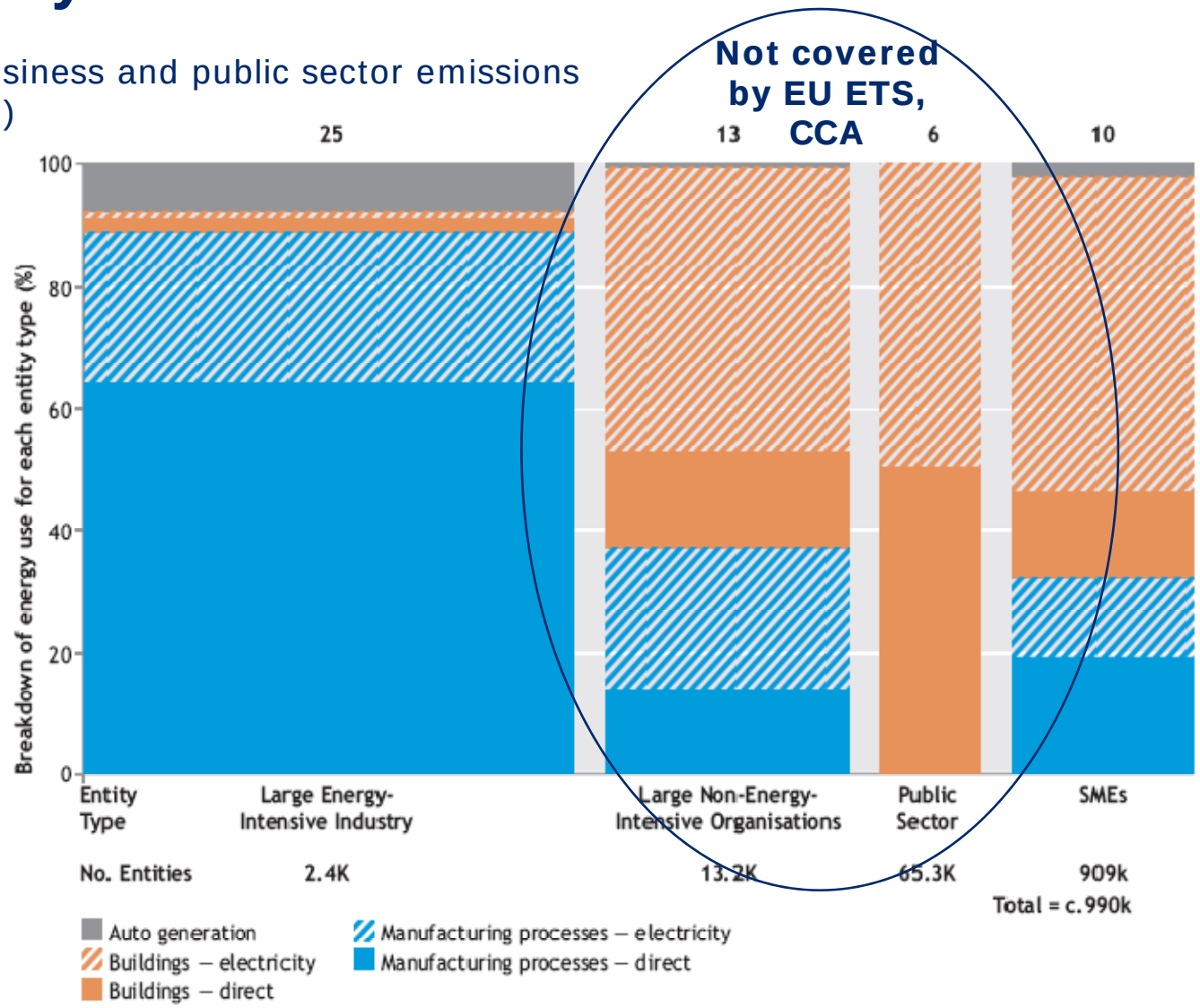
- ***Organisation***-based scheme, including direct and indirect emissions (electricity consumption)

- ***Simple*** and ***revenue neutral*** design
  - Light touch admin
  - Auction, with proceeds recycled to participants

Why do we need the CRC?

UK business and public sector emissions (2002)

Total 54 MtC



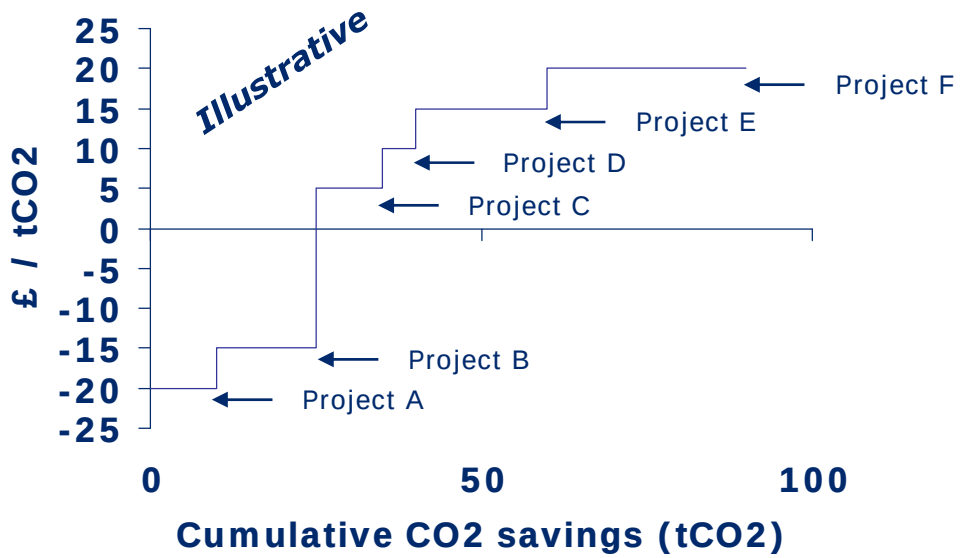
Note: For definition of entity type see text. Direct emissions are CO_2 emissions from gas, oil and coal consumption including those used for direct process conversion (e.g. in cement and steel). Building emissions include appliances, computers etc.
Source: The Carbon Trust and Ecofys.

Good carbon management is key to seizing the low carbon opportunity

1. Reduce direct emissions
2. Work with the supply chain to reduce theirs
3. Consider offsetting

Consistent, accurate measurement (carbon footprinting)

Key component: Construction of abatement cost curve



CARBON TRUST