



# Supporting energy efficiency and the switch to a low carbon economy

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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 a solid yellow line 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**

- Case for energy efficiency
- Support from the Carbon Trust
- Beyond cost saving: advantage in a low carbon economy
- Preparing for the future: Carbon Trust Standard

# The investment case for energy efficiency / reducing CO<sub>2</sub> emissions



## The traditional business case:

- Capex vs. cost savings from reduced energy consumption
- Investment case built on 'payback' or 'IRR'
- Anticipated long run energy price rises / risk mitigation

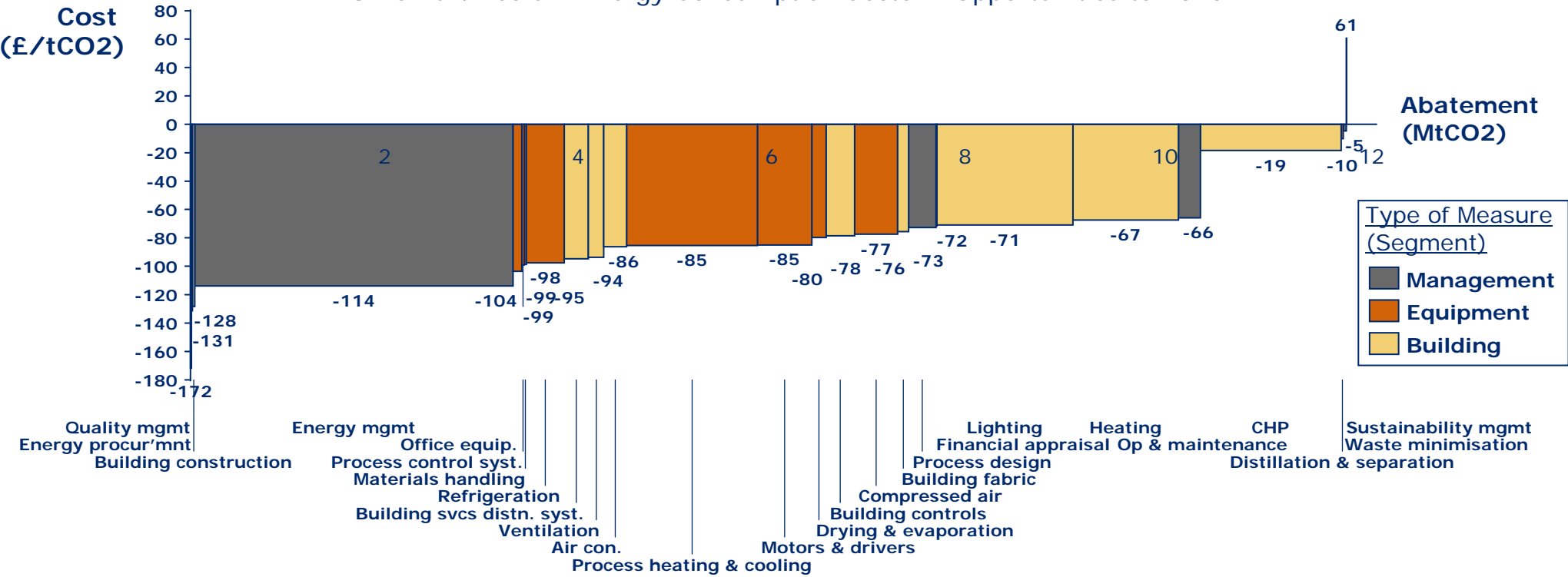
## But, some challenges:

- Awareness of opportunity
- Staff motivation
- Potential hidden costs
- Competition for capital & management time



# MAC Curve based on CT data shows a cost-effective yearly abatement potential of 12MtCO2

**Marginal Abatement Cost Curve**  
UK Small/Medium Energy Consumption Sector - Opportunities to 2020



**Identified energy efficiency measures deliver lifetime savings greater than cost of implementation**

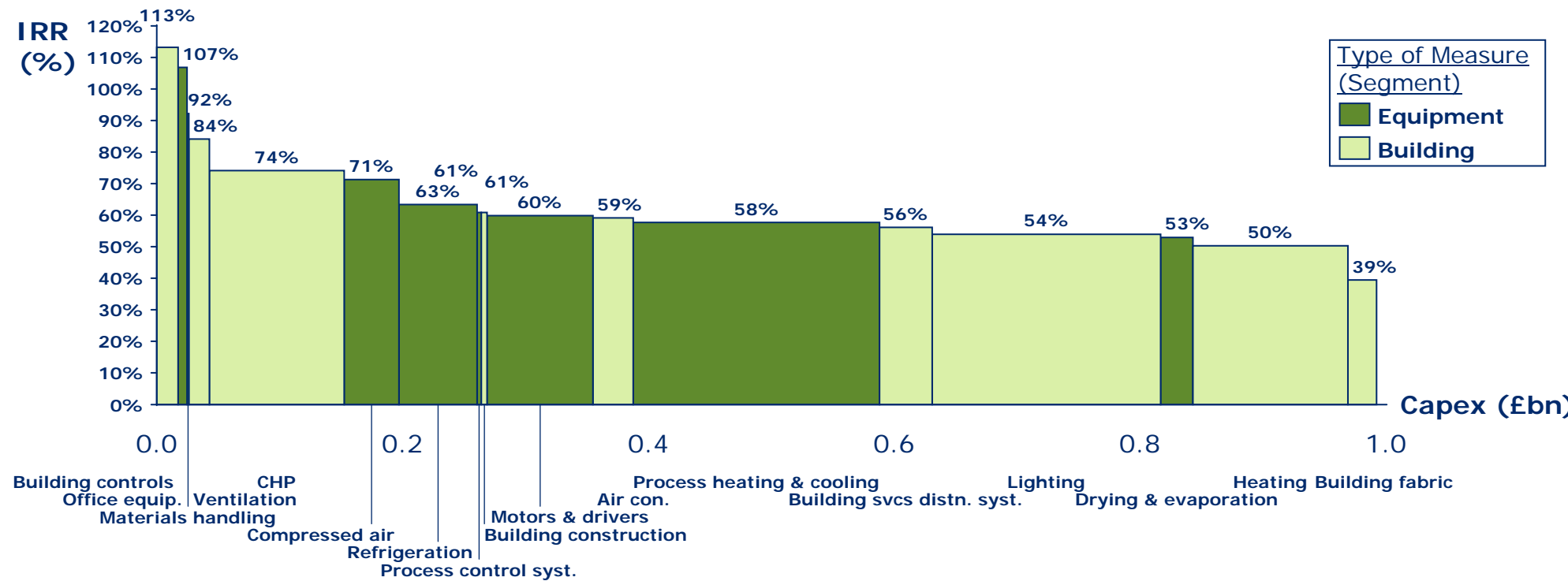
Source: Carbon Trust close-out data, Vivid Economics analysis  
 Note: Based on CT close-out 2006/07 data for organisations with energy spend <£3m p.a.; extrapolated to whole economy; assumes 10% financing cost over 10 years and 3.5% discount rate over lifetime of measure



# “Investable” measures which will achieve an IRR greater than 25% represent a ~£1bn opportunity

## IRR vs. Capex Curve

UK Small/Medium Energy Consumption Sector – “Investable” opportunities to 2020



**EE investable measures include ~38,000 projects leading to a yearly abatement of 5.2MtCO<sub>2</sub> and £0.7bn of annual energy savings**

Source: Carbon Trust close-out data, Vivid Economics analysis

Note: Based on CT close-out 2006/07 data for organisations with energy spend <£3m p.a.; extrapolated to whole economy; includes only “investable” measures (IRR>25%, Capex>3K, no management options)

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## Specialist advice:

support to help organisations cut carbon

Micro-SME	SME	Mid-Cap	Large
Telephone advice	Site survey and implementation advice		Carbon Management
Low carbon collaboration			
Publications and web tools			
Events and workshops			

Since our launch we have supported tens of thousands of customers, helping them to save

**23MtCO<sub>2</sub>** and **£1.4 billion**



## Finance:

### Interest-free Energy Efficiency Loans

- Loans to help SMEs upgrade or replace equipment with energy efficient alternatives
- £3,000 - £500,000 available per loan
- Since the scheme started in 2003 we have:
  - Offered over £100 million in loans
  - Saved over 500,000tCO<sub>2</sub>
  - Saved businesses approximately £80 million

# £100m

interest-free loans available to SMEs in 2009/10 and 2010/11



## Finance:

### Enhanced Capital Allowances

- Provides incentive to invest in energy-efficient equipment
- Qualifying equipment specified on Energy Technology List (ETL)
- Carbon Trust manages ETL on behalf of Government
- Find out more on [www.eca.gov.uk/etl](http://www.eca.gov.uk/etl)

**100%**  
first year tax relief on  
qualifying expenditure



## Finance:

### Public sector investment

- Invest-to-save schemes
- Managed by Salix Finance, an independent, publicly funded company set up by the Carbon Trust
- £10.2 million committed during 2008/09
- Projected annual savings of over 20,000tCO<sub>2</sub> and £4.2 million from these projects

# 128

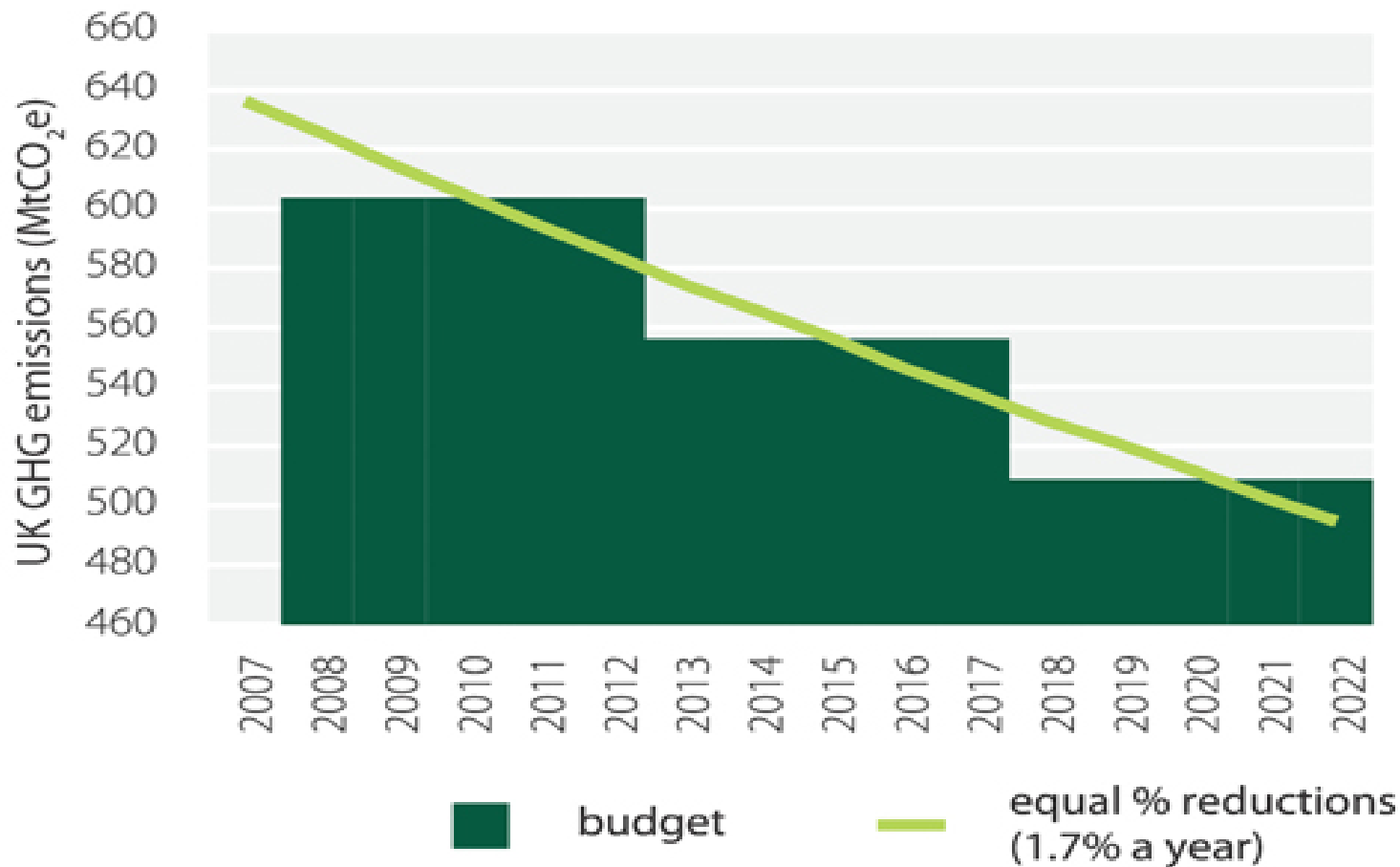
number of public sector bodies Salix Finance has worked with to date



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# Carbon budgets: 1.7% reduction/year



Source: Committee on Climate Change

## Key issues for a low carbon strategy

- Regulation: new risks & new opportunities
  - Cost of carbon improves investment case
  - Strong performance (e.g. CRC) generates returns
  - But new risks – penalties, reputational damage
  - Increased corporate focus – director's responsibility
- Changing market demand: new revenue opportunities or declining markets?
  - Consumer demand for lower impact products & services
  - Consumer demand for responsible companies
  - Supply chain pressure
- Brand value: building a trustworthy, environmentally responsible reputation?
  - Is your data robust & audited?

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# The Carbon Trust Standard: Recognition for real carbon reduction



- Robust certification based on strict criteria and detailed assessor audit
- Best action your organisation can take to prepare for the low carbon economy
- Enables you to communicate your carbon credentials with integrity

**“The process of achieving the Carbon Trust Standard helped improve our understanding of our own needs and processes for managing energy. We recommend this approach to any organisation”**

**Francis Salway, CEO  
Land Securities**

# Standard Bearers lead the way

250+ certified organisations:

- Over 2 MtCO<sub>2</sub>e certified reductions
  - Equivalent to £62m cost saving
- 3.5% p.a. avg reduction



J Sainsbury plc



DIAGEO

SIEMENS

Trinity Mirror plc

Go-Ahead



Easibind International Ltd.

first direct



MORRISONS

dyson

MARKS &  
SPENCER

ATKINS

LandSecurities

O<sub>2</sub>

# Siemens achieves the Carbon Trust Accreditation Standard

## SIEMENS

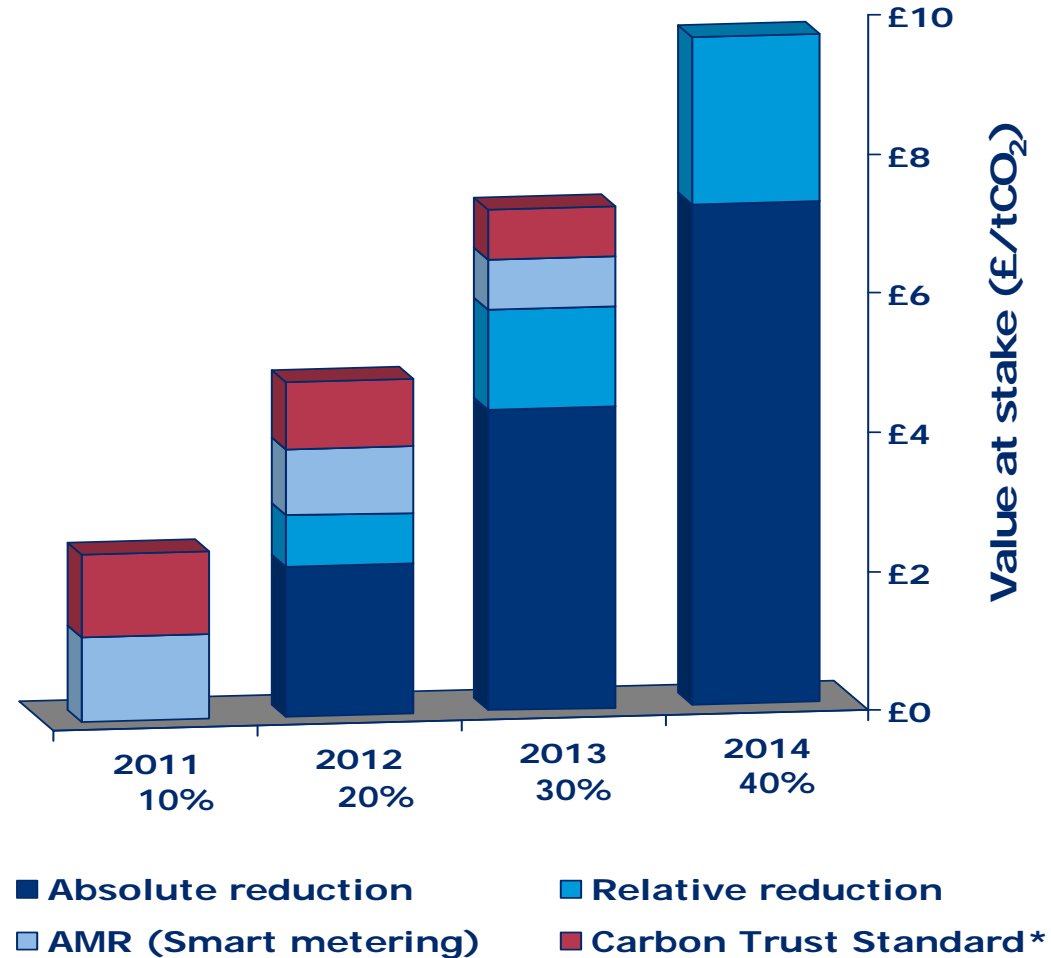


- Carbon Reduction:
  - Target: 5% year on year reducing its carbon footprint.
  - Last year through reducing travel, using live meeting and through energy saving refurbishments, an 8% reduction was achieved.
  - Energy Health Checks have identified future opportunities to help achieve the 5% target for the current year.
- Siemens intends to fund Energy Saving projects on its sites to a value in excess of £5 million using Siemens technology and innovation. There will be a return on investment in less than 4 years.
- Work includes lighting, sub metering, boiler optimisation and many other projects.
- Siemens Real Estate ( SRE ) will fund the work, Siemens Industry sector will provide the technology and project manage the work utilising Siemens Energy sector knowledge.

# The Carbon Trust Standard is linked to initial CRC recycling payments



- Achieving the Standard will:
  - Boost league table ranking
  - Increase cash back through recycling
- Achieving certification now gets 2011 benefit
- 10,000 tCO<sub>2</sub>e footprint (~£1m-£1.5m energy bill)
  - £120k allowances p.a.
  - £120k 1<sup>st</sup> purchase
  - £24k at stake (2011)



\* Or 'equivalent'  
N.B. Figures are based on draft legislation

# Booker – food wholesale



Action	Motivation
<ul style="list-style-type: none"> <li>➤ Training and awareness</li> <li>➤ Thermal jackets on refrigerated goods</li> <li>➤ Masternaut lorry tracking and route monitoring</li> <li>➤ Dockbay refurbishment programme at distribution sites.</li> <li>➤ Alternative fuel trials</li> </ul>	<ul style="list-style-type: none"> <li>➤ CRC</li> <li>➤ Reinforce green credentials as sustainable wholesaler</li> <li>➤ Target public sector contracts</li> <li>➤ Target high profile private sector contracts</li> </ul>
Communication	Success
<ul style="list-style-type: none"> <li>➤ Press release</li> <li>➤ Trade advertising</li> <li>➤ Investor engagement / interim results presentation</li> </ul>	<ul style="list-style-type: none"> <li>➤ First food wholesaler certified</li> <li>➤ 5000tCO2 saving</li> <li>➤ Contribution to winning major public sector contract</li> </ul>



**“Retaining the Carbon Trust Standard gives us a competitive advantage”  
-Ian Keilty, Group Development Director**

# first direct / HSBC – financial services



Action	Motivation
<ul style="list-style-type: none"> <li>➤ 3000 PCs installed with 'night watchman'</li> <li>➤ Installed solar panels on offices – enough to power the in-house creche for 300 children</li> <li>➤ Low energy chillers, BMS extension</li> </ul>	<ul style="list-style-type: none"> <li>➤ Reductions motivated by employee engagement programme</li> <li>➤ Fit with innovative online bank branding</li> <li>➤ Fit with global \$90m initiative to reduce HSBCs impact</li> </ul>
Communication	Success
<ul style="list-style-type: none"> <li>➤ Press advertising</li> <li>➤ Website</li> <li>➤ Employees – e.g. via podcast</li> </ul>	<ul style="list-style-type: none"> <li>➤ First direct were the first certified bank, saving 1500tCO2 and £200k a year</li> <li>➤ 10% reduction across HSBC</li> </ul>

first direct

# Carbon

Others may copy, but we are first

first direct has become the first bank to be awarded the Carbon Trust Standard for carbon footprint reduction.

It's this sort of thing that makes first direct unique. We really do go the extra mile to make a difference. Solar power heats part of our building. Our PCs shut down automatically when they're not in use. More of us are cycling to work and all of us recycle when we get there.

It's the little things that matter. And they all add up to make first direct a better place to bank. Maybe that's why we've been voted number one for customer satisfaction\*.

Our friendly people are on hand to help day or night, 365 days a year. So why not copy 1,000s of happy customers and join first direct today?

first direct banking's better in black and white

Join us, call  
**0800 24 24 24**  
or visit  
**firstdirect.com**  
Member HSBC Group



REDUCING CO2 YEAR ON YEAR

\* Source: Institute of Customer Service, 2009. Because we want to make sure we're doing a good job, we may monitor and/or record our calls. We hope you don't mind. © HSBC Bank plc 2009. All rights reserved. 40 Wakefield Road, Leeds LS8 1FD.

ACT101

**“Achieving the Standard has given our people a great sense of pride and has further invigorated those involved with reducing our footprint” – Chris Pilling – Head of Direct Banking, HSBC**



# Contact details and more information



- **Website:** [www.carbontruststandard.com](http://www.carbontruststandard.com)
  - Case studies
  - Rules and tools
  - Enquiry form
  - News + updates
  
- **Helpline:** **0800 019 1443**
  
- **Dedicated account management team**