C A R B O N T R U S T

> Making business sense of climate change

Is your brand at risk from climate change?



The Carbon Trust works with business and the public sector to cut carbon emissions and capture the commercial potential of low carbon technologies.

An independent company set up by the Government to help the UK meet its climate change obligations through business-focused solutions to carbon emission reduction, the Carbon Trust is grant funded by the Department for Environment, Food and Rural Affairs, the Scottish Executive, the Welsh Assembly Government and Invest Northern Ireland.

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The world's first major study of brand value and climate change

Enlightened business people already know that it's not just heavy users of energy who are affected in a carbon-constrained world.

When in 2003 the Carbon Trust invited large companies in the UK concerned about climate change and its impact on their businesses to come and work with us on Carbon Management, a broad range of companies responded.

These included supermarkets, food manufacturers and high street banks: companies for whom climate change is not such an obvious issue.

What most of them had in common was a strong dependence on their consumer perception or consumer-facing 'brand'.

It's clear that reputations and brands are at risk from climate change. But no one has attempted to quantify this — until now. That's why the Carbon Trust commissioned Lippincott Mercer, a leading brand advisory firm, to undertake the world's first study of this important subject.

While it is difficult to put hard values on intangible assets such as brands, persuasive methodologies do exist. The report's conclusions — that consumer attitudes are approaching a 'tipping point' on the issue and that billions of pounds of brand value are at risk — have, I believe, profound consequences for many sectors.

I hope you find this summary of our findings useful. For a copy of the full report and to find how Carbon Management can help you position your company for the low carbon economy, call us on 0800 085 2005.

Tom DelayChief Executive

Climate Change: not yet a consumer issue

Climate change is now widely accepted as a fact, requiring significant reductions in greenhouse gas emissions over coming decades. Under Kyoto, the UK is legally bound to a 12.5% reduction in these gases by 2008-12. Longer term, reductions of up to 60% are thought necessary.

CO₂, the major driver of climate change, is linked to transport, energy use and many products we take for granted. Meeting our target reductions will require some major changes across most or all aspects of the economy.

Climate change is not yet a significant consumer issue. While two thirds of Britons say they know 'a great deal' or 'a fair amount' about the subject¹, the link between people's actions and climate change is not yet being widely made.

Are we near the tipping point?

But will this change - and if so, how quickly? When the right conditions are in place, behaviour can change or 'tip' almost overnight, with potentially huge consequences for businesses - and brands.

'Tips' in social and environmental issues happen when consumers both want to, and are able to change the way they spend their money. In recent years there have been some significant 'tips' where social and environmental concerns have resulted in dramatic changes in consumer behaviour.



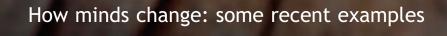


Dolphin-friendly tuna

A video of dolphins being drowned in tuna nets, leaked to the US press, drove demand for dolphin-friendly tuna. All tuna sales are now dolphin-friendly.

CFCs

With no feasible substitute when the problem was first identified, strong press coverage drove the first consumer moves away from aerosol deodorants, etc. The switch tipped when technology was available and regulation was in place.



The Carbon Trust

Organic food

Older first-time mothers' health concerns drove the original 'tip' in the growth of organic food. Fears over GM accelerated the growth in sales, which have moved in close alignment with the number of media mentions. Consumers now expect supermarkets to sell organic food.

Unleaded petrol

Parents concerned with lead levels in school playgrounds were early adopters of cars that ran on unleaded petrol. Viable technology was available but it was a tax on 2 star and 3 star (freeing up pumps for unleaded) that caused a tip in unleaded petrol sales.

Leaded petrol is no longer widely available.

Carbon will 'tip' between now and 2010

There are four ways in which climate change will become more visible to consumers.

Severe weather

Although the full effects of climate change may not be seen for some decades, unpredictable events such as droughts, hurricanes and flash floods are becoming more frequent and severe. Such weather is already linked to climate change by the press, reinforcing the reality of change.

Regulatory impact

Regulations are already with us and more are on the horizon. These include 'cap and trade' schemes for carbon emissions and mechanisms to support renewable energy. The results, from potential increases in electricity prices to more renewable power generation projects, are likely to be fairly visible.

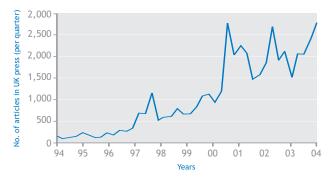
Politics/current affairs

Political issues such as the international tensions over post-Kyoto emissions targets and the re-opening of the nuclear debate are likely to increase the intensity of exposure, driving consumer interest and turning passive awareness into passionate engagement.

Commercial anticipation

Companies anticipating demand and legislation are already reviewing their operations and sourcing of materials and communicating a carbon-responsible position. Such moves explicitly make the link to consumers' actions, offering consumers choices without big compromises in lifestyle.

Growth in UK press mentions of Climate Change



Source: Factiva, UK English language press mentions including global warming, climate change, greenhouse effect or greenhouse gas



2010: a changed business landscape?

One hundred thousand northern Europeans died in the heat wave of 2008...

In UK Augusts are wet; gale force winds common; heavy snowfalls are expected in February...

Most of the volume car manufacturers now offer hybrid-fuel cars...

Bangladesh is inundated by catastrophic floods, though little media attention is paid to this now regular occurrence...

GDP growth remains strong...

California has imposed permanent water rationing...

International tension mounts as emissions in the US, China and India continue to increase...

The Thames Barrier is being urgently extended to protect Canary Wharf after floods caused £100 million of damage...

One in ten Cornish homeowners are no longer able to get their homes insured...

Energy labels are now in place in all supermarkets, banks and shopping centres. Energy certificates have been a mandatory part of house sales since mid-2006...

What we found

The report's findings focused on six sectors: airlines, oil & gas, food & beverage production, food retail, telecommunications and banking.

For each sector, it analysed:

- How important is brand value, and in particular brand image?
- What is the operational exposure to climate change, both in terms of direct greenhouse gas emissions, and broader areas of influence or exposure?
- · How easily could a company differentiate its products on the issue of climate change? What alternatives are available to consumers?

If climate change becomes a consumer issue, it is not just industrial sectors that will have value at risk. Companies across much of the economy will need to assess their own exposure and understand the lead time needed to address the issue and take appropriate action.

Almost £20bn at risk

Airlines and Food and Beverages were found to have the highest intangible value at risk (50% and 10% of market value respectively). Oil and Gas, Retail, Banking and Telecommunications had much lower exposure, at less than 2-3% of market value. Even this small percentage however can still equate to several billions of pounds in quoted value alone.

Brand value at risk (£ bn)

Here we take the FTSE All Share capitalisation for each sector and apply the above report's findings to those values. Most other sectors are exposed to consumer brand perception and climate change issues. The report

provides a framework for analysis that could easily be extrapolated to other sectors.

In just these six sectors, there is almost £20 billion of value at risk.

£ billion, based on FTSE All share

Sector	Total Market Value	% at risk	£ billion at risk
Airlines	3.1	50	1.5
Food & Beverage Production	66.5	10	6.6
Oil and Gas	172.9	2-2.5	3.9
Banking	380.8	1-2	5.7
Telecomunications	116.0	1	1.2
Food Retail	31.7	<1	<0.4

Source: Brand value at Risk, The Carbon Trust (March 2005)

What does it mean?

With climate change set to become a more prominent issue, it is not just industrial sectors (those exposed to the EU ETS or other regulatory regimes) that will have value at risk.

Companies need to consider the implications of being seen to address climate change less effectively than their competitors. This impacts your reputation with consumers and corporate customers; with NGOs; with staff; with suppliers of finance; and with local, national and international public bodies, influencing anything from planning to access to natural resources.

In some sectors, the lead time for action may be considerable.

Companies need to act now. Many already are — across the page you'll see the names of some of Britain's leading companies¹, who are using Carbon Management to uncover real business advantage. You can join them by calling the Carbon Trust today.

For your copy of the full report or to find out more about climate change and its strategic implications for your business call the Carbon Trust on

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