



Mitigation

CLIMATE CHANGE BRIEFING PAPER

Climate change briefing papers for ACCA members

Increasingly, ACCA members need to understand how the climate change crisis will affect businesses. This impact can be felt throughout an organisation as a consequence of changing taxation, carbon trading, new reporting requirements, different management needs, formulating adaptation policies, or changes required in governance.

The ACCA climate change briefing papers provide readers with the information needed to assess the changing environment ahead. ACCA has worked with several well-established partners in the relevant field to develop their content.

ACCA climate change briefing papers include the following titles:

1. adaptation
2. governance and management
3. investment
4. mitigation
5. taxation.

www.accaglobal.com/climatechange

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Climate change mitigation – the challenge for business

Climate change mitigation entails finding ways to reduce the greenhouse gas emissions that cause climate change. Ways of mitigating climate change include reducing demand for emissions-intensive goods and services, increasing efficiency gains, increasing use and development of low-carbon technologies, and reducing non-fossil fuel emissions.

The undeniably global scale of both the causes and effects of climate change means that solutions invariably need to be international in scope, hence the importance of a global, political agreement.

Companies will provide many of the answers to the question of how we reduce our carbon emissions. They will need to develop new low-carbon technologies, cut their own carbon emissions and encourage their suppliers to do the same.

Yet research by the Carbon Trust has found that climate change is still not a strategic priority for a significant number of businesses.

A major study of six business sectors: construction, automotive, consumer electronics, aluminium, oil and gas, and beer, found that the large emissions reductions necessary to tackle climate change and put us on a path to a low-carbon economy will create significant business opportunities and risks with huge financial impact.

The study found that well-positioned, proactive and forward-thinking businesses could increase company value by up to 80%. Conversely, poorly positioned and laggard companies run the greatest risks, with up to 65% of company value at risk in some sectors.

Companies need to consider the future impact of bigger changes driven by regulation, technology or consumers. With the UK's commitment to challenging and legally binding carbon emissions-reduction targets, climate change is now a key strategic issue. As this new business revolution unfolds it is clear that there will be winners and losers, and that companies that adopt a flexible but proactive approach now are most likely to benefit.

So, what is the role for business?

A critical starting point for many businesses in assessing their role in climate change mitigation is the realisation that this is not just an ethical obligation, but a fantastic business opportunity. The challenge is to understand how this opportunity can be realised.

BOTTOM LINE BENEFITS

The bottom line is that saving energy and saving carbon also saves money. The challenges presented by the economic environment are understandably front-of-mind for businesses that are struggling with the tightening of credit markets. In these circumstances, implementing energy efficiency measures is now more essential than ever. Indeed, in 2009 the pressures of the global economy have made energy saving and carbon reduction more important than ever.

To cut carbon you do not have to invest large sums of capital. Most businesses could save up to 20% on energy bills by taking simple low-cost or no-cost action on energy efficiency. The first step to cutting your carbon emissions is to understand your carbon footprint. Various organisations, including the Carbon Trust, offer free advice to help with this.

Taking the next step on the low-carbon, low-cost journey requires investment in new, more energy-efficient equipment for businesses. From essential heating and lighting systems to core manufacturing equipment – essential business equipment represents a drain of £3.3 billion a year on the bottom lines of smaller and mid-sized businesses (SMEs).

A lack of available credit through traditional mechanisms need not, however, be an obstacle for SMEs that want to invest in more energy-efficient equipment. For example, in the UK, the 2009 Budget announced £100m of new funding for interest-free Energy Efficiency loans, which allow businesses that have an energy electricity spend below £500,000 a year, or with fewer than 250 employees and a turnover of less than £43m, to replace old, inefficient equipment with new energy saving models.

The unsecured, interest-free Energy Efficiency loans of between £3,000 and £400,000 are available to fund projects ranging from lighting installations and boiler projects to large industrial process technologies. The loans are designed to pay for themselves through energy savings, so that once the loan is paid off, savings go straight onto the bottom line. Typically, annual savings can range from £14,000 a year to well over £100,000 a year. Essentially, the loan scheme provides a cost-free way for all SMEs to cut energy costs now, as well as to transform their businesses with more efficient equipment

As well as saving businesses money, investing in energy-efficient equipment is also tax efficient. The Enhanced Capital Allowances (ECAs) scheme¹ for energy-saving technologies encourages businesses to invest in energy-saving plant or machinery specified on the Energy Technology List (ETL). The ECA scheme provides businesses with 100% first-year tax relief on their qualifying capital expenditure. The ETL specifies the energy-saving technologies that are included in the ECA scheme. The scheme allows businesses to write off the whole cost of the equipment against taxable profits in the year of purchase. This can provide a cash flow boost and an incentive to invest in energy-saving equipment, which normally carries a price premium compared with less efficient alternatives.

Larger companies, meanwhile, can benefit from a more strategic approach to managing the risks and realising the opportunities that climate change presents. This goes well beyond energy management, enabling organisations to consider both their operations and their revenue in the context of climate change. In addition to cost savings, the results include improved clarity of responses to legislation, operational improvements, corporate reputation and brand enhancement.

1. <http://www.eca.gov.uk/etl>

Carbon management case study: Sainsbury's

The UK's retail sector is responsible for over 5 million tonnes of CO₂ emissions a year. It is estimated that energy savings of up to 20%, equivalent to more than £300m, are possible across the sector.

The immediate impact of climate change on food production is relatively clear. Changes to the temperature, and weather conditions, could jeopardise crops and disrupt supply. The knock-on effect of these hazards, however, is more subtle. Erratic weather patterns can increase risk and lead to greater uncertainty – increasing suppliers' insurance costs. Increases in direct and indirect taxation of energy, transport and waste management (as well as increased direct production costs) may also have an impact.

Acknowledging this, Sainsbury's measures and reduces its energy consumption and CO₂ emissions. With almost 800 stores across the UK, this retailing company sources products from all over the world, so it has a vested interest in the environmental debate and is keen to play its part in saving energy and reducing its carbon footprint.

Our work with the Carbon Trust has aided us enormously, helping us to achieve our commitment to the continued reduction in CO₂ emissions. We have been able to exceed our reduction targets and ensure that we remain a responsible company in minimising our impact on the environment.

(JULIUS BRINKWORTH, SAINSBURY'S HEAD OF ENERGY AND ENVIRONMENT.)

THE RESULTS

In total, Sainsbury's has saved 81,000 tonnes of CO₂ through its work with the Carbon Trust – and the specific measures it has introduced as part of this. Overall, the stores that took part in the Reset Project (a project that measures best-fit energy projects to find those most suited to individual stores) are showing sustainable energy savings of 15%. This equates to annual energy savings of £9m. Based on these savings, Sainsbury's is well on the way to meeting its target of a 25% reduction in energy for every square metre by 2012.

Reducing Emissions

For companies that seek to reduce emissions, implementing low-cost measures with immediate impact is usually a good way to start because it can act as a springboard to the development of a longer-term strategy. Top tips for reducing emissions include the following.

Tips for individual employees

- Turn off lights – lighting a typical office overnight wastes enough energy to heat water for 1,000 cups of tea.
- Switch off PCs – a PC monitor switched off overnight saves enough energy to microwave six dinners.
- Switch off all non-essential equipment – for a typical office for one night, this will save enough energy to run a small car for 100 miles.
- Limit printing documents where possible.
- Choose a low-carbon method of transport to and from work.

Tips for central departments

- Review travel expenses policy – flights and hotels.
- Consider type of lighting, and ways of recycling waste and disposing of old equipment.
- Review types of paper, cup, ink cartridge purchased.
- Investigate availability of video-conferencing facilities to reduce travel.

Tips for outsourced providers

- Select food with minimal packaging.
- Turn off elevators, IT equipment, dishwashers, etc at night.
- improve building insulation.
- Check that heating and lighting are turned off at night.

Understanding the regulatory picture

Although cutting carbon can deliver significant financial benefits, businesses also need to be aware that their environmental performance is subject to growing regulatory scrutiny.

In the UK, one of the key pieces of regulation that will affect organisations in the coming months and years is the Carbon Reduction Commitment² (CRC), a mandatory emissions

trading scheme starting in April 2010. The CRC will affect large public and private organisations that used more than 6,000 MWh of electricity in 2008 (roughly equating to £500K spend), which will have to purchase and surrender allowances each year to cover their CO₂ emissions.

Around 20,000 organisations will be affected by the new regulation and 5,000 organisations will participate in a CRC League Table. The first year of the league table is based exclusively on 'early action metrics'. These are achieving certification against the Carbon Trust Standard and installing voluntary Automatic Metering.

The organisations targeted by the CRC typically have relatively low energy intensity and most are outside existing schemes such as the EU Emissions Trading Scheme and Climate Change Agreements. Sectors affected include retail, leisure, some manufacturing, professional services, many other office-based activities and the public sector, including local authorities, universities and NHS Trusts.

Organisations that are affected by the CRC will have to purchase carbon allowances from the government from April 2011 – which could cost tens or hundreds of thousands of pounds, depending on their emissions. Many organisations have not yet considered the financial, compliance, audit and carbon management implications of the new regulations.

Boosting reputation

Beyond the bottom line and regulatory drivers for cutting carbon, there is also a significant reputational benefit to be drawn from the commitment to operating more sustainably.

The Carbon Trust Standard was launched last year to provide independent certification of this and so far over 100 organisations have achieved the Standard, ranging from household names such as Morrisons, first direct and O2, to local councils, universities and the emergency services. The Standard delivers a clear benefit to organisations affected by the CRC by reducing the cost of compliance, while it also offers credible, third-party recognition of tangible action on climate change.

Once a niche sector, the market for low-carbon products and services is now becoming more mainstream, evidenced by the fact that some of the UK's leading businesses are now displaying product carbon footprinting information for their customers, via the Carbon Trust's Carbon Reduction Label. The scheme was launched in the UK in 2007 and in less than two years has won the support of over 60 product manufacturers. The label now appears on more than 2,500 UK consumer products, from potato crisps to fruit juice, paving stones to bank accounts. Brands that have adopted the system include the leading UK supermarket chain Tesco, Allied Bakeries' Kingsmill bread and PepsiCo's Walkers, Quaker and Tropicana.

The Carbon Reduction Label and footprinting methodology are also being deployed globally. Earlier this year, the Carbon Trust signed an agreement with Planet Ark, a leading Australian environmental organisation, to establish its Carbon Reduction Label in Australia. The first products bearing the label are expected to hit Australian supermarket shelves in 2010.

More widely, global brands such as PepsiCo have undertaken footprinting projects – for example, PepsiCo has calculated the lifecycle carbon footprint of the 64-ounce (1.8 kg) container of Tropicana Pure Premium Orange Juice.

2. <http://www.defra.gov.uk/environment/climatechange/uk/business/crc/index.htm>

The move to a low-carbon economy

The growing propensity of consumers to ‘buy green’ highlights the business opportunity that the move to a low-carbon economy will create for organisations in all sectors.

The Carbon Reduction Label scheme represents a strategic opportunity for Australian businesses to measure and reduce their products’ carbon footprint and their energy cost. This is an exciting and groundbreaking partnership with the Carbon Trust. They have showcased the significant strategic value of communicating corporate commitments and cuts in product carbon footprints to European and American consumers. Our aim is to achieve the same success here with Australian companies and consumers.

PAUL KLYMENKO, RESEARCH DIRECTOR OF PLANET ARK

One of the most fundamental changes that we need to see, both in the UK and internationally, is the emergence of a new, low-carbon energy industry with significantly reduced reliance on fossil fuels. To meet EU targets of generating 15% of its total energy supply from renewable resources by 2020, up from less than 5% today, the UK will need to take a giant step forward in enabling key renewable technologies, such as offshore wind and marine energy, to reach commercial maturity.

Fortunately, the UK is in a strong position to accelerate the development of these technologies. With Europe’s largest wind, wave and tidal resources, as well as extensive engineering expertise, exploiting these resources will offer major economic development opportunities for UK-based companies.

In fact, analysis has shown that by taking a bold new approach to commercialisation of clean technologies, the UK could generate up to £70 billion for the economy and almost 250,000 jobs in offshore wind and wave power alone. Offshore wind and wave alone could also provide at least 15% of the total carbon savings required to meet our 2050 targets.

Recent research indicates this ‘clean tech’ revolution has begun and some green roots have been planted. United Nations Environment Programme data released earlier this year shows that overall, renewable energy investment last year was more than four times greater than in 2004. Global investments in renewable energy overtook those in carbon-based fuels for the first time in 2008 with the overall market for clean technologies last year valued at some £3 trillion.

It is hoped that this new policy framework will now drive the action and investment needed from business. This will create an environment where sustainable economic growth can be a reality. Critically, it will also mean that organisations globally can not only contribute to the fight against climate change but also benefit from doing so in both the short and long term.



Further reading

Carbon Trust (July 2009), *Focus for Success - A New Approach to Commercialising Low Carbon Technologies*.

Carbon Trust (March 2009), *Making the Business Case for a Carbon Reduction Project*.

Carbon Trust (August 2007), *Carbon Footprinting*.

Carbon Trust (Feb 2008), *Climate Change – A Business Revolution?*

DECC (2009), *'User Guide' to the CRC*.

CBI (March 2009), *Less is More: Building an Energy Efficient UK*.

CBI (June 2009), *CBI Climate Change Tracker: Monitoring Progress Towards a Low-carbon Economy*.

CBI (August 2009), *Getting Involved: A Guide to Switching your Employees on to Sustainability*.

About the Carbon Trust

The Carbon Trust is an independent company set up in 2001 by government in response to the threat of climate change, to accelerate the move to a low-carbon economy by working with organisations to reduce carbon emissions and develop commercial low-carbon technologies. We cut carbon emissions now by providing business and the public sector with expert advice, finance and certification to help them reduce their carbon footprint and to stimulate demand for low-carbon products and services. Through our work, we have already helped save over 23 million tonnes of carbon, delivering costs savings of around £1.4 billion. We cut future carbon emissions by developing new low-carbon technologies. We do this through project funding and management, investment and collaboration, and by identifying market barriers and practical ways to overcome them. Our work on commercialising new technologies will save over 23 million tonnes of carbon a year by 2050.

www.carbontrust.co.uk

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