

Investment

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

About Trucost

Trucost Plc helps organisations measure and reduce the carbon and environmental impacts of their operations, supply chains, investments, products and services.

Services for investors: With the largest and most comprehensive database of corporate environmental impacts covering the world's major indices, Trucost enables investors to understand how environmental issues could affect companies' future earnings. Institutional investors and fund managers use Trucost's company and fund data for a variety of purposes, including measuring the carbon or environmental footprints of investments and funds, understanding the financial risk to investments from potential environmental costs and creating new products.

Services for companies: Trucost helps companies measure and manage the carbon and environmental impacts of their business activities using readily available information. Companies work with Trucost for a variety of reasons including benchmarking environmental performance against selected peers and sectors, measuring carbon and environmental impacts of their operations and supply chains, and managing financial risk from future regulation and energy price increases.

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September 2009

The economics of emissions

Companies need to improve accounting of greenhouse gas emissions and carbon costs to help investors address financial risks and reward carbon-efficient leaders.

Carbon accounting will become more important as regulatory controls on GHG emissions require industries to pay for their emissions and invest in low-carbon energy, technologies and processes.

Institutional shareholders such as pension funds increasingly expect fund managers to manage carbon-related risks and opportunities. Asset managers need to be able to identify carbon-efficient companies for investment, as well as carbon-intensive companies that present the greatest risks. To do this, they need companies to provide consistent and comprehensive accounting of corporate carbon emissions and costs. In the absence of adequate reporting requirements and standards, accountants are well placed to encourage companies to report accurate, standardised data in annual reports and accounts.

Accountants are uniquely positioned to help integrate extra-financial issues such as greenhouse gas (GHG) emissions into reporting and assurance practices, as well as management accounting, systems and controls.¹ They can help companies embed sustainability information in corporate strategies and provide a more complete picture of business performance.²

Carbon accounting will become more important as regulatory controls on GHG emissions require industries to pay for their emissions and invest in low-carbon energy, technologies and processes. Market-based approaches such as carbon trading schemes and taxes, as well as emissions performance standards, will have knock-on effects on the markets and companies that drive investment returns.

Government action to address rising GHG emissions is increasing as recognition grows that climate change impacts will have major economic repercussions. If 'business as usual' allows 5–6°C warming, annual GDP could fall by 20% globally, according to the 2006 UK Government's *The Stern Review: The Economics of Climate Change*.³

At the United Nations international climate change talks in December 2009, countries are due to agree targets for cutting GHG emissions from 2013 onwards. Climate scientists have called for global GHG emissions to be at least halved from 1990 levels by 2050, and for developed countries to cut emissions by at least 80%.⁴

To have a chance of avoiding the most dangerous climate change impacts, just 1% of annual global GDP will need to be invested in mitigation by 2050. The longer action is delayed, the higher the costs.

1. Federation of European Accountants (FEE), *Policy Statement – Sustainability: The Contribution of the Accountancy Profession*, January 2009.

2. <http://www.accountingforsustainability.org/output/Page159.asp>, 31 July 2009.

3. H.M. Treasury.

4. http://www.europeanclimate.org/index.php?option=com_content&task=view&id=52&Itemid=42, 31 July 2009.

Risks and opportunities

Carbon costs will become increasingly material to carbon-intensive businesses.

Carbon costs are starting to contribute to a fall in earnings and valuations for carbon-intensive companies

The Stern Review called climate change ‘the greatest and widest-ranging market failure ever seen’. Most GHG emissions currently do not carry a cost that reflects the damage they cause to the environment and society – these damage costs are external to market transactions. Markets act inefficiently by treating pollution outputs as off-balance sheet ‘externalities’. As governments apply a price to carbon to internalise the cost of emissions on company balance sheets, GHGs will become increasingly material to companies and investors.

Most companies are likely to have the widest exposure to emission controls through market-based instruments. Cap-and-trade schemes will change cost structures for all industries. Emissions trading will increase operating costs most for companies that rely heavily on fuels and processes that produce high levels of emissions to generate revenue. The amount of greenhouse gases a company emits relative to revenue – ie its carbon intensity – shows the extent to which it relies on its ability to externalise associated damage costs.

Under the European Union Emission Trading System (EU ETS), 10,000 energy-intensive industrial installations, including combustion plants, oil refineries, coke ovens, iron and steel plants and cement producers, are directly exposed to carbon costs. They must surrender an EU Allowance or carbon permit for each tonne of carbon dioxide emitted. The majority of allowances are allocated free of charge during phase II, from 2008–12. Companies that emit more than the number of permits allocated freely can purchase EU Allowances through government auctions or on the carbon market. To help meet their caps, they can also purchase international carbon credits, issued under the UN Kyoto Protocol agreement on climate change.

Carbon costs are starting to contribute to a fall in earnings and valuations for carbon-intensive companies. For instance, under phase III of the EU ETS the expected costs of allowances from 2013 for coal-fired power station operator Drax Group Plc were central to a decision by Standard & Poor’s to downgrade the company from investment grade to ‘junk’ status in May 2009.⁵ Meanwhile, the power utility RWE Group reported €1.2 billion in carbon costs in its 2008 annual report and accounts.

In practice, most companies are indirectly exposed to carbon costs that are passed on by suppliers in higher prices for goods and services. To start positioning their businesses to allow for carbon constraints, companies in a range of sectors, including food and drink, are beginning to measure and manage carbon emissions from operations and supply chains.

Companies that are more carbon-efficient than sector peers, or that reduce emissions, are likely to benefit from lower operating costs under cap-and-trade. Companies that provide low-carbon ‘solutions’, such as renewable energy and clean technologies, also stand to gain competitive advantage.

This trend is set to increase across industrialised countries. Cap-and-trade is planned in various countries, including the US, Australia and South Korea. There will be winners and losers during the shift to a low-carbon economy.

5. Sakoui, A., ‘Drax downgraded to ‘junk’ status by S&P’, *Financial Times*, 15 May 2009.

Shift in investor behaviour

Investor action to address risks and opportunities linked to greenhouse gas emissions is barely off the starting block.

Some pension funds and fund managers are starting to address exposure to carbon costs by assessing the carbon footprints of their funds

Investors are starting to consider climate change in investments,⁶ focusing mainly on opportunities such as energy efficiency, clean technology and renewable energy providers. Financial products that invest in 'solutions' include the DWS Invest Climate Change LC and F&C Global Climate Opportunities Fund. Globally, some US\$500 billion a year will be needed to develop energy efficiency and renewable energy.⁷ This investment universe is still small, however, and the technology sector is a high-risk one.⁸

Most investors are yet to address carbon risks across indices and funds. Nonetheless, investors such as VicSuper, one of Australia's largest superfunds, are starting to shift assets towards carbon-efficient companies. Research by Goldman Sachs suggests that if companies had to pay US\$60 per tonne of carbon emissions, approximately 20% of the cash flow of carbon-intensive industries would move from less to more carbon-efficient companies.⁹ Goldman Sachs assessed the performance of some 800 global companies with a market capitalisation over US\$3 billion.

Products to meet growing investor demand for environmentally focused indices include the S&P US Carbon Efficient Index. The Index measures the performance of 'large cap' US companies with relatively low carbon emissions, while seeking to track closely the return of the S&P 500. Trucost calculates the carbon intensity of Index companies by researching and standardising publicly disclosed information and engaging directly with companies to verify calculations. Trucost also helps companies to measure and manage emissions from their operations and supply chains.

Some pension funds and fund managers are starting to address exposure to carbon costs by assessing the carbon footprints of their funds. For instance, Green Century became the first US-based mutual fund to disclose its carbon footprint in July 2009, using Trucost carbon data. Carbon footprints help identify which companies contribute most to portfolio exposure to carbon costs. To reduce portfolio carbon exposure, investors are increasingly use proxy voting activities and engagement programmes to encourage companies to improve carbon management and reporting.

A recent study by the United Nations Environment Programme Finance Initiative (UNEP FI) concluded that asset managers and investment consultants have a legal duty to take account of environmental, social and governance issues.¹⁰ This is likely to spur further integration of issues such as climate change into investment analysis.

6. Institutional Investors Group on Climate Change, *Investor Statement on Climate Change Report*, 2008.

7. World Economic Forum, *Green Investing, Towards a Clean Energy Infrastructure*, January 2009.

8. Hargreaves Lansdown Asset Management Ltd, *Climate Change – A Chance to Profit from a Changing World?*, 2009.

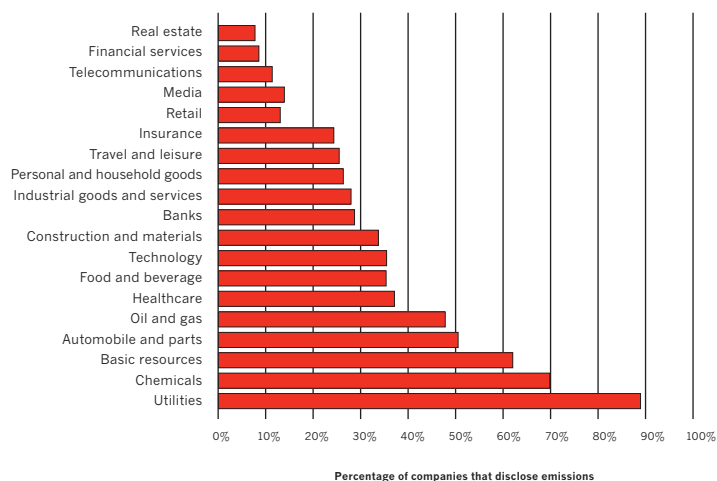
9. GS SUSTAIN, The Goldman Sachs Group, *Change is Coming: A Framework for Climate Change – A Defining Issue of the 21st Century*, May 2009.

10. Asset Management Working Group of the UNEP FI, *Fiduciary Responsibility – Legal and Practical Aspects of Integrating Environmental, Social and Governance Issues into Institutional Investment*, 2009.

In a separate report on the materiality of climate change, the UNEP FI has called for investors to ‘routinely include climate change as a factor in asset management practice’.¹¹ In this report, it also warns that ‘corporate management has not yet grasped the immediacy of the issue’.

During interviews conducted for the WWF/Trucost/Mercer report, *Carbon Risks in UK Equity Funds*, fund managers revealed that the main barriers to integrating climate change into decision-making processes were lack of confidence in government policy, short-term pressures and lack of comparable data.¹² Nonetheless, these perceived barriers do not reflect emerging greenhouse gas regulations in major economies, carbon cost impacts on earnings for some companies, and better reporting on emissions by companies in carbon-intensive sectors (see Figure 1).

Figure 1: S&P 500 – Disclosure of direct operational GHG emissions by sector



Source: *Carbon Risks and Opportunities in the S&P 500*, Trucost/IRRC Institute

11. Asset Management Working Group of the UNEP FI, *The Materiality of Climate Change – How Finance Copes with the Ticking Clock*, July 2009

12. WWF/Trucost/Mercer (2009), *Carbon Risks in UK Equity Funds*

Accounting for emissions and carbon allowances

While gaps in regulatory requirements and reporting standards remain, accountants can support clear reporting of emissions and allowance costs in directors' reports.

Until standardised reporting frameworks are in place, accountants can encourage firms to disclose carbon costs separately in financial statements, and report emissions in line with the GHG Protocol in annual reports and accounts

Asset managers need information on corporate carbon performance to reveal off-balance sheet carbon risks for companies, as well as to identify leaders in carbon efficiency. To help fund managers incorporate carbon risks and opportunities into financial analysis, companies should account for greenhouse gas emissions and carbon costs in a standardised, consistent and robust way.

Companies do not, however, currently have to report greenhouse gas emissions publicly or identify costs incurred from the purchase of carbon allowances. Pressure is growing on regulators in the UK and elsewhere to require companies in carbon-intensive sectors to provide accurate information on greenhouse gas emissions, as well as on carbon costs under cap-and-trade schemes, in annual reports and accounts.¹³ Many investors are calling for more robust corporate disclosure of greenhouse gas emissions so that markets can assess which companies have the greatest carbon costs, and which stand to gain in a low-carbon economy. The Co-operative Bank and WWF are calling for the UK government to strengthen carbon disclosure requirements for oil, gas and power companies to help identify potentially risky investments in carbon-intensive industries.¹⁴

Company reporting on carbon emissions has improved globally under the Greenhouse Gas Protocol international corporate accounting standard, developed by the World Resources Institute and World Business Council for Sustainable Development. Recognising that corporate reporting of emissions is, however, still inconsistent, the Federation of European Accountants (FEE) called for accounting bodies to develop standardised carbon measurement, disclosure and assurance approaches.¹⁵

Reporting on carbon costs under emission trading schemes is even more inconsistent. For instance, some companies do not disclose on their balance sheets the cost of allowances under the EU ETS, while others charge allowance costs to income statements within fuel costs, making it more difficult for analysts to estimate probable financial risk from future carbon prices.

Mixed reporting on allowance costs reflects the gap in international standards for accounting for carbon costs. Accounting bodies, including the International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB), are currently developing guidance on accounting for emission allowances under trading schemes.¹⁶

Until standardised reporting frameworks are in place, accountants can encourage firms to disclose carbon costs separately in financial statements, and report emissions in line with the GHG Protocol in annual reports and accounts. They can also help companies rise to the challenge of integrating carbon factors into business planning, risk controls and forecasting.

13. <http://www.ceres.org/Page.aspx?pid=911>, 31 July 2009.

14. <http://www.co-operativecampaigns.co.uk/toxicfuels/>, 31 July 2009.

15. FEE, *Policy Statement: Carbon Emissions Information*, 31 July 2009.

16. <http://www.iasb.org/NR/rdonlyres/D0D0B44A-254A-4112-9FCE-34178B236D07/0/0811ProjectUpdateETSproject.pdf>, 31 July 2009.

Additional resources

Stern, N. (2009), *A Blueprint for a Safer Planet, How to Manage Climate Change and Create a New Era of Progress and Prosperity* (The Bodley Head).

Stern, N. (2006) *Stern Review: The Economics of Climate Change* (London: H.M. Treasury).

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UNEP FI (2009), *IASM Emission Trading Scheme Project*, <<http://www.iasb.org/Current+Projects/IASB+Projects/Emission+Trading+Schemes/Emission+Trading+Schemes.htm>>.

FASB Emission Trading Scheme Project (2009), <http://www.fasb.org/emissions_trading_schemes.shtml#summary>.

Accounting for Sustainability (2009), *The Prince's Accounting for Sustainability Project* [website], <<http://www.accountingforsustainability.org>>.

Federation of European Accountants (FEE) (2009), *Policy Statement – The Contribution of the Accountancy Profession*.