acclimatise
managing your climate risks

ACCA

Adaptation

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

This briefing paper has been prepared by Acclimatise.

Contents

Climate change is underway

Governments, businesses and the financial markets increasingly recognise the reality we face, that we have both to reduce our emissions (mitigate) and to adapt to this inevitable change.

Climate change is inevitable. And it is happening now. Governments, businesses and the financial markets increasingly recognise the reality we face, that we have both to reduce our emissions (mitigate) and to adapt to this inevitable change. There is no choice between mitigation and adaptation; organisations and individuals have to pursue complementary actions on both. When we talk about 'organisations', we mean those in both the public and private sectors.

According to the Intergovernmental Panel on Climate Change (IPCC), we already face many years of continuing unavoidable change. Even if we were able to stabilise atmospheric concentrations of greenhouse gases (GHGs) immediately, we would need to cope with a changing climate for the next 40-plus years, owing to past and present-day emissions. The future climate is already determined for this period and the consequences cannot be ignored.

So what does climate change adaptation mean?

Recognising what is happening to our climate on a global and local scale, and developing strategies to manage the risks that this presents is crucial to the growth, development and continuing success of any organisation.

Temperatures and sea levels are rising; storm intensity, frequency, and track locations are varying; rainfall patterns are changing, increasing the risk of flooding and drought; and there is increasing competition for natural resources. These are not environmental issues, they are core business risks. More importantly, they present huge commercial opportunities and cost savings for the businesses that are first to adapt to the changing climate.

Recognising what is happening to our climate on a global and local scale, and developing strategies to manage the risks that this presents is crucial to the growth, development and continuing success of any organisation. Adaptation equates to investing in the future of your business. And this means acting now.

Ten years ago we were talking about these impacts affecting our children and our grandchildren. Now it is happening to us. Even if we achieve a cap at two degrees, there is a stock of major impacts out there already and that means adaptation. You cannot mitigate your way out of this problem.

PROF MARTIN PARRY, CO-CHAIRMAN, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) 2007

And how will it affect your organisation?

The role of the accountant is becoming more important to every business. Climate change has the potential to be a key financial risk; the more you understand about the risk and opportunities the better positioned you will be to build resilience to, and exploit the opportunities from, the impacts of climate change.

Regardless of size, location, or product, the risks facing every industry are threefold: the physical, policy and market impacts. In brief, business strategies and objectives that stand today will not do so tomorrow. They need to evolve by taking into account the far-reaching impacts on customers, operations, supply chains, workforce, stakeholder value and brand reputation.

For example:

- changing markets and products, as well as customer expectations, preferences and needs will alter the competitive landscape
- critical changes to value, return and growth could trigger credit-rating revisions and increased cost of capital
- decisions taken by directors and professional advisers may be open to legal challenge, creating corporate governance and director and officer liabilities
- increased pressure on contracts, procurement processes and supply chains could lead to increased competition between purchasers
- failure to identify and manage risks in a timely manner could lead to missed business opportunities and loss of competitive edge
- weather disruptions could lead to equipment downtime, increased maintenance costs and compromised safety standards
- greater need for contingency planning and workforce health and safety may arise owing to changes in working conditions and disease patterns
- availability and quality of essential water resources will be reduced; in addition, there will be competing demands for these limited supplies from local communities and emerging markets
- risk of non-compliance with industry and environmental regulation may lead governments to take prescriptive measures.

The above impacts are not insurmountable; with the right risk-management approach and adaptation plans in place, businesses can overcome the complexities of environmental and regulatory requirements and still meet growing demand.

The adaptation challenge

Incremental changes in the climate and in a company's current thresholds, sensitivities and vulnerabilities are significant issues to be considered in any analysis of future financial performance

For most parts, adaptation has received less attention than mitigation, but that is now changing as leading organisations are starting to address the wider climate change challenge. They are also seeing that inevitable climate change (adaptation) is not an environmental issue, but is instead a core business risk

The risk of increasing severity and frequency of extreme events due to climate change has grabbed the media headlines and has been the focus of most climate change assessments. In contrast, the 'creeping' average changes in climatic conditions are much harder to recognise and are more likely to be overlooked. These changes in our climate are more subtle and their impacts on business models may pass undetected until critical thresholds are breached. The responses may result in 'step-changes' for a company, increasing operational costs beyond forecasts, falling revenues, unplanned capital investment and additional balance sheet financing to manage the consequences.

Assets and operational processes designed without any allowance for incremental change are likely to fail to meet future design criteria, operational performance targets, Key Performance Indicators (KPIs) and regulatory standards. Incremental changes in the climate and in a company's current thresholds, sensitivities and vulnerabilities are significant issues to be considered in any analysis of future financial performance. We have already seen significant impacts that indicate the business consequences of inevitable climate change.

Changing weather patterns may impact in a variety of ways, including the physical risk to fixed assets arising from storm damage or flood, impacts on the supply chain arising from increasing scarcity of natural resources such as water, and shifting patterns in demand for goods and services due to increased extremes of temperature.

They may impact asset values, and hence potentially weaken a company's balance sheet; they may increase costs, as raw materials or other inputs become scarce, or as operations or working practices need to change; or they may reduce the demand for a company's products or services.

...these impacts may be valid considerations in credit risk analysis for lending banks.

BARCLAYS ENVIRONMENTAL RISK

Building business resilience

Every business, if it has not already, must undertake risk assessments of its business model to understand the impacts of a changing climate

CFOs, finance directors and accountants will play a key role in setting the right structures for future success. Every business, if it has not already, must undertake risk assessments of its business model to understand the impacts of a changing climate. As this is more than an environmental or social responsibility issue, any company board that treats climate change as a box-ticking exercise to assuage corporate social responsibility (CSR) sensitivities is failing in its fiduciary responsibilities. Inevitable climate change goes right to the heart of a business and straight on to the balance sheet, making this a financial issue. It should appear on the risk register of every company as a matter of good corporate governance, and be treated as a board-level priority.

Directors and managers, particularly when developing future strategies and making decisions on projects and financial budgets, should be exploring their business models and considering the effects of climate change on key areas such as:

- natural resources and raw materials, eg reduction in rainfall and increasing temperatures, resulting in constraints on industrial water supply and discharge
- supply chains and logistics functions, eg heat waves and flooding affecting transport infrastructure, sea level risk affecting ports
- third-party utility, transport and communications suppliers, eg data centres located in flood plains or competing for energy supply during heat waves, resulting in loss of business continuity for customer and suppliers
- design, performance and location of new assets, eg vulnerable coastal locations susceptible to sea level rise and storm surges
- operational impacts on existing processes, eg reduced equipment efficiency owing to incremental increases in temperature
- markets and customers: eg changing seasonal demand requiring just-in-time stock management and development of new products and services
- society and the local communities, eg natural resource conflict leading to local disputes and community action
- stakeholder perceptions and actions, eg environmental pollution resulting from extreme events resulting in tighter regulatory conditions; legal action and consequential wider impact on brand and reputation

All companies should assess their existing operations, locations, markets, business models and assets to understand their current risks and how these may change over time. They should also introduce the assessment and management of climate change impacts into strategic planning and project appraisal and design. New projects and markets will be particularly vulnerable if the knowledge we have on climate change is ignored. It is an increasingly urgent imperative that businesses must recognise and deal with these risk factors.

Future-proofing corporate decision making

Although there are still uncertainties about the impacts of future climate change at specific locations, there is sufficient information now to enable businesses to incorporate climate risks into decision-making processes and financial assessments. Uncertainties can be better understood and managed by identifying the thresholds for operational activities and using a range of climate-change scenarios to test their sensitivity to potential changes in climate hazards.

A business will flourish only if its leaders are adept at weighing up risks and making robust decisions in the face of uncertainty. The successful businesses of the future will be those that are now taking into account the risks and opportunities presented by inevitable climate change, and developing adaptive strategies and actions to manage the uncertainties.

Failure to spot the climate change signals

All decisions taken by directors and professional advisers that do not take inevitable climate change into account may be open to legal challenge.

As the financial impacts of inevitable climate change begin to be recognised we are likely to see the use of litigation as a means of recovering costs. Lawyers are beginning to acknowledge that there is now sufficient information available on climate change for companies to take it into account in both strategic and project-level decision making. All decisions taken by directors and professional advisers that do not take inevitable climate change into account may be open to legal challenge. In the future, the courts may examine claims and decide that it was reasonable, at the time the decision was made or advice given, to have foreseen the impacts of climate change, based on the information available in the public domain.

It is inevitable that legislation and regulations will change disclosure requirements, as well as supporting guidance, codes of practice and standards, in response to the potential impacts of climate change. This will impose future liabilities that may require remedial action. To climate-proof strategies and projects now is not only a sensible adaptive action, it is also a matter of both good corporate governance and fiduciary responsibility. The longer the delay before businesses respond to inevitable climate change, the more likely we are to see governments and regulatory bodies respond and act more aggressively with prescriptive regulation on adaptation.

Companies are also being challenged by investors to demonstrate their corporate governance credentials and improve their disclosure of future risks. The spotlight on financial management and reporting is now also focusing on wider strategic risk-management issues. Over the next few years we will see a greater awareness and understanding of the impacts of a changing climate. The importance of this for businesses is that their climate change adaptation strategies and actions need to be in place if they are to retain the confidence of their investors, that is, businesses must become more climate-resilient.

In October 2008, Dynegy, a US power company, agreed to disclose its financial risks from climate change under a binding and enforceable agreement with New York's General Attorney, Andrew M. Cuomo.

The reporting requirement is to include not only risks from present and probable future climate-change legislation, regulation and litigation, but also risks from the physical impacts of climate change.

This new regulatory landmark reinforces the materiality of climate change impacts as financial risks for companies.

The challenge facing private sector assessment of climate change risks is evident from recent reviews of business response to the issues. While many banks and insurance companies have issued climate change reports, the reality is that actual work to identify and respond to the consequences of climate change remains surprisingly limited.

In order to better understand these issues, IFC plans to undertake several assessments of climate change risks. These studies will use existing investments and will test the sensitivity of different types of projects to [the] most likely changes in climate variables, looking at both risks to IFC during the expected investment period and risks to the client over the life of the investment.

INTERNATIONAL FINANCE CORPORATION (IFC) 2007

Prepare–Adapt: 10 questions for senior executives

Governments, regulators and investor groups are challenging companies to disclose the actions they are taking to assess and manage the impacts of inevitable climate change.

To aid further decision making, Acclimatise and IBM have jointly prepared their Prepare-Adapt set of questions to help companies take the right steps toward building business resilience to inevitable climate change. A simplified checklist drawing on the more comprehensive set of questions is provided below.

Each of these questions can be used by accountants to challenge their own companies to assess, manage, integrate and engage on the consequences of climate change. If stakeholders believe there are questions to be answered then companies should be ensuring that the correct questions are being asked within their own business.

Your risks

1. What are the operational impacts of climate change on your company?

How are your supply chains and suppliers' operations affected?

What are the implications for the price, supply and demand for commodities (eg agriculture, fisheries, minerals) and services (eg water services, energy services, telecommunications and IT)?

How will international and internal security threats due to climate change affect your local labour supplies and supply chains?

2. Which of your company's key operating assets are located in areas vulnerable to climate change impacts and what are the implications?

How long would it take and what costs would be involved to relocate and reconfigure key operating assets?

What are the implications of depreciating, abandoning or writing-off assets before normal end-of-life?

How will the value of your asset portfolio change over time?

3. How sensitive is demand for your products and services to climate change impacts?

How will customer needs, buying behaviour and ability to pay, change and over what timescale?

What steps have you taken to ensure that your current products and services remain viable?

What are the implications arising from changes in the demographics of your customer base?

4. How could current and future climate change regulations and industry standards affect your organisation and its reputation?

What is your level of regulatory and financial exposure to the introduction of prescriptive legislation on adaptation, together with further legislation on urgent mitigating action as the reality of climate change becomes more pressing?

How effective and auditable is your process for reporting regulatory and policy compliance?

Which areas of your business are sensitive to media, NGO and local community concerns?

Your opportunities

5. What new and enhanced existing products and services can you offer your customers?

What steps are you taking to develop new or enhanced business opportunities that will provide competitive leadership?

How will you develop brand stretch to take advantage of changes in customer behaviours and develop climate-related markets?

Can you provide products and services that that will help customers to predict, monitor, adapt, insure or recover from climate change?

6. What operational benefits could you enjoy from managing your response to climate change?

How can you improve the attractiveness of your company to investors, banks, credit rating agencies, employees and potential recruits?

How will you use the current economic crisis as an opportunity and an incentive to revisit your business model and respond to the growing social, environmental and economic challenges?

What are the cost advantages if you can secure more favourable insurance cover by demonstrating strong operational risk-management processes and a responsible climate-aware business?

Your response

7. How clear and effective are your internal management responsibilities for climate change and your engagement with stakeholders?

To what extent are your climate-change leadership and management roles clearly defined, supported and empowered?

How are you sharing knowledge with and informing governments, regulatory bodies, NGOs, and the media to manage and forecast exposure?

What actions are you taking to ensure that the investment community, your bankers and insurers understand and support the steps you are taking regarding climate risk?

8. How well structured is your company's approach for managing climate change?

How effective is your process for exploring longer-term scenarios and identifying risk and opportunity signals as they emerge, so as to plan and act accordingly?

How are you assessing the vulnerability of your suppliers, assets, operations, workforce and markets to changing risks?

What steps are you taking to ensure that climate-driven business risks and opportunities are embedded into your capital investment and operational expenditure decision-making processes?

9. How can you ensure that your approach is based on robust information and assumptions?

How have you integrated the latest available climate science and climate change scenarios to inform your business planning and decisions?

Are your management information systems for assets, supply chains, operations, markets and customers reporting on and monitoring climate change KPIs using real-time, interconnecte d and intelligent data?

Can your information systems provide an early warning of operational risk?

10. How can you demonstrate that your climate business resilience plans are realistic and financially viable?

What actions have you taken to understand and manage future liquidity and ensure sufficient contingency funding?

How do your business continuity and crisis management plans reflect the changing risk profiles due to climate change and are they well-rehearsed?

What steps are you taking to involve your employees, implement new technologies, and develop new skills, expertise and cultural change?

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About Acclimatise

Acclimatise specialises in climate adaptation risk management. We bridge the gap between the scientific community and the corporate world, reviewing the latest science, providing clear guidance on the business and financial threats and the opportunities arising from inevitable changing climate. We have a portfolio of tools that enables your organisation to adapt to a changing climate. Whether it is reviewing regulatory or government policy, stakeholder positions, or guiding you on the business and financial threats and opportunities that stem from climate change, our network of specialists can bridge the gap between the urgent need to adapt and the business requirements of the corporate and commercial worlds. Our expertise is far-reaching. We have provided strategic and project-specific climate change advice to the private, political and public sectors. And we are working closely with governments, helping them to develop their adaptation policies.

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