

# SCCIP

scottish climate change  
impacts partnership

# Adapting to Climate Change:

*A Guide for Businesses in Scotland*



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## FOREWORD

Scotland's climate is changing, and we as Scottish businesses are faced with the challenge of coping with this inevitable change over the coming decades. Even if all greenhouse gas emissions are reduced to pre-industrial levels tomorrow, the effect of today's level of greenhouse gases in the environment is predicted to produce change in the climate system for the next 40 years.

We need to take action on two levels; reduce our emissions to the environment and adapt to inevitable climate change that is already built in. We do not have a choice between acting on either mitigation or adaptation; we need to take complementary action on both.

Businesses in Scotland are already being impacted by weather that is indicative of predicted climate change effects, including extreme weather events such as increased intensity of rainfall leading to flooding. The associated costs of these impacts are already high. We as businesses must be better prepared for an increased number and range of such events if we are to survive and thrive, and be in a position to manage the risks that a changing climate presents.

Equally, it is vital that we are ready to take advantage of the new opportunities that climate change will bring. So by understanding more about the nature of how Scotland's climate is changing and taking account of this in our business planning, these opportunities can be

transformed into economic realities that can promote resilience and underpin Scotland's low carbon economic growth.

The Climate Change Business Delivery Group (CCBDG) is delighted to support this publication that has been produced by the Scottish Climate Change Impacts Partnership (SCCIP). It offers an excellent starting point for businesses to explore the possible risks which climate change may pose, and gives advice on how to build the adaptive capacity to deal with these risks. The CCBDG encourages Scottish businesses to use this guidance and also the wider support services provided by SCCIP to begin their journey to becoming more resilient and better prepared to deal with the challenges of climate change.



**Ian Marchant**

Chair

Climate Change Business Delivery Group

## ACKNOWLEDGEMENTS

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# INTRODUCTION

## Why take climate change into account?

The climate is changing in Scotland and in other countries around the world. Much of the change in climate over the next 30 - 40 years is already determined by our past and present emissions. Scotland will be increasingly affected by climate change and it is essential that we act now to adapt and mitigate.

**Adaptation** – making adjustments and responding to the likely threats and opportunities that climate change may bring.

**Mitigation** – actions that reduce our contribution to the causes of climate change. This means “the implementation of policies and actions to reduce greenhouse gas emissions and enhance carbon storage.”

These changes could be an issue for your business and affect your bottom line e.g. extreme weather conditions may cause significant disruption and associated costs.

Planning ahead is often more likely to lead to cost-effective adaptation than responding to changes as they happen. This allows for integration into other business functions such as risk management and business continuity planning. Climate change will also bring commercial opportunities and businesses need to be ready to take advantage of these.

### Why will this document help you?

This document will:

- give you an overview of what risks and opportunities climate change may pose for Scottish businesses;
- explain how you might build the adaptive capacity to deal with these risks; and
- provide a signpost to the various existing tools, resources and more in-depth information sources that are available from SCCIP and others.

### Who is this document for?

This document is suitable for both Small and Medium Enterprises (SMEs) and large businesses as an introduction to climate change adaptation. It is also suitable for business-facing organisations that wish to raise the topic of climate change adaptation with the businesses with which they engage.

It is hoped that this document will encourage you to address climate change impacts and adaptation work in your own business or organisation. The SCCIP team will be happy to help you in this process.

### Scottish Climate Change Impacts Partnership (SCCIP)

w [www.sccip.org.uk](http://www.sccip.org.uk) e [sccip@sniffer.org.uk](mailto:sccip@sniffer.org.uk) t 0131 557 2140



## CONTENTS

### Section 1: Page 2

#### Headline messages

Key messages about climate change, its impacts on business and adaptation.

### Section 2: Page 3

#### Climate change adaptation for business

An approach to tackling climate change adaptation within your business or organisation.

### Section 3: Page 8

#### Climate change adaptation in Scotland

An overview of the profile of climate change adaptation in Scotland.

### Section 4: Inside back cover

#### Useful resources and links

Some useful resources and links to help you address climate change adaptation.

## SECTION 1:

# Headline messages

*These are the key messages about climate change, its impacts on business and adaptation.*



**The climate is changing in the UK and in other countries around the world**

Some of the most powerful evidence of climate change is provided by nature: changing seasons, earlier blossom and buds on plants or the earlier arrival of migrating birds.

Global temperature change varies with different emissions scenarios for the 21st century. However, lag times in the atmosphere mean that some climate change is unavoidable regardless of current or future emissions.



**The changing climate could be an issue for your business and could well affect your bottom line**

Some industrial and agricultural processes are climate sensitive and some equipment has operating requirements that climate change could jeopardise.

Flooding, subsidence, excessive temperatures or stormy weather can cause damage to stock or equipment or loss of business continuity, therefore directly affecting the bottom line.



**The weather has impacts across a range of business areas, not just the obvious ones, and not just 'environmental' ones**

Climate impacts on people, as customers for goods and services and as members of a workforce, for whom working conditions, both inside and out, could change beyond acceptable thresholds.

Nearly all businesses make use of premises and transport systems, both of which are vulnerable to weather-related events like floods, storms, and subsidence.



**Businesses and business sectors are particularly vulnerable to climate change if they are currently affected by weather events and make long term investment**

Infrastructure for transport and utilities is particularly vulnerable, and therefore puts at risk supply companies and those businesses that use their systems.

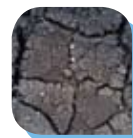
There has been a steady rise in the costs of business claims for weather damage. In 2007, 28% of businesses reported disruption as a result of extreme weather (Chartered Management Industry Survey, 2008).



**Although the impacts of climate change are uncertain, they can be managed like any other business risk**

The way in which climate change will translate into business consequences is not certain. However, there are uncertainties relating to all aspects of business planning and this does not mean that inaction is the best option.

Risk is the combination of the likelihood of occurrence and the magnitude of the consequence of a hazard. It is a useful concept for dealing with an uncertain future.



**Businesses that have global markets or suppliers will probably be affected by climate change in other countries**

Climate impacts on agriculture in other countries could result in market opportunities for UK food production.

Many UK-based companies rely on manufacturing operations in East and South East Asia, where impacts such as an increase in the frequency of tropical storms and water scarcity are expected.



**Climate change will bring in commercial opportunities as well as threats**

Some markets will expand and there will be new market opportunities, such as outdoor leisure, summer food, drinks and clothes and flood defence technologies.

Some industrial and agricultural processes and activities could become easier or more economically viable and winter heating costs will be reduced.



**Planning ahead is often more likely to lead to cost-effective adaptation than responding to changes as they happen**

Climate risk management needs to be incorporated into mainstream business management strategies and procedures.

Some adaptation will occur without long lead in times, but it takes time to recognise a change is happening and to put in place the right institutional arrangements.

## SECTION 2:

# Climate change adaptation for business

### THE ADAPTATION PROCESS

This section sets out an approach to tackling climate change adaptation within your business or organisation. It is not an in-depth methodology; however it should give you a flavour of what is required. Further information and tools can be accessed through the Scottish Climate Change Impacts Partnership (SCCIP) and the UK Climate Impacts Programme (UKCIP).

The adaptation process set out below takes you through a 5-step methodology that will help you to assess your vulnerability to current weather and future climate change, identify options to address your key climate risks and

opportunities, and help you to develop a climate change adaptation strategy.

This process is based on the Adaptation Wizard, a tool to help you adapt to climate change.

The Adaptation Wizard was developed by UKCIP and is an interactive tool which can be accessed online at [www.ukcip.org.uk/wizard](http://www.ukcip.org.uk/wizard). To carry out a full assessment, please visit the website.

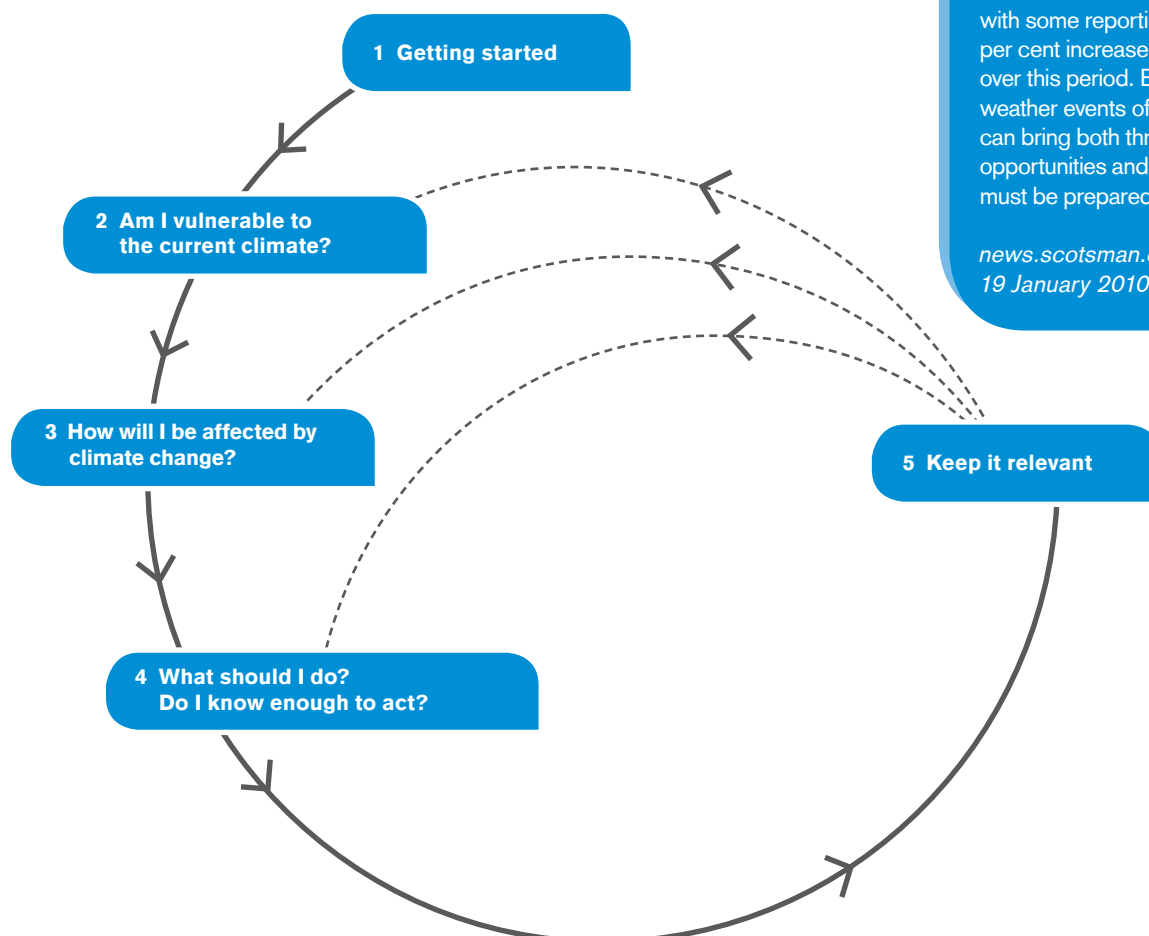


### CASE STUDY

The cold snap across Britain in January 2010 is estimated to have cost the “big four” supermarkets £750 million in lost sales. Those to suffer most were the out-of-town retailers with shoppers instead choosing to shop locally, much to the benefit of independent stores and smaller chains with some reporting an 80 per cent increase in sales over this period. Extreme weather events of any kind can bring both threats and opportunities and businesses must be prepared for both.

*news.scotsman.com,  
19 January 2010*

Figure 2.1 The adaptation process as described by the UKCIP Adaptation Wizard



## STEP 1: GETTING STARTED

### What do I want to achieve?

Identify at the outset what the problem is that you are seeking to address, and clarify what you intend to achieve. What are your goals and how will you be able to judge a successful outcome?

#### Are you:

- Trying to raise awareness of your colleagues or wider professional network;
- Trying to make the case to senior management of the need to adapt to climate change; or
- Seeking to make a decision that is resilient to climate change.

Think at this point about who else needs to be involved in the process both inside and beyond your organisation, and how best to engage them. Identify potential barriers and constraints to implementing change, and consider how they might be overcome.

## STEP 2: AM I VULNERABLE TO THE CURRENT CLIMATE?

Assessing your vulnerability to current climatic variability will make it easier for you to consider how future climate change might affect you (Step 3). Vulnerability is a function of your sensitivity to climatic variability, your exposure to climate risk, and your inherent capacity to adapt.

- Identify how particular types of weather have affected your organisation in the past, what the consequences of those weather events were, and what the response of your organisation was. Use the example table 2.1 to help you with this task, (blank tables are available for download in the resources section of the Adaptation Wizard, see section 4).
- If possible, identify critical thresholds, which when exceeded, brought unacceptable losses to your organisation – or opened up a new opportunity; a changing climate could mean that a critical threshold will be exceeded more frequently than at present and you will need to adapt to manage your risks to a level that is acceptable to you.

<b>Climate variable</b>	Increased winter rainfall
<b>Specific event</b>	Heavy rainfall for two days
<b>Impact</b>	Office basement flooded
<b>Consequence</b>	Some stock destroyed & damage to property
<b>Threats that arose</b>	Loss of business
<b>Opportunities that arose</b>	Consider benefits of redesign or relocation
<b>Actions taken to address impact</b>	Movement of stock to better location
<b>Identify critical thresholds</b>	Continuous rainfall for 48 hours after prolonged dry period
<b>Source &amp; credibility of information</b>	Past experience. Reliable

**Table 2.1** How have previous weather events affected your organisation?



## STEP 3: HOW WILL I BE AFFECTED?

Understanding how you will be affected requires some knowledge of how Scotland's climate is expected to change, both in the short and long term, and assessing how those climatic changes could affect you. You can do this by conducting a qualitative risk assessment to identify your climate risks, and comparing the relative importance of these climate risks with other non-climate related risks affecting you. You can then use this information to identify your priority climate risks that require an adaptation response.

### How is Scotland's climate expected to change?

The UK Climate Projections 2009 (UKCP09) provide the latest climate change scenarios for the UK. They provide probabilistic projections over the next century for three future emissions scenarios at a resolution of 25km grid squares. Some of the general trends for Scotland which can be drawn from UKCP09 are as follows:

### General Trends

- Warmer, drier summers.
- Milder wetter winters.
- Rising sea levels – e.g. the sea level in Edinburgh is projected to increase by 10 to 18cm by 2050 and 23 to 39cm by 2095.
- More very hot days – extremes of temperature increase in intensity as well as frequency.
- More intense downpours of rain – extremes of precipitation increase in intensity as well as frequency.
- Snowfall will become less common.

Information is provided for three Scottish regions, based on the Met Office 'climate regions'. The map below and accompanying data gives a range for the projected mean temperature increase and mean

precipitation increase in winter and summer for the 2050s under a medium emissions scenario for each of the three regions.

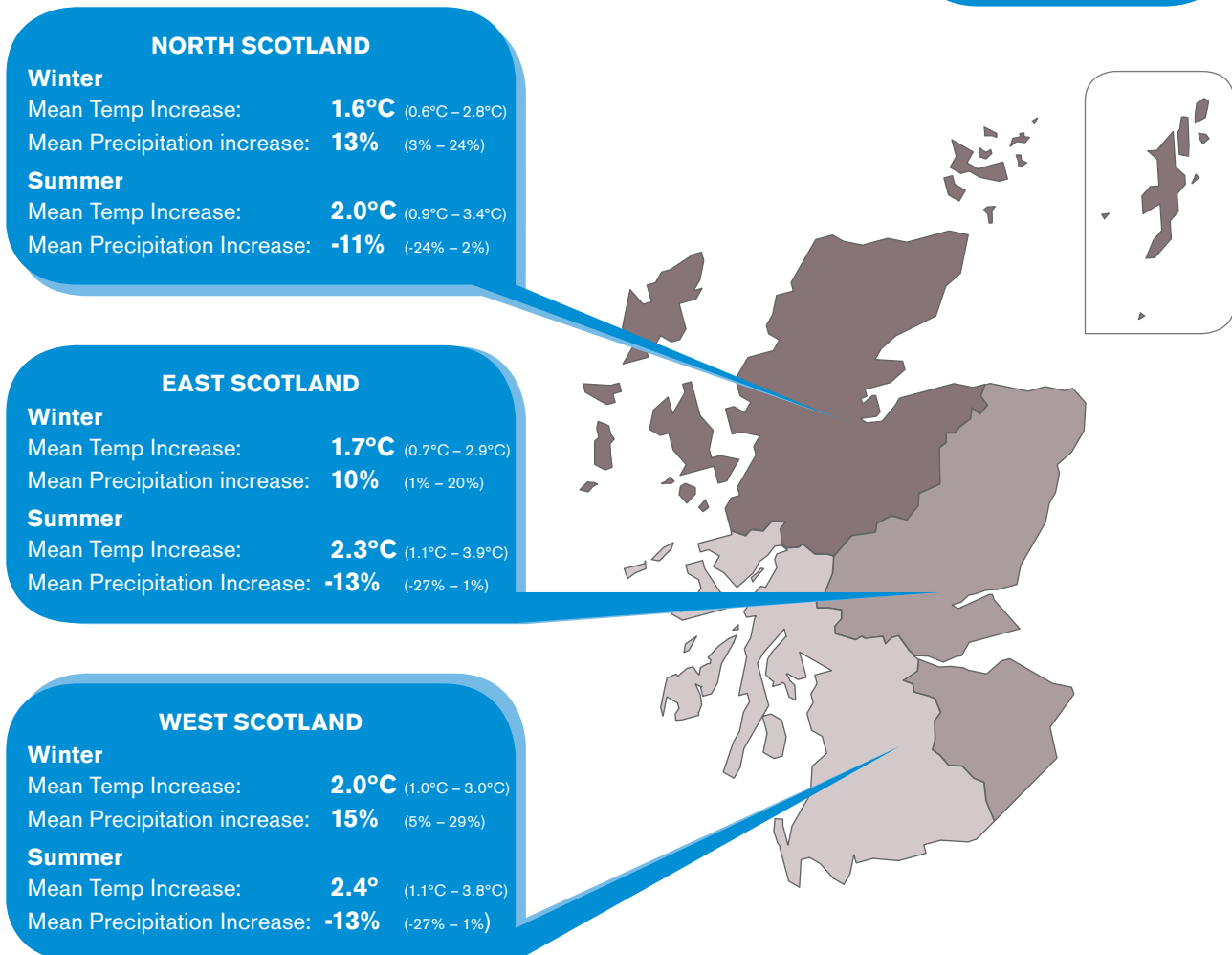
Many businesses have global supply chains and operate in global markets. You may also need to consider how the climate will be changing where your key suppliers and customers are located. For example, in South, East and South-East Asia there will be an increasing frequency of heatwaves and intense rainfall (IPCC 4th Assessment report).



### CASE STUDY

Damage from the floods in south Scotland and Cumbria in November 2009 was estimated to result in insurance claims of more than £100m.

[www.news-insurances.com](http://www.news-insurances.com), 23 November 2009



**Figure 2.2** Mean temperature and precipitation increase in Scotland in 2050s under medium emissions scenario

**Note:** UKCP09 are probabilistic projections which assign a probability to different possible climate change outcomes. In Fig. 2.2 above, the main numbers represent the mid point of the probability range, known as the central estimate. Taking East Scotland as an example, there is a 50% chance the summer mean temperature will be more than 2.3°C hotter and a 50% chance it will not have increased quite that much. The figures in brackets show the range within which the actual change is likely to be. In this case, the projections suggest that it is very unlikely the increase in summer mean temperature will be less than 1.1°C or greater than 3.9°C.

## Identifying your impacts

Once you have some understanding of how the climate in your locality may change, you can begin to identify how these changes may impact on your business. The Business Areas Climate Impacts Assessment Tool (BACLIAT) produced by UKCIP provides a useful checklist and approach for organisations to assess the potential impacts of climate change either on their business or on an entire business sector.

It recognises that a changing climate affects all business areas, and not just the more obvious ones of product design or service delivery.

It encourages a comprehensive assessment, by inviting consideration of the opportunities as well as the threats from a changing climate, under six business areas. Table 2.2 below outlines a number of threats and opportunities for each of the business areas. Please note that these are only examples; threats and opportunities will be different for each business/business sector.

Business Areas	Threats	Opportunities
<b>Markets</b> Changing demand for goods & services	Decreased or disappearing demand for present range of goods and/or services. Access of customers to products or services could be undermined by extreme weather.	New products or modifications to existing products to respond to a changing market. More extreme events means opportunities e.g. repair, maintenance, domestic tourism etc.
<b>Finance Implications</b> for investments, insurance and stakeholder reputation	Failure to adapt creates difficulties in securing investment and/or insurance cover at reasonable cost. Potential liabilities if climate change is not factored into long-term decisions about the future.	Good risk management will appeal to financiers, insurers and other stakeholders, leading to security for investment and opportunity for reduced premiums. Clients and customers attracted to businesses that can show they are resilient to climate change.
<b>Logistics</b> Vulnerability of supply chain, utilities and transport arrangements	Global climate change could affect availability of some goods and services (e.g. raw materials, components) and commodity prices. Disruption to utilities, especially electricity supply, water supply and sewerage, which can be affected by extreme weather.	Competitive advantage for companies with redundancy or flexibility built into delivery systems and supply chains or those undertaking business continuity planning. Supplying local markets creates an opportunity for marketing approach based on regional distinctiveness or reduced product miles.
<b>Premises Impacts</b> on building design, construction, maintenance & facilities management	Vulnerability due to proximity to potential river, coastal or urban flooding. Internal environment: challenge of coping with increased summer temperatures (without adding to greenhouse gases). Potential future regulation in this area.	Maintaining thermal comfort in winter months is less of a challenge. Opportunities for high thermal mass building solutions, which can reduce air-conditioning requirements. Opportunities for those in built environment industries to develop expertise in climate-related building issues.
<b>People Implications</b> for workforce, customers & changing lifestyles	Threats to working conditions and travel arrangements for staff from extreme weather. Internal environment uncomfortable as a result of increased summer temperature.	Reputational opportunities of responding effectively as good employer increases recruitment and retention of high quality staff. Generally more outdoor activity creates opportunities for some industries, e.g. tourism, leisure, urban design.
<b>Process Impacts</b> on production processes and service delivery	Reduced productivity or disruption to climate sensitive processes or activities e.g. <ul style="list-style-type: none"> <li>Construction: difficult working conditions and damage during construction process from more torrential rain. More dust in dry summer conditions.</li> <li>Agriculture: existing crops less viable in the new climate, such as those that rely on a frost. Summer drought reduces water quality. Livestock are affected by excessive temperatures.</li> </ul>	Some aspects of a production process or service delivery made easier as a result of changing climate e.g. <ul style="list-style-type: none"> <li>Manufacturing: developing expertise in managing industrial processes and technologies in response to climate change.</li> <li>Agriculture: longer growing season and new species and varieties of plants can be grown.</li> </ul>

**Table 2.2** Potential threats and opportunities of climate change on business areas

## What risks do these climate impacts present?

Once you have identified the potential positive and negative impacts on your business or sector, you need to determine which of these are significant and require a response. A useful way of doing this in the presence of uncertainty is to use the concept of risk, where risk is a combination of probability and significance of an event.

There are several approaches to risk assessment. Your organisation may have its own in-house risk assessment methods, in which case you should integrate climate change risks into your existing system.

## STEP 4: WHAT SHOULD I DO?

What action you take (if any) will depend on the information you have gathered in steps 2 and 3 i.e. are you directly or indirectly vulnerable to the current climate, how are you likely to be impacted upon in future, and what risks do these impacts pose. Any action will be guided by your organisation's attitude to risk, for example a risk-taking company may choose to take a more entrepreneurial approach that focuses on the opportunities. Action may also be influenced by the types of insurance your business carries.

### When to take action?

Take action straight away if:

- you are already experiencing problems with climate-related impacts e.g. flooding, disruption to utilities, costly insurance premiums;
- you want to obtain first-mover advantage on a climate change opportunity; or
- you are considering a long-lived decision.

In other cases, you'll need to decide when to take action based on:

- how soon you expect climate risks to cause any critical thresholds for your system to be exceeded;
- the lead-in time for planning and implementing adaptation measures; and/or
- the cost of acting now compared to potential costs in the future.

### What are my adaptation options?

The purpose of climate adaptation is to help you manage your climate risk to an acceptable level, and enable you to exploit any positive opportunities that may arise. Proactive and planned adaptation is generally more effective and less costly than reactive adaptation. Planned adaptation to climate change can be divided into two broad categories:

- Building Adaptive Capacity (BAC) involves developing the institutional capacity to respond effectively to climate change. This means compiling the information you need and creating the necessary regulatory, institutional and managerial conditions for adaptation actions to be undertaken, including developing skills and training.
- Delivering Adaptation Actions (DAA) involves taking practical actions to either reduce vulnerability to climate risks, or to exploit positive opportunities.

The following are some simplified steps to help you identify your options.

## STEP 5: KEEPING IT RELEVANT

Like all strategies of this type it is important that your climate adaptation strategy is dynamic and that you keep it relevant and up-to-date in a continually changing environment. Try to review your strategy annually ensuring that it meets the objectives that you set in Step 1.

- Take the climate risks you identified in Step 3 and compile a 'long list' of possible adaptations that you could take to address these;
- Get people/staff involved in this process e.g. through a brainstorming exercise;
- Use past experience of weather events or other disruptions to help you identify options; and
- Look to examples of what others are doing e.g. in other countries or those within your locality who have coped well with previous events.

Adaptation options can range from the very practical e.g. moving your I.T server room from the basement to the upper level, to the more strategic e.g. developing policies and raising awareness.

### Assess, select and implement preferred adaptation options

You will then need to:

- Evaluate adaptation options using appropriate criteria and select the most suitable options;
- Formalise your risks and options into an adaptation strategy; and
- Develop an implementation plan.

One of the most effective ways of responding to a changing climate is to integrate climate risks into existing business functions for example, through business continuity planning, risk assessment or health and safety management. However, adaptation has some unique features that these systems may not adequately deal with (long time-scales, changing conditions, new types of information requirements and uncertainties). Initially, therefore, it may be necessary to identify and work on climate risks as a discrete activity.



## CASE STUDY

Ski resorts in Scotland are already beginning to diversify and adapt to the threat of reduced snow. Mountain biking presents a big opportunity and Glencoe, the Nevis Range and Glenshee have all built bike tracks to facilitate this sport. Acknowledging that it is not sustainable to rely on the skiing season, the Glenshee Tourism Association is now targeting ramblers, cyclists, historians and sightseers.

*news.scotsman.com,  
17 April 2007*

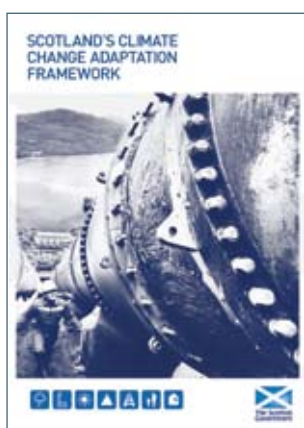
## WHAT NEXT? Getting help from SCCIP

- Contact our private sector officer – 0131 524 0976.
- Visit [www.sccip.org.uk](http://www.sccip.org.uk)
- Ask about training and other support.
- Sign up for newsletter.
- Join one of the virtual communities to keep up-to-date with best practice.

## SECTION 3:

# Climate change adaptation in Scotland

The profile of climate change adaptation in Scotland has been raised with the Climate Change (Scotland) Act 2009. The Act places a duty on Scottish Ministers to produce an adaptation programme to address risks identified for Scotland in progressive UK Climate Change Risk Assessments (UK CCRA). Scotland's first Climate Change Adaptation Framework, published in December 2009, is a non-statutory forerunner to the adaptation programme required under the Act and has strengthened the profile of adaptation in Scotland even further.



The aim of the Adaptation Framework is to lead planned adaptation across all sectors to "increase the resilience of Scotland's communities, and the natural and economic systems on which they depend, to the impacts of climate change".

Under the strategic direction of Scotland's Climate Change Adaptation Framework, Sector Action Plans are being developed for 12 key sectors. These will address the issues specific to each sector as well as considering

how each sector might help reduce the vulnerability of other sectors, or wider society. These Plans are being developed by sector leads, in consultation with relevant sector stakeholders.

The Sector Action Plans will be updated on an ongoing basis so as to reflect the evolution and needs of that sector. Following the publication of each UK Climate Change Risk Assessment, Sector Action Plans will demonstrate how Scottish Government and broader Scottish action is being taken to manage for the risks outlined in the Assessment. Annual progress reporting on Scotland's Climate Change Adaptation Framework will incorporate progress reporting against all Sector Action Plans. The sectors involved are set out in table 3.1.

Stakeholders from the business community will be involved in the development of the Business and Industry Sector Action Plan. However, business and industry should be mindful of the other Sector Action Plans, many of which will impact on their sector.

As Sector Action Plans are established, comprehensive and prioritised actions will be determined by sector leads and key stakeholders. Sector Summaries for each of these sectors were published alongside the Adaptation Framework. The actions outlined in these Summaries provide an indication of the broad range of work planned over the coming years to strengthen Scotland's resilience to the impacts of climate change.

### The UK Climate Change Risk Assessment (UK CCRA)

One of the duties under the UK Climate Change Act 2008 is to lay a report before Parliament containing an assessment of the risks to the UK of the current and predicted impacts of climate change to 2100. This report is referred to as the UK Climate Change Risk Assessment (UK CCRA), and the first CCRA is due in January 2012. This will be the first Government assessment of the risks posed by climate change to things which have social, environmental and economic value at UK, national and regional levels. Subsequent reports are timed to be delivered no later than five years after the previous report.

CLIMATE CHANGE ADAPTATION FRAMEWORK Sets strategic policy and coordinates Sector Action Plans	Sector Action Plans	Water Resource Management
		Agriculture
		Forests and Forestry
		Spatial Planning and Land Use
		Biodiversity and Ecosystem Resilience
		Transport
		The Built Environment
		Energy
		Business and Industry
		Marine and Fisheries
		Health and Wellbeing
		Emergency and Rescue Services

Table 3.1 Sector Action Plans

## SECTION 4:

# Useful resources & links

### Scotland Climate Change Impacts Partnership (SCCIP)

**w** [www.sccip.org.uk](http://www.sccip.org.uk) **e** [sccip@sniffer.org.uk](mailto:sccip@sniffer.org.uk)  
**t** 0131 524 0976 or 0131 557 2140

SCCIP has a dedicated Private Sector Officer, whose role is to engage with the business and industry sector on the issue of climate change adaptation. Through this role, SCCIP offers advice, training, support and guidance to businesses and business-facing organisations. Advice and support is free of charge and businesses are encouraged to get in contact with SCCIP to avail of these services.

### UK Climate Impacts Programme (UKCIP)

**w** [www.ukcip.org.uk](http://www.ukcip.org.uk) **e** [enquiries@ukcip.org.uk](mailto:enquiries@ukcip.org.uk)  
**t** 01865 285717

UKCIP has a number of tools to help organisations assess their vulnerability to climate change and to devise appropriate ways to adapt to the changing climate. All UKCIP reports and resources are available free of charge. Some of the most popular tools are listed below:

#### Adaptation Wizard

An online tool to help you adapt to climate change. This tool has formed the basis of the advice provided in this publication. [www.ukcip.org.uk/wizard](http://www.ukcip.org.uk/wizard)

#### Local Climate Impacts Profile (LCLIP)

A tool to help you determine your sensitivity to current weather variability. [www.ukcip.org.uk/lclip](http://www.ukcip.org.uk/lclip)

#### Business Areas Climate Impacts Assessment Tool (BACLIAT)

BACLIAT provides a simple checklist for organisations to assess the potential impacts of climate change either on their business or on an entire business sector. It can be accessed through the business section of UKCIP's website.

[www.ukcip.org.uk/business](http://www.ukcip.org.uk/business)

#### The Brain

A searchable, web-based database which combines databases on adaptation examples, impacts examples and research. [www.ukcip.org.uk](http://www.ukcip.org.uk)

#### Climate Adaptation Resource for Advisors (CLARA)

A web-based resource aimed at those providing advice and support to SMEs. Advice is provided on making the business case and some practical tips for providing appropriate support, including delivery resources. [www.ukcip.org.uk/clara](http://www.ukcip.org.uk/clara)

#### UK Climate Projections 2009 (UKCP09)

The UK Climate Projections 2009 (UKCP09) provide the latest climate change scenarios for the UK. They provide probabilistic projections at a resolution of 25km<sup>2</sup> for seven overlapping 30 year time slices over the next century for three future emissions scenarios. <http://ukclimateprojections.defra.gov.uk/>

### The Institute of Environmental Management and Assessment (IEMA)

IEMA in partnership with UKCIP has produced 'Adapting to climate change: a guide to its management in organisations' as part of the 'Practitioner' best practice series. It is available to purchase from [www.iema.net](http://www.iema.net).

### Scottish Government

Responsibility for climate change within the Scottish Government lies with the Climate Change and Greener Scotland Division. In 2009, the world-leading Climate Change (Scotland) Act was passed unanimously by the Scottish Parliament. This was followed in December 2009 by the publication of Scotland's Climate Change Adaptation Framework. All legislation and policy documents relating to climate change can be found on [www.scotland.gov.uk/climatechange](http://www.scotland.gov.uk/climatechange).

### The Scottish Environment Protection Agency (SEPA)

SEPA is responsible for the protection of the environment in Scotland. Its task is to protect the land, air and water in partnership with others, and enabling Scotland to sustain a strong and diverse economy. [www.sepa.org.uk](http://www.sepa.org.uk)

### Met Office

The Met Office provides a range of information and guidance on climate change. [www.metoffice.gov.uk](http://www.metoffice.gov.uk)

### Business-Facing Organisations

A number of business-facing organisations can also provide assistance on climate change adaptation. SCCIP is working in partnership with many of these organisations to ensure a consistent message is delivered to businesses throughout Scotland. These organisations include:

**Business Environment Partnership** – [www.greenbusinesspartnership.co.uk](http://www.greenbusinesspartnership.co.uk)

**Business Gateway** – [www.bgateway.com](http://www.bgateway.com)

**Confederation of British Industry (CBI)** – [www.cbi.org.uk](http://www.cbi.org.uk)

**Crichton Carbon Centre** – [www.carboncentre.org](http://www.carboncentre.org)

**Highlands & Islands Enterprise** – [www.hie.co.uk](http://www.hie.co.uk)

**Scottish Council for Development & Industry** – [www.scdi.org.uk](http://www.scdi.org.uk)

**Scottish Business in the Community & The Mayday Network** – [www.sbcsot.com/mayday](http://www.sbcsot.com/mayday)

**Scottish Enterprise** – [www.scottish-enterprise.com](http://www.scottish-enterprise.com)

# SCCIP

scottish climate change  
impacts partnership

The Scottish Climate Change Impacts Partnership (SCCIP) is an initiative that brings together stakeholders in Scotland to collectively address and prepare for the impacts of climate change.

SCCIP aims to support Scotland in addressing the challenge of climate change. It endeavours to do this by:

- Developing as a gateway/resource hub for adaptation information for Scotland;
- Engaging with a wide range of stakeholders in the public, private and third sectors;
- Promoting awareness and understanding of climate change impacts affecting Scotland;
- Providing adaptation planning support for organisations in Scotland;
- Supporting the roll-out of UKCP09 Climate Scenarios; and
- Supporting the Scottish Government and others in delivering key actions within Scotland's Adaptation Framework and Sector Action Plans.

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SCCIP is funded by the Scottish Government and the Scottish Environment Protection Agency.



SCCIP works closely with the UK Climate Impacts Programme (UKCIP) and promotes the various tools developed by UKCIP, in Scotland. Much of the material set out in this guide is based on tools and information developed by UKCIP.

- The UK Climate Impacts Programme (UKCIP) helps organisations to assess how they might be affected by climate change, so that they can prepare for its impacts.
- It is principally funded by the Department for Environment, Food and Rural Affairs (Defra) on behalf of the UK government and devolved administrations as part of the Government's Adapting to Climate Change (ACC) programme. It is based at the Environmental Change Institute (ECI), University of Oxford.
- It promotes and co-ordinates stakeholder-led research on the impacts of climate change and adaptation, it facilitates stakeholder partnerships and capacity-building programmes, and it provides common tools and datasets, all of which are available free of charge.

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The SCCIP programme of work 2009-2011 is being delivered by The Scotland & Northern Ireland Forum for Environmental Research (SNIFFER).

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SNIFFER's aim is to increase knowledge to help protect the environment and improve quality of life. SNIFFER works in partnership with a wide range of stakeholders to identify knowledge gaps and create opportunities for knowledge exchange.

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