



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

Welsh Government Policy Statement:

Preparing for a changing climate

Implementation of adaptation provisions in the Climate Change Act 2008

Contact the Welsh Government Climate Change Team:
climate-change@cymru.gsi.gov.uk

0300 060 3300 (English)
0300 060 4400 (Cymraeg)

Published March 2013
Digital ISBN 978 0 7504 8238 7
WG16921
© Crown Copyright 2013

Contents	Pages
Ministerial Foreword	4
The Challenge	5
The Welsh Government response	6
Climate Change Act 2008	6
Guidance	7
Power to direct	9
Adaptation Framework and Delivery Plan	10
Adaptation indicators	11
Knowledge Transfer Programme	12

Ministerial Foreword

“The earlier Wales starts to prepare, by understanding our vulnerability to climate change impacts, increasing resilience, and building the capacity to adapt, the better equipped we will be to cope with the consequences of climate change.”

Climate Change Strategy for Wales, 2010

Sustainable development is about long-term decision making and how we make sure that all our decisions are right for the future and will contribute to a resilient economy, thriving society and a high quality natural environment for the people and communities in Wales. One of the most fundamental parts of sustainable development is how we make decisions against long-term challenges such as climate change. Climate change is one of the greatest environmental, economic and social challenges facing the planet. The robust scientific case for human-induced climate change underpins the Welsh Government’s commitment to lead action on tackling climate change. Measuring carbon footprints, a process pioneered by the Welsh Government is becoming mainstream, and many public sector bodies, businesses and individuals are taking action to reduce their greenhouse gas emissions. The Welsh Government is committed to deliver on its commitments to reduce emissions year on year, but we are also committed to ensuring that Wales is well-equipped to manage the consequences of a changing climate. As part of this we need to raise awareness, engage and encourage action on adapting to the impacts of climate change.

Historic and current emissions show that climate change over the next thirty or forty years is inevitable. The impacts of these changes may be drastic; we may experience more flooding, more heat waves, more droughts and water shortages, loss of important habitats for wildlife, more wildfires and more disruption to our transport, energy and ICT networks.

We need to act now if we are to reduce the impact of the negative consequences and capitalise on the opportunities that future changes may bring.

The Welsh Government set out our Adaptation Framework in the Climate Change Strategy for Wales. One of the aims of the Framework is ensuring that climate change is factored into organisational decision-making. [Preparing for a changing climate](#), the Welsh Government’s statutory guidance under the Climate Change Act 2008, is designed to help the growing number of people across Wales who have been tasked with developing their organisation’s response to the risks and opportunities posed by our changing climate.

In this Policy Statement, we set out how the Welsh Government will implement relevant provisions of the Climate Change Act 2008 following the public consultation in 2011. [The Preparing for a changing climate](#) guidance provides technical advice on how to assess climate risks and how to develop adaptation plans.

John Griffiths AM
Minister for Environment and Sustainable Development

The Challenge

Our climate is changing and the science indicates that we can expect more extreme weather events and sometimes extreme changes to our climate in the years to come. To secure the long-term well being of Wales, we must act now to reduce the risks from a changing climate. Climate change elsewhere in the world also has the potential to affect life in Wales, for example, through migration from other parts of the world as a result of events such as persistent flooding or drought, or through increases in the price of food.

The challenge of our changing climate is particularly acute as it is directly relevant to all aspects of our lives: our economy, our society and our natural environment. Organisations, businesses, communities and individuals will all be affected in a variety of ways.

In one sense, climate change is a key risk that organisations need to manage to ensure their future resilience. The UK Climate Impacts Programme (UKCIP) has found that most of the activities and methods applied to preparing for climate change are not new and are drawn from existing and usually well-established fields. It is likely that many organisations are already tackling this agenda if they deal with weather-related risks. Learning to live better with current weather events will go some way to dealing with future climate change. However, there are characteristics of this work that make it particularly challenging, including long timescales, uncertainty, complexity, irreversibility, and the potential for very significant consequences.¹

The challenge is to ensure consideration of climate change impacts and possible responses inform decision-making processes. Effective adaptation will have wider benefits for our economy and environment, and for people's well-being.

¹ [Managing adaptation: linking theory and practice](#) (UKCIP, January 2011)

The Welsh Government response

Climate Change Act 2008

The Climate Change Act 2008 gives Welsh Ministers the power to issue guidance to reporting authorities on:²

- assessing the current and projected impacts of climate change;
- preparing proposals and policies for adapting to climate change;
- co-operating with other organisations for that purpose.

The Act also gives Welsh Ministers the power to direct reporting authorities to prepare adaptation reports.

We consulted on the Guidance and the power to direct between December 2010 and March 2011.³ This Policy Statement confirms our approach to the Guidance, identification of key reporting authorities, and use of the power to direct.

² Section 70 (1) of the Act defines reporting authorities as “a person or body with functions of a public nature” and “a person who is or is deemed to be a statutory undertaker for the purposes of any provision of Part 11 of the Town and Country Planning Act 1990 (c.8) (see section 262 of that Act)”.

³ <http://wales.gov.uk/consultations/environmentandcountryside/climatechangeresilience>

Guidance

[During the consultation there] were clear messages both from those who had already produced adaptation reports and those identified as key reporting authorities that adaptation assessment and planning should be done in stages, with an initial emphasis on building awareness and capacity within organisations before risk assessments and adaptation plans are produced.

John Griffiths AM, Minister for Environment and Sustainable Development
Climate Change Commission for Wales, July 2011

About the Guidance

We developed the [Preparing for a changing climate](#) guidance using a model created by ICLEI, Canada and adapted by Adaptation Scotland. The model provides a step-by-step approach to developing a planned response to the threats and opportunities presented by climate change.

Preparing for a changing climate, although still relatively new, it has become a very fast-moving area of work. The Guidance reflects this and recognises that there is no single, uniformly-applicable process for adapting to climate change. Instead, it is presented as a series of processes and possible tasks that, if followed with sufficient commitment and resource, should help an organisation to understand its exposure to climate risks and to develop a response.

It is intended that the Guidance will be refined over time, for instance when new climate information comes to light and as organisations provide feedback on its application in practice and will only be published online.

Commitment

The Guidance is intended to be an aid to organisations in Wales but it is important to recognise at the outset that a successful adaptation response is most likely to occur in those organisations that commit sufficient time and resources to the work, and where there is ongoing commitment from senior decision-makers.

Guidance contents

The Guidance sets out a five-part, cyclical approach to developing a planned response to managing climate change impacts:

1. Starting

Part 1 starts by setting out what is meant by 'preparing for a changing climate', and showing why it's important and worthwhile. It highlights some linkages with other work, for example with sustainable development, and suggests what good preparation might look like. It also involves learning about how the climate has already changed, how organisations have been affected by weather in the past, and what organisations are already doing that counts as preparing for climate change.

Part 1 helps to understand how to communicate key messages about adaptation, develop partnerships and a network of contacts who can help with adaptation work, and how to gain support from senior management.

2. Investigating

Part 2 involves refining the climate change impacts identified in Part 1, and identifying levels of sensitivity and adaptive capacity. It also includes a climate change risk assessment that explores the likelihood and consequence of each impact and provides organisations with a list of prioritised impacts to develop actions for Part 3.

3. Planning

Part 3 leads to an adaptation plan or programme using information generated by investigations carried out in Part 2. It includes setting aims and objectives, identifying and prioritising adaptation options, and establishing baseline data, which will help with monitoring and reviewing in Part 5.

4. Implementing

Part 4 discusses implementation of the adaptation plan or programme produced in Part 3. It also addresses the need to build the adaptive capacity of the organisation and partners through training and communication, as well as delivering and managing adaptation actions.

5. Monitoring and reviewing

The principal goal of Part 5 is to determine whether the aims and objectives set out in the adaptation plan or programme are being achieved. Reviewing allows for new climate information and any lessons learned to be captured and fed into the process, which should be seen as ongoing.

How to use the Guidance

The chapters can be used independently of each other depending on the needs and priorities of each organisation. We have developed a Guidance Workbook that provides a template for some of the suggested tasks, and is available online alongside the Guidance documents. The first tab of the Spreadsheet explains how to use it.

Responding to climate change is highly location- and organisation-specific. The Guidance seeks to highlight some key things to think about when considering risks and opportunities arising from climate change, but the response developed by each organisation must be tailored to suit local needs; there is no one-size fits all approach to adaptation.

Who the Guidance is for

The Guidance is primarily aimed at the 'identified reporting authorities' detailed on page 10.⁴ In practice, it will be helpful to any organisations that are interested in exploring how climate change may affect them. The Guidance is not specific to any one type of organisation or sector, and can be used by organisations that have already begun to develop work on adaptation and those who are yet to start.

⁴ This list replicates the list of key reporting authorities published in the consultation.

Organisations may wish to develop a stand-alone adaptation action plan and/or choose to embed adaptation actions within their existing work. Embedding adaptation into existing processes may prove more successful in the longer term.

The Guidance has been developed for those responsible for leading on the initiation or further development of adaptation work within an organisation. It is intended as a resource for practitioners.

Power to direct

The power to direct allows Welsh Ministers to improve Wales' resilience for climate change by ensuring that key public bodies and statutory undertakers are assessing the risks and opportunities posed by climate change, and are implementing appropriate responses.

The Welsh Government will follow a two-phased approach in applying the Welsh Ministers' power to direct reporting authorities:

- **2011 – 2012:** identify key reporting authorities, provide them with tools and support to enable them to take action on adaptation, and establish mechanisms to assess and monitor progress.
- **2013 onwards:** use the information in the UK Climate Change Risk Assessment, Adaptation Plans and feedback from strategic level adaptation indicators to enable the Welsh Government to identify where additional assessment and reporting is required, and consider directing organisations to produce reports, where appropriate, in the light of that evidence.

We would therefore expect key reporting authorities to make progress in preparing for a changing climate during 2013 and 2014. The [Preparing for a changing climate](#) guidance and the Welsh Government's adaptation Knowledge Transfer Programme have been designed to help facilitate this.

As the number of reporting authorities, as defined by the Act, runs into the hundreds the Welsh Government applied the same methodology to identify key reporting authorities as the UK Government used to identify reporting authorities in England and those operating in Wales with non-devolved functions.⁵

This methodology identifies key reporting authorities as those authorities that:

- are responsible for national infrastructure, and therefore the daily functioning of Wales;
- are vulnerable to the projected impacts of climate change;
- have limited or no current regulatory framework that requires them to look long term at and report on the need for adaptation of its functions, assets and business.⁶

⁵ The list of reporting authorities identified by the UK Government can be found at <http://www.defra.gov.uk/environment/climate/sectors/reporting-authorities/>. It includes Severn Trent Water, Cardiff International Airport, Milford Haven Port Authority, Network Rail, and gas transporters, electricity generators, transmitters and distributors that serve Wales.

⁶ The methodology was set out in full in the consultation document, available from <http://wales.gov.uk/consultations/environmentandcountryside/climatechangeresilience>

On this basis, the following organisations have been identified as current key reporting authorities in Wales.

Sector	Key reporting authority
Natural environment	<ul style="list-style-type: none"> • Environment Agency⁷ • Countryside Council for Wales⁷
Water	<ul style="list-style-type: none"> • Dŵr Cymru Welsh Water • Dee Valley Water • Ofwat
Health	<ul style="list-style-type: none"> • Health Boards • NHS Trusts • NHS Shared Services Partnership
Local government	<ul style="list-style-type: none"> • County Councils and County Borough Councils • National Park Authorities
Emergency response	<ul style="list-style-type: none"> • Fire and Rescue Services

The Welsh Government will look to review this list of key reporting authorities in future and amend as appropriate.

Adaptation Framework and Delivery Plan

The Adaptation Framework within the Climate Change Strategy has three objectives:

- to build the evidence base;
- to embed preparing for a changing climate into decision-making;
- to share information and good practice.

The Framework presents a national, co-ordinated approach to ensure that Wales understands the risks and opportunities that climate change presents, and is well placed to adapt in a sustainable way. The Adaptation Delivery Plan sits alongside the Strategy and sets out the specific actions to be delivered under the Adaptation Framework.

[Preparing for a changing climate](#) is vital to the success of the Framework as it constitutes guidance for organisations across Wales who need to explore climate risks, develop plans for addressing them, and mainstream adaptation within their structures and processes. It also contributes to Action 3 in the Delivery Plan – “Integrate into all public bodies in Wales the assessment of risks and opportunities presented by climate change and the development of adaptation plans”.

⁷ Natural Resources Wales from April 2013.

Adaptation indicators

The Welsh Government is committed to developing a robust method to monitor and evaluate the performance of the adaptation framework and its achievements. A comprehensive set of indicators for the Emission Reduction Delivery Plan has already been developed, as detailed in the first annual progress report on the Climate Change Strategy. However, unlike emission reduction, adaptation does not have a clear unit of measurement and developing an indicator framework is more challenging.

Adaptation indicators will be developed to report on the level of uptake, and the subsequent performance of adaptation planning across Wales. Measuring changes in Wales' resilience to, and preparedness for, future climate change is complex and has a number of different aspects. These wide ranging aspects will not be captured effectively by a single indicator. Therefore, we expect to develop a multi-faceted approach that incorporates different styles of indicator. For reporting authorities we will be looking to assess progress by introducing Strategic Level Indicators.

- **Strategic-level indicators:** This indicator set will assess climate change preparedness in terms of the level of adaptive capacity being developed across Wales. Strategic-level indicators will be aligned to the Preparing for a Changing Climate guidance to provide a measure of the degree to which key tasks described in the guidance have been implemented. This approach will help to ensure that adaptation is mainstreamed in the policy decision making process across Wales. We anticipate that strategic-level indicators will adopt a self-assessment reporting process, recording the level of adaptation achieved against specific performance criteria. For example, an indicator of this style could measure whether a climate change risk assessment has been completed, or whether a process to evaluate and review the adaptation plan has been implemented.

The Welsh Government will introduce Strategic-level indicators alongside the Preparing for a Changing Climate guidance and are likely to be detailed spring 2013.

Knowledge Transfer Programme

Alongside the Preparing for a Changing Climate guidance the Welsh Government is implementing a Knowledge Transfer Programme. The Knowledge Transfer Programme⁸ is an exchange process between the Welsh Government and its key stakeholders in Wales. It aims to build resilience in organisations, against the impacts of climate change through the exchange of knowledge, skills, and resources between the Welsh Government, organisations and sectors in Wales, whilst understanding stakeholder's needs and requirements to enable effective action against the impacts of climate change.

The Knowledge Transfer Programme will focus on key policy priorities as identified in the Delivery Plan, and will utilise the behaviour change approach outlined in the Climate Change Communication and Engagement Strategy.⁹

⁸ <http://www.wales.gov.uk/climatechange>

⁹ The 4 Es model: Exemplify, Enable, Encourage, Engage.

The Climate Change Engagement Strategy has set out our approach for engagement. We are working in partnership, providing the resources at a national level in order to support action led at the local level. This means that our Knowledge Transfer Programme will be developed and delivered in partnership, providing at a national level those resources for which it makes sense to fund nationally, in order to support action at the local level.

Our objective is to catalyse action, broadly encompassing elements set out in Table 1.

Table 1

Exemplify	Encourage
<ul style="list-style-type: none"> • Leading by example. • Achieving consistency in policies. • Ensure learning from organisations that have already looked at adaptation, are fed back to others e.g. the learning from the Changing Climate Changing Places project is being fed to others. 	<ul style="list-style-type: none"> • Expenditure – grants. Our Supporting Sustainable Living Grant includes provisions relating to adaptation. • Recognition/social pressure – league tables. • We will look to utilise other policy mechanism where possible to embed adaptation into sector areas and organisations through the Sectoral Adaptation Plan process.
Enable	Engage
<ul style="list-style-type: none"> • Remove barriers through upstream actions (such as policy development) and downstream processes (such as tools and resources). We have produced a number of tools such as the business case for the private, public and third sector to take action on climate change. • Give information – by providing it one centralised location such as the Knowledge Hub. We are looking to continually develop our website which will contain useful tools and resources all in one place. • Train/provide skills – for key stakeholders such as the potential Reporting Authorities. • Provide capacity, by training, sharing knowledge, case studies and learning from one. 	<ul style="list-style-type: none"> • Community action – we have harnessed peer to peer learning by creating a DVD showing what a Local authority and Local Service Board are doing on emission reduction and adaptation. • Co-production – we will look for opportunities for organisations and sectors to work together to reduce work loads such as through Local Service Boards and the Local Authority Sustainable Development network. • We will engage with wider networks and start to look at shared risks through Local Service Boards and Local health boards. • Use networks – our approach will look to utilise existing well established networks in different sectors and organisations, to engage stakeholders such as the stakeholders in the health sector which we will look to engage with through the Climate Change and Health Working Group.

The Reporting Authorities have a vital role to play in ensuring that Wales adapts to the impacts of climate. The main emphasis of the Knowledge Transfer Programme is focusing on building resilience in this sector. The Knowledge Transfer Programme has initially focussed on building capacity in these organisations by:

- Providing further support for local authorities through the Welsh Local Government Association, Sustainable Development Framework programme. It is a well established and recognised programme for the sector and ensures learning between different local authorities. Since the Welsh Climate Change Strategy was published there has been a significant increase in activity on adaptation in local authorities. In 2010 local authority engagement on adaption issues was focused on the four pilot authorities who took part in the Changing Climate Changing Places project. There are now eleven local authorities in Wales (50%) addressing climate change adaptation in their organisation or through their Local Service Board areas. Each local authority is unique and looking at different aspects such as financial savings, the natural environment, impacts on communities, infrastructure, and organisation risks. Collectively this is a useful network of learning and resources.
- Providing support for other public sector bodies by working with Welsh Government departments to look at how to effectively deliver workshops and embed adaptation.
- Developing tools and resources to help sectors and organisations adapt to the impacts of climate change.