











The Second Annual Report of the Climate Change Commission for Wales

February 2013

Contents

Chair's Foreword Executive Summary	03 05
1. Climate Change Context1.1 UK Climate Change Risk Assessment1.2 Responding to the Challenges and Opportunities	07 08 09
2. Progress in Wales2.1 UK Committee on Climate Change's Review of Progress2.2 UK Committee on Climate Change's Recommendations to Welsh Government2.3 Commission's Review of Progress on its Recommendations to Government	10 11 13 15
3. Priority Areas for Action 3.1 Building Resilience to Manage the Impact 3.2 Reducing Emissions from Built Environment 3.3 The Transport Challenge 3.4 Accelerating the Transition to a Low-carbon Economy 3.5 Leadership Action in the Public Sector 3.6 Engaging Civil Society 3.7 Managing our Land Use	16 17 18 20 22 23 24 25
4. The Climate Change Commission for Wales 4.1 Role of the Commission 4.2 Sub-groups of the Commission 4.3 Engaging with the Work of the Commission 4.4 Role of the Secretariat 4.5 Meetings of the Commission 4.6 Forward Work Programme 4.7 Contacting the Commission 4.8 Membership of the Commission	26 26 27 27 28 28 29 29

Chair's Foreword

In December 2012, the Climate Change Commission for Wales¹ marked its fifth anniversary.

Over the past five years, the Commission has played a key role in addressing the challenges of climate change in Wales as a cross-sector, cross-party body, providing advice to Government, building consensus for action and independently reviewing progress.

This document – the second Annual Progress Report of the Climate Change Commission for Wales – reviews progress over the past year and sets out its priorities for action in 2013/14. The Report should be read in conjunction with the UK Committee on Climate Change² (UKCCC) second report to Welsh Government on progress in Wales on reducing emissions and preparing for climate change.

When the Climate Change Commission for Wales was established in 2007, climate change was at the top of the political agenda and public awareness and concern was high. Since then, the impacts of the global financial crisis have dominated headlines and priorities – despite the increasing evidence that greenhouse gas emissions will continue to rise and, potentially, lead to a level of global warming (between 4°C and 6°C) that will create significant disruption to human life and the natural resources humans rely on for their wellbeing.

My colleagues in the Climate Change Commission agree unanimously: a choice between the economy and the environment is not the way forward. We are clear that the solution to both the financial and environmental problems is a transition to a low-carbon economy – only this can deliver both our climate change and jobs targets. The overriding priority of the Europe 2020 Strategy³ is achieving smart, sustainable and inclusive growth – or 'green growth' – as central to a resource-efficient future for Europe. We are conscious that this is both a competitive and collaborative agenda in countries around the world.

Progress has been made over the last five years but to become market leaders and deliver 'green growth' across the economy, a clear route map, based on global best practice, is needed. The Commission is committed to taking this forward, working in partnership with Government, business, and the wider community.

We recognise the key role that Natural Resources Wales (the new single environmental body that will be operational from April 2013) and the Sustainable Development Bill ⁴ will play within Wales' framework to support investment in the transition to a low-carbon, resource-efficient economy.

The Commission's role, as an independent body, working across political parties and sectors of society, is vital for ensuring that resilience to cope with the impacts of a warmer world is built and that Wales becomes an early adopter of the low-carbon economic model.

The original terms of reference for the Commission included the role of the new body in establishing:

"An agreed benchmarking and target regime for emission reduction in areas of devolved competency in Wales."

This was achieved with the launch of the Welsh Government's Climate Change Strategy ⁵ in October 2010.

Meeting the climate change targets will, of course, necessitate Government leadership. The First Minister's statement at the Climate Change Commission 5th Anniversary meeting (December 2012) was very encouraging:

"I would like to thank the Climate Change
Commission for their hard work. The threat of
climate change is one of the greatest challenges we
face and we must ensure that we do all we can to
prepare for those challenges ahead. I witnessed
first-hand the devastation that extreme weather
can bring when I visited St Asaph last week and I
am committed to ensuring we continue to invest in
both adaptation and mitigation of climate change.
Your continued support in this agenda is vital if we
are to make any meaningful progress and I look
forward to continuing our work with you."
The delivery of these targets also requires
Commission members to fulfil the brief also
agreed at that first meeting, to:

"Provide leadership on climate change for their sector and encourage wider engagement and action on the issue. I am delighted that the Commission now has the full support of Cynnal Cymru – Sustain Wales ⁶ to enable Commission members to fulfil that function."



I am extremely grateful to the Commission members for their contribution over the last 5 years. The report of the UK Committee on Climate Change recognises we have made some progress in that time, but also sets out the scale of transformation which we must make over the next five years.

Peter Davies
Chair of the Climate
Commission for Wales &
Commissioner for
Sustainable Futures

Cefnogir gan: Supported by:



¹ The Climate Change Commission for Wales: www.thecccw.org.uk

² UK Committee on Climate Change Second Report to Welsh Government on Progress in Wales: www.theccc.org.uk/reports/welsh-reports

³ Europe 2020 Strategy: http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm

⁴ The Sustainable Development Bill: http://wales.gov.uk/topics/sustainabledevelopment/sdbill/?skip=1&lang=en

⁵ Welsh Government Climate Change Strategy, October 2010: http://www.cynnalcymru.com/library/climate-change-strategy-wales

⁶ Cynnal Cymru-Sustain Wales: www.cynnalcymru.com

Executive Summary

The second annual report of the Climate Change Commission for Wales is published in the interim period of the Government's annual progress reports. ⁷ Going forward, the Commission will respond directly to the Welsh Government's Climate Change Strategy Progress Report, due in Autumn 2013. It will be the first time Welsh Government will be reporting on delivery of its 3% annual emission reduction target against emission data in the baseline period (2006-2010). Subsequently, the third annual report from the Commission will be a direct review of the Government's progress on emission reductions, as stated in their Climate Change Strategy. It will be published at the end of 2013.

In this report, the Commission reviews progress against the measures that were set out in the Climate Change Strategy (published in 2010) and builds on the recommendations proposed recently in the UK Committee on Climate Change second progress report to Welsh Government.⁸ The UK Committee is an independent statutory body, which was established under the Climate Change Act (2008) to advise UK and devolved administration governments on setting and meeting carbon budgets, and preparing for climate change.

Since the Welsh Government published its strategy, the UK Committee has published two progress reports on Wales, with the most recent report in January 2013 providing emissions data for 2010 and estimates of emissions trends for 2011, against the baseline period (2006-2010). This will enable future reports to review progress against the Government's 3% annual emission reduction target. The Climate Change Commission for Wales produced its first

annual report in 2012,¹¹ providing a review of progress, with recommendations for Welsh Government.

This progress report is published at a time when there is increasing evidence that the continuing rise in global greenhouse gas emissions will have an even greater effect on the severity of climate change impacts than scientists had previously predicted – and that the type and frequency of the impacts will be unpredictable, making planning for them difficult.

The Climate Change Commission for Wales' role is unique and vital. Its independence and Waleswide, cross-sector, cross-political party reach enables it to build consensus, stimulate action across all parts of Welsh society, and to hold Government to account for delivery on the targets set out within the Climate Change Strategy. The Commission has identified priority themes for action, and these are to:

- 1. Focus on **building resilience to manage the impact** of a changing climate.
- 2. Scale-up efforts to reduce emissions from the built environment.
- 3. Address the **transport challenge** that is central to our approach to sustainable development.
- 4. Accelerate the transition to a low-carbon economy.
- 5. Ensure **leadership from the public sector** to communicate and engage people on the challenges of climate change.
- 6. **Engage civil society** to achieve a significant impact in tackling climate change.
- 7. **Manage our land use** to reduce emission levels from this sector.

In reporting the progress made, the Commission welcomes the recent findings from the UK Committee's report to Welsh Government, which concludes that, although progress in reducing emissions through the implementation of measures has been particularly good in the residential and waste sectors, significant challenges remain – suggesting the need for policies and associated indicators to be strengthened.

The Commission also recognises that there are a number of recommendations contained in its first annual report that have not yet been fully implemented. We urges the Welsh Government to:

- Accept the recommendations of the UK Committee on Climate Change.
- Take action on the outstanding issues identified from the Commission's first report.
- Work with the Commission and partners to deliver on the seven priority areas for action identified in this report.

⁷ Climate Change Strategy for Wales First Annual Progress Report, March 2012 (Chapter 14, pg. 72): http://wales.gov.uk/docs/desh/publications/120329climateannualreporten.pdf

8 UK Committee on Climate Change Second Report to Welsh Government on Progress in Wales, January 2013: http://www.theccc.org.uk/reports/welsh-reports

The Climate Change Act, 2008: http://www.legislation.gov.uk/ukpga/2008/27/contents

Welsh Government Emissions Reductions Target:

http://wales.gov.uk/topics/environmentcountryside/climatechange/emissions/targets

Climate Change Commission for Wales First Annual Report, January 2012: http://www.cynnalcymru.com/library/climate-change-commission-wales-first-annual-report

1. Climate Change Context

It is now widely accepted that the world's climate is being affected by increasing emissions of greenhouse gases from human activity and, even if efforts to mitigate these emissions are successful, the earth is already committed to significant climatic change (IPCC, 4th Assessment Report 2007 ¹²).

Despite this assessment, and a call for collective global action to reduce greenhouse gas emissions (GHG), global emissions of carbon dioxide (CO₂), increased by 3% in 2011, reaching an all-time high of 34 billion tonnes in 2013.¹³

In order to have a 50% chance of keeping the global mean temperature rise below 2°C relative to pre-industrial levels, atmospheric GHG concentrations must stabilise below 450ppm CO₂ equivalence. Current atmospheric GHG concentrations and trends in GHG emissions mean that these concentration levels are being exceeded and we are progressing towards levels that may well result in global mean temperature increases of 4°C. This view was recently reinforced by Nicholas Stern, author of the UK government-commissioned 'Stern Review: The Economics of Climate Change,' 14 who stated that his report underestimated the risks, and that he should have been more "blunt" about the threat posed to the economy by rising temperatures. A similar view was expressed by the President of the World Bank who, at the launch of their report 'Turn down the heat,' 15 hoped that the report would "shock us into action."

Over the past year, the latest scientific evidence has been presented to the Commission members ¹⁶ by climate change experts, including scientists from the Tyndall Centre, Met Office, and the Chief Scientific Adviser to Welsh Government. The empirical evidence and scientific opinions were stark. Professor Kevin Anderson of the Tyndall Centre stated:

"There is a widespread view that a four degree future is incompatible with an organised global community, is likely to be beyond 'adaptation' and is devastating to the majority of ecosystems and has a high probability of not being stable."

The summer of 2012 was the UK's 3rd wettest since Met Office records began in 1910.¹⁷ June 2012 was the wettest month in Wales, with a month's worth of rain falling in just 2 days in north Ceredigion – resulting in floods that affected thousands of people. This extreme rainfall was preceded by the 5th driest month in 100 years, in March 2012.¹⁸

It is important to note that there will always be uncertainties around the weather but extreme weather events are now a characteristic of the present day climate in Wales. These extreme weather events dominate current climate risks and the media. During the last year rain and flooding have had an increased impact on Welsh communities. Climate change is a global issue and the effects of climate change will vary across the world as average global temperature is projected to rise between 4–6 degrees by 2100.

In his paper on Arctic ice melt, 'The Dark Canary,' 19 Commission member Professor Gareth Wyn Jones states:

"The Arctic is a major determinant of the thermohalide circulation system of our oceans and of the behaviour of the North Atlantic jet stream," and he goes on to say:

"It appears that Arctic changes are now influencing the strength and path of this jet stream as well as allowing standing, blocking meanders in it. These have caused this summer's great heat and severe drought in the USA as well as previously similar events in France and Russia/Ukraine as well as bringing us in North West Europe a disappointing wet and windy summer as the jet stream threw an unremitting series of Atlantic lows at us!"

Our geographical location in North West Europe means we are particularly subject to the behaviour of the jet and gulf streams, so making prediction difficult and leading to greater uncertainties of the impact of global climate changes than in other parts of the world.



1.1 UK Climate Change Risk Assessment

In January 2012, the UK Climate Change Risk Assessment ²⁰ (CCRA) was published, including the Climate Change Risk Assessment for Wales. This presented an assessment of both the challenges and opportunities from climate change, based on the climatic changes projected by the UK Climate Projections (UKCP09).

Challenges:

- Increases in hot weather-related deaths and illnesses.
- Changes in soil conditions, biodiversity and landscape due to warmer, drier summers.
- Reductions in river flows and water availability during the summer affecting water supplies and the natural environment.
- Increases in flooding on the coast and inland, affecting people, property and infrastructure.
- Changes in coastal evolution including erosion and costal squeeze, affecting beaches, intertidal areas and other coastal features.

- Changes in species including a decline in native species, changes in migration patterns and increases in alien and invasive species.
- Increases in the risk of pests and diseases affecting agriculture and forestry. The risk to livestock is a particular concern.

The CCRA report found a number of potentially significant opportunities for Wales but these opportunities are likely to be transient as we move towards even higher temperatures at the end of the century:

Opportunities:

- Increases in grass yields, allowing a potential increase in livestock production.
- Increase in tourist numbers and a longer tourist season.
- Reductions in cold-weather related illnesses and death.

http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/sternreview_index.htm

15 The World Bank, November 2012: 'Turn down the Heat: Why a 40 warmer world must be avoided

¹⁶ Climate Change Commission for Wales meetings: http://www.cynnalcymru.com/5-december-2012

¹⁷ The Met Office, June 2012: http://www.metoffice.gov.uk/news/releases/archive/2012/second-wettest-summer

18 Environment Agency's 'Water Situation Report': www.environment-agency.gov.uk/static/documents/Research/WSR_March_2012.pdf

¹⁹ Land use sub-group 'The Dark Canary' paper: www.theCCCW.org.uk

²⁰ Climate Change Risk Assessment for Wales

http://www.defra.gov.uk/environment/climate/government/risk-assessment/#report

¹² IPCC, 4th Assessment Report 2007: http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml

European Commission's Emissions Database for Global Atmospheric Research (EDGAR): http://edgar.jrc.ec.europa.eu/index.php

13 European Commission's Emissions Database for Global Atmospheric Research (EDGAR): http://edgar.jrc.ec.europa.eu/index.php

14 'Stern Review on the Economics of Climate Change':

1.2 Responding to the Challenges and Opportunities

The Commission recognises that:

- Climate science shows clearly that without immediate, radical and sustained reductions in global greenhouse gas emissions there will be severe consequences for human society as well as for the ecosystems and biodiversity that are essential to human livelihoods.
- Action now on emission reduction will substantially reduce long term costs of impacts and adaptation, while early action to adapt to climate change will make us more resilient and less vulnerable to its future impacts.
- As a nation, Wales is living beyond its environmental limits, is over-reliant on fossil fuels and is emitting unsustainable levels of greenhouse gas emissions.
- Government has a key leadership responsibility, but concerted actions are needed from all parts of society. Only around one third of emission reductions are expected to come from policies solely under the control of Welsh Government.
- Welsh Government's Climate Change Strategy and annual reduction targets are comparable with the more ambitious reduction plans globally. We need to ensure delivery while keeping the relevance of the targets under review.

- The Climate Change Strategy must be set in the context of our commitment to sustainable development, promoting social justice and recognising that those most vulnerable will be hardest hit.
- Wales is well-placed to play a leadership role in a transition to a low-carbon economy, which will have many benefits beyond tackling climate change – with secure, long term energy supplies, better air quality, more comfortable homes and opportunities for business to thrive while producing low-carbon products and services.
- The greatest opportunity we have is also the greatest challenge – to engage with the public to increase their response to climate change in Wales.



2. Progress in Wales

The Welsh Government published its Climate Change Strategy in October 2010,²¹ alongside its Emission Reduction²² Delivery Plan and Adaptation Delivery Plan,²³ setting out the 'level of ambition in tackling the causes and consequences of climate change'.

As part of its statutory role to provide advice to UK and devolved administrations, the UK Committee on Climate Change published its first report to Welsh Government in 2011 on 'Reducing emissions and preparing for climate change in Wales,' ²⁴ making an initial assessment of progress in Wales along with a series of recommendations.

The Climate Change Commission's first annual report ²⁵ followed in 2012, reviewing the progress of Welsh Government in meeting emission reduction targets and preparing for climate change. Subsequently, the Government published its first annual progress report, ²⁶ which included a technical annex on the proposed sectoral indicators, and sought to incorporate many of the recommendations proposed by the Committee and the Commission.

Now, in this second annual report, the Commission provides the progress update from both the Committee's second report to Welsh government, published in January 2013, and an update on progress against its own recommendations.



²¹ 'Climate Change Strategy for Wales, October 2010:

http://www.cynnalcymru.com/library/climate-change-strategy-wales

http://wales.gov.uk/topics/environmentcountryside/climatechange/publications/emissionplan/?lang=en

Welsh Government Adaptation Delivery Plan, October 2010:

http://wales.gov.uk/topics/environmentcountryside/climatechange/publications/adaptationplan/?skip=1&lang=en UK Committee on Climate Change, Welsh Reports: http://www.theccc.org.uk/reports/welsh-reports

²⁵ Climate Change Commission for Wales First Annual report, January 2012:

Welsh Government 'Climate Change Strategy for Wales First Annual Progress Report', March 2012: http://www.cynnalcymru.com/library/climate-change-strategy-wales-first-annual-progress-report

Welsh Government Emission Reduction Delivery Plan, October 2010:

2.1 UK Committee on Climate Change's Review of Progress on Wales' Emission Reduction Targets

In its second report to the Welsh Government, the UK Committee provides its findings on Wales' progress in implementing the Climate Change Strategy for Wales to meet the emission reduction targets and prepare for climate change. This report presents emission data for Wales, over the baseline date (2006-2010) and as defined by the 3% annual reduction target.

The average annual emissions, covered by the 3% target over this baseline period, were 32.9 MtCO₂e,²⁷ representing 69% of total greenhouse gas emissions in Wales. To meet the target will require an annual reduction of just under 1 MtCO₂e from 2011, leading to emissions of 23MtCO₂e in 2020. In future reports, both the UK Committee and the Commission will review progress against this baseline data.

Whilst it does not report on progress against emission data for 2011 (which will be made available later in 2013), the UK Committee's report provides an analysis of emission trends in 2010 against the baseline data. Using the indicators from the Government's indicator framework,²⁸ the following progress has been reported:

- Emissions increased in 2010, but are likely to have fallen in 2011, due mainly to weather and economic factors.
- 2. Good progress implementing emission reduction measures has continued, particularly in the residential and waste sectors.

More specifically:

- 3. On transport, which accounts for a fifth of the emissions covered by the 3% devolved target, emissions in 2010 fell, mainly due to reductions in car emissions. This is as a result of improved efficiency in new cars and a reduction in vehicle kilometres.
- 4. In the business sector, which accounts for a third of emissions covered by the 3% target, emissions (where electricity use represents a higher share of the sector's emissions than direct emissions) fell by 19% in 2010, over the baseline period, despite a 10% increase in 2010 as production output recovered following the 2009 recession.
- 5. In the residential sector, responsible for a quarter of the 3% annual target, direct emissions rose 13% in 2010 due to the cold winter months of 2010. However, gas demand would have fallen if using weather adjusted gas demand data to account for the exceptionally cold winter. Indirect emissions, meanwhile, were slightly lower than the baseline due to a combination of reductions in carbon-intensity of power and electricity consumed by end-users.
- 6. Emissions from agriculture and land use, which accounts for a sixth of the 3% emission targets, fell 10% within the baseline period, and averaged 5.9MtCO₂e overall.
- 7. The waste sector (which comprises the waste management and wastewater handling sectors only) accounts for 3% of total emissions in the 3% target. Emissions fell 9% over the baseline period to 0.9 MtCO₂e, which was also the average over the baseline period. Within this, high

household recycling rates have continued, and at 53%, Wales has the highest recycling rates across the UK. Generally, improvements in recycling and resource efficiency will inevitably lead to emissions reductions throughout the economy – for instance, in the business and transport sectors.

8. Public sector also accounts for 3% of emissions in the 3% targets, with total emissions in 2010 down from the baseline average.

Wales also has a target to reduce emissions from all sources by 40% from 1990 levels, implying a reduction from 54.9 MtCO₂e to 32.9 MtCO₂e.

On this, the following progress was reported:

9. By 2010, Wales achieved a 15% reduction from 1990 levels, although in 2010 emissions increased by 8% from the residential, business and industrial processes sectors. This was due to the exceptionally cold winter months in 2010 and an increase in production output from the previous year.

On adaptation, the following issues have been reported:

- 10. While Welsh Government has produced guidance for developing adaptation plans, currently Sectoral Adaptation Plans (SAP) have yet to be produced for the infrastructure, business and tourism, and communities sectors. For the natural environment, Government has confirmed that adaptation will be embedded within its wider Natural Environment Framework and the forthcoming Environment Bill.
- 11. There is no clear source of advice for businesses on adaptation, as those provided to the public sector and in particular local authorities.
- 12. A fifth of floodplain development has been in areas currently exposed to a significant chance of flooding, and the area of green space in towns and cities has reduced, with potentially adverse implications for surface water flood risk in the coming decades.

MtCO₂e - Million metric tons of carbon dioxide equivalent: This measure can aggregate different green house gases into a single measure, using global warming potentials. One unit of carbon is equivalent to 3.664 units of carbon dioxide

²⁸ Climate Change Strategy for Wales First Annual Progress Report-Technical Annex, March 2012: http://www.cynnalcymru.com/library/climate-change-strategy-wales-first-annual-progress-report

2.2 UK Committee on Climate Change's Recommendations to Welsh Government

The UK Committee also made a number of recommendations, as requested by the Welsh Government. These related to:

- Reviewing the methodology to measure the achievement of emission reduction targets of 3% per year in areas of devolved competence, measured against a baseline of average emissions between 2006–2010, and the indicator framework developed by the Welsh Government.
- Analysing Wales' preparedness in building resilience to mitigate the impacts of climate change.
- Proposals for possible legislative options for climate change mitigation and adaptation.

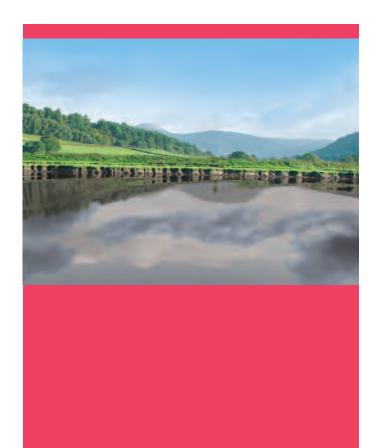
The key recommendations proposed and endorsed by the Climate Change Commission for Wales, are as follows:

- Government needs to strengthen policies to ensure that Wales is on track to meet its emission reduction targets through:
 - A stronger energy efficiency and generation strategy to increase roll-out of energy efficiency measures (such as Green Deal), receive its equal share of funding from supplier programmes, and allow Wales to increase its uptake of incentives on renewable heating and increase its renewable energy generation capacity.
 - Greater clarity on how one-third of the 3% annual reduction targets will be met from 'wider contribution of others' as stated in the Government's Climate Change Strategy.

- A review of its indicators framework, as set out in the Technical Annex of Government's first annual progress report, to:
 - Include the UK indicators and corresponding Wales level indicators relating to UK policies.
 - Take account of forthcoming changes in accounting framework of the European Union Emission Trading Schemes (EUETS), which will incorporate some of the emissions currently within the 3% devolved targets.
 - Address the sectoral gaps (i.e. in business and agriculture, in particular) to allow better assessment of progress.
 - Consider tracking temperature and/or consider weather-related emissions data to account for variability in some areas, such as residential sector.
 - Explore setting a trajectory related to the level of anticipated uptake of abatement measures by 2020.

- 2. On **adaptation measures**, the Committee recommends for the Welsh Government to:
 - Complete the remaining Sectoral Adaptation Plans (SAPs) for infrastructure, buildings and tourism, and communities, recognising that the adaptation plan for the natural environment will be embedded within Government's wider Natural Environment Framework and forthcoming Environment Bill.
 - Prepare advice to businesses on adaptation, complementing those provided to local authorities.
 - Ensure robust implementation of planning policy by local authorities relating to development in the floodplain and in the design of urban areas.
 - Consider how investment in flood defence keeps pace with the increasing risk of flooding under a changing climate.

- 3. In its **assessment of legislative options**, the UK Committee concludes that:
- Statutory targets could provide a level of certainty over the long-term, i.e. beyond 2020, that could be helpful for businesses, investors, policy-makers as well as wider society. Both at UK level and in Scotland, there are examples that provide the statutory policies underpinning their emission reduction targets.
 - Such targets need to be based on evidence and analysis of cost-effective levels of emission reduction in Wales.
 - If statutory targets are set, then an accompanying duty on Welsh Ministers to develop policies to meet the targets should be set alongside them.
- There is an opportunity to explore further how a duty on public bodies could be incorporated within the SD Bill and/or the forthcoming Environment Bill to include how public bodies contribute to the Government's emission reduction targets and adaptation objectives.



2.3 Commission's Review of Progress on its Recommendations to Government

Since the launch of the Commission's first annual report in January 2012, the Commission has been working closely with government officials and through the organisations represented on the Commission to help deliver the Climate Change Strategy for Wales.

A detailed analysis of progress against the recommendations from the Commission's first annual report is provided in the Annex.²⁹ However, progress updates on some of the Commission's key recommendations are outlined below:

- There has been limited progress in defining how the 3% annual reduction in emission can be achieved from the 'wider contribution of others'.
- 2. On consumption based emissions, there has been no progress to report. However, as of the end of 2012, Government will be working with its appointed contractor to develop data on Wales' ecological footprint, which was last updated in 2006.
- 3. Efforts to engage communities and sectors on behaviour change have been limited and ad-hoc. We still await a final publication of the segmentation and narratives work that will inform how people can be engaged more effectively on issues around climate change and sustainable development.

- 4. We echo the progress reported by the UK Committee in that adaptation plans remain incomplete for a number of sectors.
- We remain concerned on how the regional/spatial plans (e.g. city regions) will incorporate the earlier work on low-carbon regions developed as part of the Wales Spatial Plan.
- Despite the initial show of support for Community Energy Wales, there has been no financial support to ensure the organisation can be firmly established to support community groups developing energy generation and efficiency measures.
- 7. There has been some progress with engaging with, and providing advice to, small and medium-sized businesses through the Government's 'Business Case for Action on Climate Change,' 30 published in late 2012. In addition, the Business Wales' 'one-stop business support service' incorporates provision of support on energy and resource efficiency. 31

The Commission endorses the recommendations from the UK Committee and recommends that Government consider these in its next progress report. The Commission will also work alongside both the UK Committee and the Welsh Government to ensure that the barriers to progress and the recommendations highlighted above are addressed.

²⁹ Climate Change Commission for Wales 'Second Annual Report' Annex: http://www.cynnalcymru.com/publications

Welsh Government 'Business case for action on climate change', October 2012:

http://wales.gov.uk/topics/environmentcountryside/climatechange/publications/caseforaction/?lang=en
Welsh Government' '£6.5m Business Wales network of one stop shops', January 2013:
http://wales.gov.uk/newsroom/businessandeconomy/2012/6876829

3. Priority Areas for Action

In March 2012, following the launch of the Commission's first annual report, the Minister for Environment and Sustainable Development, John Griffiths A.M., posed the following questions:

- A key reflection following the Commission's recent report is that it is critical that the Commission looks to identify and remove obstacles to delivering the climate change agenda in Wales. Do we have the conditions and working arrangements in place to enable this to happen?
- It is crucial that working with the Welsh Government and other delivery partners the Commission focuses on catalysing the wider contributions from businesses and communities to help deliver our challenging targets. What's the focus for the next year to enable the Commission to achieve this?

In response, the Commission has highlighted seven priority areas, identifying key areas for action:

- 1. Building resilience to manage the impact of climate change.
- 2. Reducing emissions from the built environment.
- 3. The transport challenge.
- 4. Accelerating the transition to a low-carbon economy.
- 5. Leadership action in the Public Sector.
- 6. Engaging civil society.
- 7. Managing our land use.

The sections that follow provide an overview of the challenges posed within each of the priority areas, and the key recommendations of the Commission.



3.1 Building Resilience to Manage the Impact

Meeting the major challenges of adapting to climate change requires a collective reassessment of our material expectations, lifestyle priorities and capacity to change. Both government and society must do their bit. The Government can fund public works, such as a flood defences or warning systems, but individuals and organisations must make their own plans, reflecting their particular vulnerabilities.

There is a clear role, for the Commission, as a cross-party, cross-sector independent organisation, to advise, build consensus and mobilise action.

The Commission's Adaptation Sub-Group examines scientific evidence relating to the predicted changes to Wales' climate and weather. The group informs the Commission of its findings and identifies strategies and measures to strengthen the Welsh approach to adapting to climate change.

In support of the recommendations presented by the UK Committee on Climate Change in its 2013 report, which are to: (i) produce the outstanding sectoral adaptation plans (SAPs), (ii) set out a clear source of advice for businesses on adaptation, (iii) ensure robust implementation of planning policy, especially on development in floodplains, and (iv) maintain and, if possible, increase the flood defence budget, the Commission recommends the following actions:

- 1. Further consideration should be given to whether Welsh Government should direct public bodies, using powers under the **Climate Change Act, to produce** adaptation reports. The UK Government is preparing a National Adaptation Plan in response to the findings of the first Climate Change Risk Assessment (CCRA), published in January 2012. This does not, however, cover devolved issues in Wales. The Welsh Government, therefore, must prepare an equivalent plan (or plans) to address the relevant climate risks in Wales. Options exist for embedding such plans within its forthcoming Environment Bill. Equally, the Welsh Government may wish to revisit its powers to direct public bodies to prepare adaptation reports under the UK Climate Change Act 2008.
- 2. Support should be given to host workshops across Welsh Government to kick-start progress with Sectoral Adaptation Plans (SAPs) and adaptation planning and the working group should be involved in developing adaptation indicators. The Welsh Government must step up its work on the SAPs if it is to meet its publication deadline of early 2013. Indeed, postponing the publication may be prudent in order to achieve a better product and wider buy-in. While the appropriate Government departments should direct and adopt these plans, they should still be developed with the active engagement of the Commission to ensure that the full range of stakeholders is involved.

The Commission's Adaptation Sub-group members are happy to work alongside climate change officials to organise workshops and reinvigorate the planning process with relevant Welsh Government departments. The thematic guidance being developed by Climate Ready ³² (the UK government's initiative to help businesses, communities and the environment adapt to a changing climate) will help inform this work. The Scottish Government and the UK Committee on Climate Change are both working on adaptation indicators. Work in Wales should link to those tools.

innovative communication methods to share experience and learning on climate change adaptation. These methods could include developing images of adapted landscapes similar to the six 2030 visions that Defra commissioned for: City; Home; Infrastructure; Coastal; Countryside and Farm. The Commission's Adaptation Subgroup will also make links with the European Environment Agency and European Nature Conservation Agency Climate Change Sub-group, which are collating adaptation case studies from across Europe.

3.2 Reducing Emissions from Built Environment

Established in April 2009, the Wales Low Zero Carbon Hub (WLZCH) was developed to provide a dissemination mechanism to stakeholders and a source of advice to the Commission. As a sub-group of the Commission, it provides information and advice about activities and actions needed to achieve the aspiration of zero-carbon new-build and the contribution that will be made by buildings in delivering the 3% annual target to cut greenhouse gas emissions. Carbon emissions directly attributed to buildings represent approximately 30% of the total. 80% of the projected 2050 building stock is already in existence. Therefore, to achieve 2050 targets, 62,500 properties per year must be refurbished to high energy fabric performance standards.

A formal position statement has been released alongside this Report,³³ and provides a detailed account of the challenges and recommendations to address emissions from buildings, both new and existing stock. The recommendations outlined are in support of those proposed by the UK Committee in its latest report. The Commission urges Welsh Government to consider the following priority actions:

 Clarity on the Green Deal: A clear statement on the position of Welsh Government on the Green Deal, and what it will do to promote its uptake;

³² Climate Ready: http://www.defra.gov.uk/environment/climate/government/nap/

- 2. Development of the right Allowable Solutions for Wales: Providing clear direction and a positive stance on the Allowable Solutions debate, ensuring that solutions that are relevant and viable for Wales are included in any mechanism, and that Welsh Government takes an immediate and active role rather than simply observing its development in England.
- 3. Awareness of the risks & opportunities for solid wall insulation: Clear guidance, produced by the WLZCH, on the risks and opportunities, posed by solid wall insulation needs to be endorsed by the Welsh Government for all schemes and initiatives it funds.
- 4. Development of retrofit at scale: With 80% of the 2050 building stock already in existence, a reduction in energy used by the built environment can only be delivered by addressing the issues of the existing building stock. Welsh Government must look wider than the measures and incentives that are currently in place.
- **5. Ensure consistency and progress through the establishment of appropriate targets and indicators:** The group is keen to meet with the Welsh Government Climate Change Team to develop the indicators further.
- 6. Low energy demand buildings: It is of paramount importance that buildings are designed and constructed to require the minimum amount of energy to function effectively, while meeting the occupant's needs, engendering a long build-life and, therefore, spreading the construction impact energy use over a longer period. Achieving very low energy demand will not require buildings to generate energy. Energy generation is best undertaken at scale, with maintenance and operational procedures in place for efficient management. As such, Welsh Government needs to ensure that 'Allowable Solutions'

- for legally tying specific buildings to off-site power generation are developed and implemented as an urgent priority.
- 7. Value in the built environment: Current development methods do not adequately value the lifecycle impacts of buildings in any construction sector and this places low energy demand property (with its potentially higher capital cost) at a significant disadvantage. Welsh Government must seek to rebalance this valuation within existing development frameworks. While the methods will vary for different sectors, the measures will use existing levers and mechanisms to drive the value of low energy building stock and, in turn, result in an increase in demand.
- 8. Buildings don't use energy, people do:
 The Welsh Government needs to raise the awareness of energy use within buildings through both regulated and unregulated emissions, highlighting both the opportunities and benefits. Welsh Government should provide a detailed update on the work undertaken on behaviour change for energy efficiency, with a clear strategy and timeline for future delivery.



Third Sector Sub-group's paper on 'Engaging civil society': www.theCCCW.org.uk

3.3 The Transport Challenge

Climate change is a key issue for the transport sector, both because the sector is a major emitter of greenhouse gases and because it is potentially vulnerable to the impacts of climate change. The transport sector in Wales accounts for 20% of devolved emissions and, although some progress has been made towards decarbonising the transport sector and adapting it to cope with climate change in Wales; the sector was highlighted in the Commission's first annual report as a key area for improvement.

There are excellent examples, across sectors, within Wales, of addressing behaviour change, improving access to services, and piloting new social enterprise models. The multi-million pound investment in Next Generation Broadband across Wales will be transformational in reducing the need for travel, allowing 'smart' travel solutions, tailored to demand, and increasing provision of services in the home. There is significant potential for developing new social enterprise business models based on car clubs, which can be built on such improved communication networks.

There are also specific challenges facing our rural communities, where transport poverty is a real issue. In this regard, community transport solutions provide much more than an improved access to vital public services. They also represent a key investment that addresses issues of loneliness and mental health, potentially reducing costs to the health and social service budgets and increasing wellbeing.



With the aim of raising the level of debate around transport and climate change, the Commission established a task group, which set out principles and priority actions in a position paper.³⁴ This was sent to the Minister for Local Government and Communities in July 2012. The Commission Paper highlights many examples of excellent practice that exist across Wales. It welcomes the proposals in the Active Travel Bill but recognises that more ambitious and wide-ranging improvements to transport systems have taken place in other European countries. The report sets out a number of priority actions including:

- 1. Reduce travel demand by exploiting ICT and next generation broadband: There is a strong business case for considering alternatives to travel (i.e. by reducing costs for individuals and businesses). There are also economic opportunities associated with developing the ICT sector and future-proofing infrastructure. Alternatives to travel should be given much greater attention within transport and spatial planning as should behaviour change programmes;
- 2. Advance integrated spatial and regional approaches as a vital long-term actions through city region developments and better integrated planning;

³⁴ Climate Change Commission for Wales, Position Paper on Transport: http://www.cynnalcymru.com/library/position-paper-transport-climate-change

- 3. Ensure consistency and progress through sustainable transport visions, targets and indicators: Translating the sustainable transport hierarchy into practice can be achieved through appropriate indicators and targets. As well as indicators for bus/rail/cycle use, additional indicators could include:
 - total passenger kilometres (to assess demand).
 - uptake of efficient and alternative fuel vehicles.
 - use of ICT alternatives.
 - car-sharing uptake.
 - fuel spend: indicators for eco-driving or alternative fuel infrastructure and/or use of alternatives to travel, which can be measured through regular Welsh Government public surveys i.e. selfreported eco-driving behaviours, and by the number of electric charging points or hydrogen filling stations.
- 4. Show leadership and reward best practice highlighting the importance of behaviour change at organisation level. Here, public sector employers, Sustainable Development Charter signatories and Anchor Companies are well-placed to show leadership in sustainable transport, exemplifying action as employers through travel planning, flexible working, low-carbon and electric fleet vehicles, teleconferencing etc.

- 5. Invest in green technologies to drive innovation in Wales: There are significant economic opportunities associated with research, development and innovation for low-carbon transport. Little progress has been made in promoting new transport technologies. New markets need to be stimulated for both vehicle technologies, such as electric vehicles, and modes of transport, such as car clubs.
- 6. Promote learning, evaluation and stakeholder engagement to capture enthusiasm among diverse stakeholder groups for driving forward the sustainable transport agenda. Welsh Government could make better use of this expertise, and the willingness of stakeholders to help deliver change within Wales, through more regular and meaningful stakeholder engagement.

3.4 Accelerating the Transition to a Low-carbon Economy

Over the last year, the Commission has focused on the development of the low-carbon economy, holding meetings with companies in North and South Wales, and receiving presentations from the Welsh Government's Chief Scientific Officer, John Harries; Chair of the Aldersgate Group (an influential green economy pressure group), Peter Young; and global professional services firm, PWC, on the strategy for green growth.

The Commission is clear that the transition to a low-carbon economy can deliver both climate change and job targets. There is plenty of evidence that, even in these tough economic climes, we see continued 4.7% annual growth in the low carbon environmental goods and services sector which is the driving force for a low-carbon economy. However this transformation is not about a discrete sector, but is about all sectors – manufacturing, agriculture, tourism etc. – producing goods and services in a sustainable way that responds to diminishing natural resources, increasing material prices, consumer preferences and the global effort to reduce emissions.

We are conscious that the overriding priority of the Europe 2020 Strategy is to achieve smart, sustainable and inclusive growth, or 'green growth', as being central to a resource efficient future for Europe. We are also conscious that this is a competitive agenda with countries like Ireland, where the Taoiseach is chairing their cabinet committee on the green economy ³⁵ and further afield like New Zealand where the

business sector have combined to lead a 'Pure Advantage' campaign³⁶ to promote the opportunities for investment and marketing the national brand.

The Commission welcomed the CBI's report, the Colour of Growth, ³⁷ which set out clear recommendations to the UK Government towards further acceleration of the green economy, stressing that growth and employment in the future will be led by capturing economic activity across all sectors and value chains that contribute to reducing environmental impacts or adapting to environmental changes. In order to accelerate this transition in Wales, the Commission proposes to:

- 1. Review the progress of the Welsh Government's energy programme which was launched in March 2012, in the context of the UK Committee's comment that "renewable energy development is falling behind the rest of the UK";
- Work with partners to develop a road map for green growth for presentation to the Council for Economic Renewal in June 2013;
- Ensure that the European Funding programmes are focused on ensuring a just transition to a low-carbon economy;
- Promote the Climate Group's Clean
 Revolution campaign as a means of communicating the change taking place in Wales and in economies around the World.

Our Sustainable Future, a Framework for Sustainable Development for Ireland: http://www.environ.ie/en/Environment/SustainableDevelopment/ConsultationFrameworkforSustainableDevelopmentforIreland/

³⁶ New Zealand's Pure Advantage Campaign: http://www.pureadvantage.org/

³⁷ CBI's Colour of Growth Report: http://www.cbi.org.uk/campaigns/maximising-the-potential-of-green-business/

3.5 Leadership Action in the Public Sector

Direct emissions from the public sector only form 3% of the 3% devolved target but the sector has a key leadership role in terms of exemplifying action in estate management, engaging employees, communicating with communities and how it spends public funds.

Welsh Government's 'State of the Estate' report ³⁸ 3. Asked to see **greater focus on carbon** provides an example of good practice, demonstrating how emissions were reduced by 11% in 2010, through rationalising the use of buildings, reducing journeys, and making savings in IT infrastructure. There are also strong examples of leadership in Local Authorities, the health service, the education sector and through some local service boards. However, there is no consistent application of best practice. In order to address this, the Commission has:

- 1. Written to the Auditor General to invite the Wales Audit Office to undertake a review to ensure public bodies are making the appropriate response to the challenge of climate change, similar to the report of Audit Scotland ³⁹ on the Scottish Government's climate change strategy.
- 2. Noted the UKCCC report 'How Local Authorities can reduce emissions and manage climate risk' 40 which reviewed practice in

- local authorities in England and proposes many recommendations that are also applicable to authorities in Wales. The Commission will be working with the Welsh Local Government Association (WLGA) to benchmark practice of Welsh Local Authorities against these recommendations.
- **emissions** within the procurement processes across the public sector promoted through Value Wales.
- 4. Requested the Welsh Government to ensure that they retain a strong central **team** to ensure a focus on the Climate Change strategy across Government and the public sector.
- 5. Welcomed Estyn's review of Education for Sustainable Development and Global Citizenship as requested by the Education Minister and propose that it includes a specific focus on climate change.
- 6. Recommended that tackling climate change is clearly identified as being central to the duties on the public sector within the proposed Sustainable Development Bill, including the responsibilities of the proposed new Sustainable Development body.

³⁸ Welsh Government's State of the Estate Report:

http://wales.gov.uk/publications/accessinfo/drnewhomepage/dr2012/octdec/gov/jh3041/?lang=en

³⁹ 'Reducing Scottish Greenhouse Gas Emissions' http://www.audit-

scotland.gov.uk/docs/central/2011/nr 111208 greenhouse gases.pdf 40 UK Committee's report on 'How local authorities can reduce emissions and manage climate risk', May 2012: http://www.theccc.org.uk/reports/local-authorities

3.6 Engaging Civil Society

The third sector has a crucial role to play in tackling climate change and there is huge potential for it to make a significant impact in this area given its size, scope and reach. The Commission is keen to encourage the third sector to tackle climate change and ensure that Welsh Government is delivering its commitments to engage and enable this.

Recently, the Commission and WCVA consulted with the third sector, including a round table discussion with key stakeholders from across the sector. This identified that, to reach its potential, especially in a time of competing priorities and financial instability, the third sector needs to continue to be enabled and supported to take action in a meaningful way. It is unlikely to treat climate change as a priority without intervention.

The current support available in Wales for the third sector is viewed as a patchwork of different services and programmes rather than an easily accessible, meaningful and coherent progressive pathway for climate change action. This includes support for local, place-based groups, community energy projects and non-environmental organisations, all of which have specific needs.

The Climate Change Engagement Strategy ⁴¹ is cited in Welsh Government's Annual Progress Report as its programme to encourage wider sectoral change. Delays in the Action Plan, such as the narrative project, the segmentation model and the Sustainable Futures website, have made it difficult to assess its relevance to the third sector. There is however consensus that engagement and support needed by the third sector is not fully met by this strategy. The Commission recognises that in the current financial climate, resourcing for additional programmes and support is limited. The Welsh Government's existing strategies and programmes should therefore be reviewed,

including their delivery of measurable impact, value for money, and the provision of support to the identified need of the third sector.

Progressive work within the third sector, such as the WCVA supporting the Third Sector Partnership Council (TSPC) to integrate climate change into their funding and networks, will provide an opportunity for learning and collaboration to be developed for the nonenvironmental sector. The findings of the Pathfinder research and the Renew Wales project will offer learning on how to support local communities and the role of behaviour change in community engagement. Good practice examples across the third sector should be recognised and built on such as Environment Wales which offers a successful model of support and encouragement of voluntary action to protect and improve the environment. Size of Wales, an environmental charity has engaged and united communities, businesses, organisations and schools to help protect 2 million hectares of rainforest and forge lasting links with some of the world's poorest people. To date, they have raised £1,812,165 and helped protect 1,812,165 hectares of rainforest.

The recommendations to Welsh Government are based on the roundtable discussion held in December 2012:

- Welsh Government should develop a map of the support available for action on climate change for the third sector, which includes its procured programmes and funded statutory providers;
- 2. Welsh Government should undertake a review of the Climate Change Engagement Strategy, utilising the findings of the Round Table Discussion, the Pathfinders research, the TSPC work stream and the Community Energy Network and present its findings to the Commission.

3.7 Managing our Land Use

The agriculture and land use sector accounts for 18% of the 3% devolved target. Wales has devolved control over most of the policy areas that form part of the land use agenda, as well as the opportunity to utilise external support in the form of European Structural Funds both for farm payments, and the development of the rural economy.

The Land Use Sub-group was formally established by the Commission in February 2012, providing an advisory and monitoring role on issues covering agriculture, land use change, forestry, and the food chain. This agenda takes forward the work of the Land Use and Climate Change Group, which operated under the previous administration, and presented Welsh Government with 49 recommendations in its "Land Use and Climate Change Report (March 2010).

Welsh Government has consulted with the group on a draft implementation plan that maps actions currently being undertaken throughout land based industry in Wales. It condenses into 6 themes the original 44 recommendations of the Land Use and Climate Change group that were accepted by Welsh Government. The group has also been consulted on the plans for the next Rural Development programme, making strong representation to ensure that all parts of the new programme are subject to climate change proofing and recommending key priorities which should be supported across the EU funding mechanisms.

In its recommendations to the Commission, the Land Use Group has identified the following priority actions – full details on which are available from this link:

- Enhanced production efficiencies –seen as potential "win–win" actions for farmers;
- 2. Enhanced uptake of Anaerobic digestion to reduce emissions from livestock manures and slurries;
- 3. On Woodland issues, to assist Forestry Commission Wales (soon to be part of Natural Resources Wales) and other agencies in: (i) achieving woodland expansion to approximately 400,000 hectares; (ii) improving both management and modelling of existing woodland to achieve/record maximum net carbon sink activity to 2050; (iii) assessing the sustainable yield of fuel wood (and its space heating potential, in kWh) and commercial timber products from both current and expanded woodlands.
- 4. Minimise the constraints on realising the renewable energy potential of farms and rural communities;
- 5. Assess and reduce the greenhouse gas emissions from Wales' own food chain, i.e. food consumed by the people of Wales and embedded in our food exports;
- Keep fully informed of recent scientific advances and data in the areas of responsibility and assess the quality and accuracy of Wales' submissions to the Greenhouse Gas inventory;
- 7. Promote awareness of anthropogenic global warming and work with farmers in relation to mitigation, adaption and resilience given the particular geographic position of Wales.

⁴¹ Climate Change Engagement Strategy: wales.gov.uk/topics/environmentcountryside/climatechange/publications/engagementstrategy/?lang=en

The Climate Change Commission for Wales

4.1 Role of the Commission

The Commission's work facilitates the Welsh Government's efforts to tackle climate change by providing advice, as well as scrutinising and reporting on progress. We also seek to mobilise action and build consensus across sectors. Our main roles are to:

This is reflected in the membership of the Commission and in its operational activities, which are supported by a number of defined sub-groups working on the priority themes.

- Provide clear leadership on tackling both the causes and effects of climate change in Wales;
- Build agreement on the action needed in Wales to address climate change, and engage all sectors in this process;
- Work to remove barriers to delivering the climate change agenda and advise on solutions where appropriate;
- Advise on the development of Welsh Government's policies and programmes;
- Monitor progress and report annually on delivery of the Climate Change Strategy for Wales;
- Be proactive in sharing advice and good practice on climate change action.



4.2 Sub-groups of the Commission

Adaptation: Chaired by Michael Evans of the Environment Agency Wales, this group has been monitoring progress with the Welsh Government's Sectoral Adaptation plans (SAPs)

Land Use: Chaired by Professor Gareth Wyn Jones, this group provides an advisory and monitoring role on issues covering agriculture, land use, land use change, forestry, and the food chain.

Third Sector Leadership Group was set up under the aegis of Wales Council for Voluntary Action (WCVA); its work is now incorporated within the WCVA and administered under the Third Sector Partnership Council. Details can be found at http://www.wcva.org.uk/what-we-do/policy-and-influence/climate-change

Wales Low Zero Carbon Hub is managed by Constructing Excellence Wales. Its remit is to take forward the work of reducing carbon emissions from the built environment and help meet Welsh Government targets. Full details of its activities can be found via its web site: www.cewales.org.uk/zero-low-carbon-hub/

The report of the **Transport Task and Finish Group**, led by Dr Lorraine Whitmarsh, was accepted by the Commission and presented to Government in July. Progress will be reviewed by the Commission over the next year.

The functions of the sub-groups relate to the Commission's seven priorities for action. It is proposed to establish new groups to focus on public sector leadership and accelerating the transition to a low-carbon economy. Full details on the sub-groups, including terms of reference and composition, are available here Climate Change Commission's sub-group: www.theCCCW.org.uk

Although the work of the Commission is focused on Wales, we collaborate with similar bodies and organisations in a UK, European and global context. Climate change is a global problem that requires collective global action. We believe Wales can play a significant role in being part of the solution and the Commission commends the Welsh Government's continued commitment to the Wales for Africa programme, its membership of the Climate Group and the Network of Regional Government for Sustainable Development.

4.3 Engaging with the Work of the Commission

Engaging a diverse range of audiences across all sectors of society in meaningful, two-way communication is vital to the success of the Climate Change Commission for Wales. The Commission comprises representatives from organisations that have in-depth understanding of specific sectors of society or expertise in a particular climate change issue. Each representative is responsible for engaging with their sector to understand, and convey to the Commission, the barriers to action and developing strategies to increase action.

The strategy for engagement is to work through member networks, using the knowledge of umbrella organisations to engage their own members, disseminating information and knowledge.

Commission meetings are open to members of the public and minutes of meetings made available on the Commission web pages. Both individuals and organisations are encouraged to engage with the Commission's priorities. This input helps develop the evidence base and supports the communication of our messages and activities.

4.4 Role of the Secretariat

The Commission is supported with secretariat assistance from Cynnal Cymru-Sustain Wales, including support for its engagement and communications activities. Regular briefings and updates on the Commission's work are provided and support is given on stakeholder engagement. Dedicated web pages have been created, with improved navigation and accessibility and a distinctive bilingual visual identity, which regularly feature the latest articles, reports and views. The Commission also has an active social media profile, including engagement tools (Twitter @theCCCW) and document sharing tools (Slideshare http://www.slideshare.net/theCCCW), which allow interactive relationships to be developed with existing and new audiences.

In the print media there is regular coverage, with Commission related content being featured in the Western Mail and the Go Green environmental supplements, along with a number of other specialist publications together with regular features and blogs from the Chair of the Commission.

Over the next two years, we will further develop our communication tools and engagement processes in order to ensure the Commission's work is widely accessible and understood, increases awareness of climate change, and changes attitudes and behaviours accordingly. We are continually seeking examples of good practice from across all sectors to help us better communicate climate change mitigation and adaptation, and have recently participated in the Europe-wide World you Like 43 campaign, identifying examples to inspire action in and from Wales. We will also work in collaboration with the Welsh Government in the planning and delivery of its climate change public relations campaign (starting February 2013). Details about how to contact the Commission and engage in its work are provided at the end of the document.

Twitter

@theCCCW



Slideshare

www.slideshare.net/theCCCW

www.theCCCW.org.uk

4.5 Meetings of the Commission

The Commission meets quarterly. The meetings are open to members of the general public and regularly include presentations from climate scientists and expert guest speakers. The dates for meetings of the Commission in 2013 are as follows:

- 14 March 2013: Treforest
- 6 June 2013: Wrexham
- 19-20 September 2013: Swansea
- 5 December 2013: Cardiff





Details of the venue, timings and papers will be available from the following web link:

www.theCCCW.org.uk

4.6 Forward Work Programme

The next two years will see significant changes in the policy framework affecting climate change issues, with the establishment of Natural Resources Wales and the introduction of the Sustainable Development Bill, the Environment and Planning Bills. It will also see the establishment of the new framework for the delivery of EU funds from 2014-2020 which represent an opportunity to accelerate the transition to a low-carbon economy.

The Commission will work to ensure that tackling climate change remains central to Government's priorities. We will seek to engage leaders across all sectors and political parties to ensure that we maximize the opportunities and deliver on the priority areas set out in this Report. The Commission will:

- 1. Focus on our 7 priority areas for action.
- 2. Seek to ensure the recommendations from the Commission and UK Committee are addressed by the Welsh Government.
- 3. Work with the UK Committee to ensure UK Government policies reflect the needs of Wales.
- 4. Raise the profile of climate change issues in Wales, its impacts across the sectors, and ensure understanding of climate change risks is increased along with an awareness of action needed to build resilience to adapt to the change.
- 5. Monitor and report on progress against the targets in Welsh Government's climate change strategy.

4.7 Contacting the Commission

Secretariat for the Commission is provided by Cynnal Cymru-Sustain Wales. The team and commission members can be contacted via:

Telephone 029 2019 20 21 **Email** info@theCCCW.org.uk

Twitter @theCCCW

You can find out more about the work of the Climate Change Commission for Wales and keep up to date with the latest research and briefings by visiting its web pages at:

www.theCCCW.org.uk



4.8 Membership of the Commission

The Commission brings together representatives of key sectors and organisations across Wales, to build agreement on the action needed to tackle climate change in Wales. Chaired by Peter Davies, Commissioner for Sustainable Futures, members of the Commission represent a wide range of political, business, academic, local, regional and national government bodies and agencies, and third sector organisations.

- The Carbon Trust: Mike Batt.
- Centre for Alternative Technology: Paul Allen.
- Confederation of British Industry: David Proctor.
- Countryside Council for Wales/Climate Change Consortium for Wales: Dr Clive Walmsley.
- Countryside Council for Wales: Morgan Parry.
- Cynnal Cymru Sustain Wales: David Fitzpatrick.
- Energy Saving Trust: Duncan McCombie.
- Environment Agency (Climate Ready): Chris West.
- Environment Agency Wales: Chris Mills.
- Federation of Small Businesses: lestyn Davies.
- Funky Dragon: Andy O'Callaghan and Hannah Prydderch.
- Higher Education (HE) sector: Professor Hywel Thomas.
- Land Use Sub-group: Professor Gareth Wyn Jones.
- Plaid Cymru: Janet Davies.
- Transport Sub-group/ C3W: Dr Lorraine Whitmarsh.
- TUC: Julie Cook.
- Velindre NHS Trust: Simon Dean.
- Wales Environment Link: Peter Jones.
- Wales Council for Voluntary Action (WCVA): Graham Benfield.
- Wales Low Zero Carbon Hub: Milica Kitson.
- WLGA: Cllr Neil Rogers.
- Welsh Conservatives: Russell George AM.
- Welsh Liberal Democrats: Peter Randerson.

Specialist Advisors

- The Met Office: Dr. Vicky Pope.
- The Tyndall Centre: Professor Kevin Anderson.
- UK Committee on Climate Change: Laura McNaught.





The Second Annual Report of the Climate Change Commission for Wales