



County Durham
Environment Partnership

County Durham Climate Change Delivery Plan

July 2015

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Introduction

Climate change is not only a massive threat to the global environment; it is also perhaps the greatest economic challenge facing us in the twenty-first century. It demands an urgent and radical response across the developed and developing world - UK Department of Energy and Climate Change, 2010

The County Durham Climate Change Delivery Plan is the partner document to the County Durham Climate Change Strategy and expands on the key issues and projects that are happening in the County. It highlights some of the excellent work that is happening in communities and some of the partnerships that are working in the field. It will constantly evolve as projects change and hopefully will act as an inspiration for many of the people and groups in the County.

The first few chapters set the scene and provide more background information on the subject and this is followed by an in-depth look at the objectives and themes that we are working on.

County Durham

County Durham is a socially, economically and physically diverse area, covering some 862 square miles (2233 square km) and home to nearly half a million people in 12 main towns and more than 300 smaller settlements, many of which are former colliery villages. The historic city of Durham is home to the world-famous Castle and Cathedral, which together form a designated UNESCO World Heritage Site. The County contains many other culturally significant sites including Beamish Open-Air Museum, The Bowes Museum and Durham University, one of the UK's highest ranked universities.

The county plays an important role in the economic success and stability of the North East. It contains key transport links to Tyne and Wear and to Tees Valley, with the A19 and A1 (M) motorway, as well as the East Coast main line railway running through it, providing infrastructure vital to local employment and the regional economy. The NETPark development at Sedgefield is one of the UK's fastest-growing science parks.

Around 90% of the population lives in the east of the county, predominantly the former Durham coalfield. The more sparsely populated western Dales form part of the North Pennines Area of Outstanding Natural Beauty. County Durham has a distinct local culture and sense of local community, particularly in the smaller settlements, which remain proud of their industrial and coal mining heritage.



Climate Change in County Durham

County Durham has a long history of involvement with fossil fuels and more recently, work relating to climate change. Throughout the industrial revolution, it was the coal mines of Durham that fuelled much of the country's industry and powered the steam engines. Of course, at the time the full impact of the emissions were not known and it is only in recent years we have learnt the unintended consequences of our fossil fuel driven economy.

The last 25 years have seen a remarkable transformation and Durham can boast some excellent examples of innovative, practical and, most important of all, successful developments to mitigate and adapt to a changing climate. Our schools have won prestigious awards for their environmental work and our coastline has recovered from its industrial past, is now classified as a Heritage Coast, and hosts unique species, breeding grounds and important habitats. Nevertheless there is still a huge amount of work to do and we are a very diverse County. In 2007 Teesdale was reported as being amongst the most carbon intense places in the UK per head of population. Given the rural nature of this area and the dispersed nature of the pre-1900 housing, this is not surprising but resolving these issues will be part of the process as we move towards our 2020 and 2050 targets. The nature of the County means that we must be creative and adaptable, the solutions and opportunities that suit one community will not necessarily work elsewhere.

In 2012 the County generated 2,951,400 tonnes¹ of CO₂ from its housing, commercial and transport sectors, which is around 5.7 tonnes for each of the

¹ DECC data on Emissions within the scope and influence of a Local Authority

half million people in the County. In 2005 Durham produced 3,490,000 tonnes, or 7 tonnes per person. To meet the UK's commitments and avoid the most catastrophic effects of climate change we need play our part and reduce this to approximately 1.5 tonnes per person by 2050.

This ambition represents a significant transformation in how we live our lives and provide services. Some of these changes will be at a national level, such as, by reducing the amount of carbon used to generate electricity in our power stations, whilst some require actions at a local level. It is these local actions that this Delivery Plan will focus on.

The headline figure is only part of the picture and does not cover all our climate change impacts. Individually, we also have responsibility for emissions generated in the manufacturing and disposal of the goods and products used in our lifestyles. These emissions are particularly difficult to quantify and are not counted in the carbon saving data published by the Government. Despite the difficulty in monitoring these emissions, their importance cannot be disregarded and the Delivery Plan will highlight a number of projects that focus on this area, particularly in the Impacts Beyond our Boundaries section.

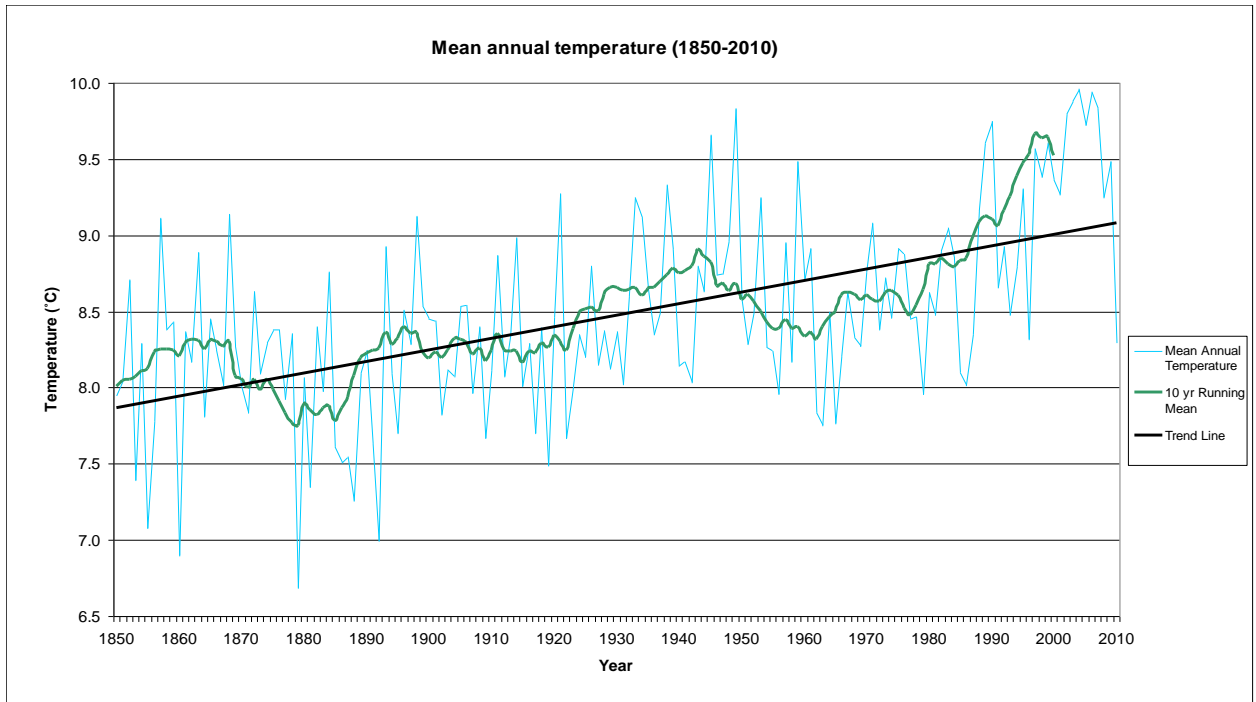
Even if we meet our targets on reducing carbon emissions, there are likely to be impacts arising from the increased carbon in the atmosphere. As a forward thinking Partnership we will seek to identify these impacts and act to adapt our county to minimise the negative aspects and where possible use any positive changes to maximum benefit.

We appreciate that not everyone is convinced about the science behind climate change, the causes of it, and the resulting impacts. This document will not answer those questions but for anyone who is still unconvinced there are a number of resources available to find out more. These are referenced in Appendix 4.

As to whether our climate is changing, the following graph shows temperature trends for the County since 1850 and clearly shows that our climate has changed significantly during this period. This data is taken directly from local monitoring stations and gives an excellent picture of what has happened in Durham in the last 160 years.

<https://www.gov.uk/government/publications/local-authority-emissions-estimates>

Graph 1:
Graph showing mean annual temperature for County Durham 1850-2010



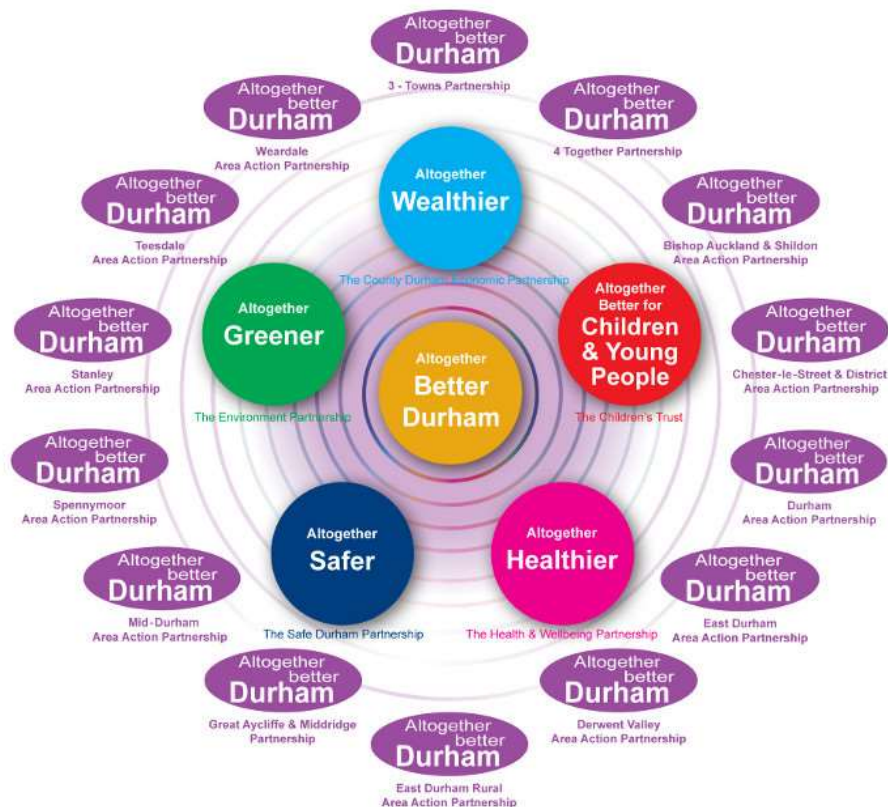
The graph shows that average annual temperatures have increased from 8.0°C in 1850 to 9.5°C in 2009 (with a steep drop to 8.3°C in 2010 due to the exceptionally cold winter in this year). This matches national trends showing that warming is occurring. It is also worth pointing out that the average temperature of 2010 (where we had the particularly harsh winter) is broadly comparable to the average temperature in 1910-this was normal 100 years ago.

If current predictions are accurate we can expect the graph to take a dramatic upturn and we will need to build resilience into our services and lifestyles to prepare for the resulting impacts.

Who's involved?

An issue as far reaching and complex as climate change cannot be addressed by a single organisation. Durham has taken the approach of embedding climate change issues within the County Durham Partnership as well as the local authority. The following paragraphs outline the structure of the Partnership and origin of the Strategy.

County Durham Partnership Structure



County Durham Partnership

The County Durham Partnership (CDP) is the strategic group charged with promoting and developing Durham and ensuring its various organisations act in a co-ordinated manner. The Sustainable Communities Strategy² sets out their long term vision for the future of County Durham and identifies key priorities for the area. Its membership includes the Chairs of the various thematic sub groups and senior representation from public sector organisations, business groups and the voluntary and community sector. The County Durham Partnership is made up of a number of strategic sub groups looking at specific areas of work.

² <http://www.countydurhampartnership.co.uk/Pages/CDP-SustainableCommunityStrategy.aspx>

County Durham Environment Partnership. 'Altogether Greener'

The Environment Partnership³ is one of the thematic groups that form part of the County Durham Partnership. It is primarily concerned with delivering environmental protection and improvements throughout the County and is made up of representatives from a number of prominent organisations working on environmental issues.

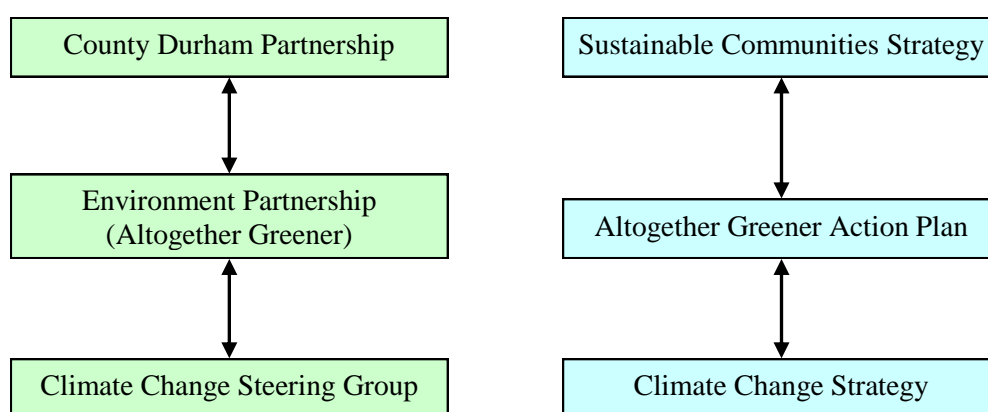
Climate Change Steering Group

The Climate Change Steering Group is one of the groups reporting into the Environment Partnership. Its priorities are mitigating against and adapting to climate change as well as encouraging a low carbon Durham. It is this group which is primarily responsible for producing and delivering the Climate Change Strategy and Delivery Plan. Its membership comprises key individuals in organisations with a remit concerning climate change and includes representatives from the public, private and voluntary sector across areas such as health, education, and business.

Residents of County Durham

We want the Strategy and Delivery Plan to engage with and be shaped by the residents, groups and business of the County. To make the Plan a success the actions need to be taken on board across the County and groups and organisations will need to work together to make the savings possible and adapt to changes.

Partnership Structure and Strategic Documents



³ <http://www.countydurhampartnership.co.uk/Pages/EnP-AboutUs.aspx>

Climate Change Documents

The Climate Change Delivery Plan is part of a series of documents produced for County Durham to achieve our aims on climate change in Durham.

The County Durham Climate Change Strategy

The County Durham Climate Change Strategy is the parent document to this Delivery Plan and outlines the high level strategic direction County Durham is taking to meet the challenge of climate change. This Delivery Plan builds on the Strategy and provides further detail on the major themes.

The County Durham Sustainable Energy Action Plan (SEAP)

The first Sustainable Energy Action Plan was produced in 2010. It takes the high level targets and assigns carbon sources and savings to categories and projects as required by the Covenant of Mayors⁴.

Durham County Council is currently revising the SEAP to take account of the County Durham Plan.

The County Durham Climate Change Delivery Plan

This document. It takes the high level vision and objectives and demonstrates how they are being addressed through projects. It cannot be totally comprehensive of every action being delivered across the County but aims to show major initiatives and prospective actions.

Durham County Council Climate Change Adaptation Action Plan

In 2010/11 Durham County Council performed a strategic review of its major operations and assessed them against the significant risks associated with a changing climate. The Adaptation Action Plan was produced to help the Council adapt and build in resilience to its services. This will be used as a starting point for other key organisations to evaluate their own services against the impacts of climate change.

Other Documents

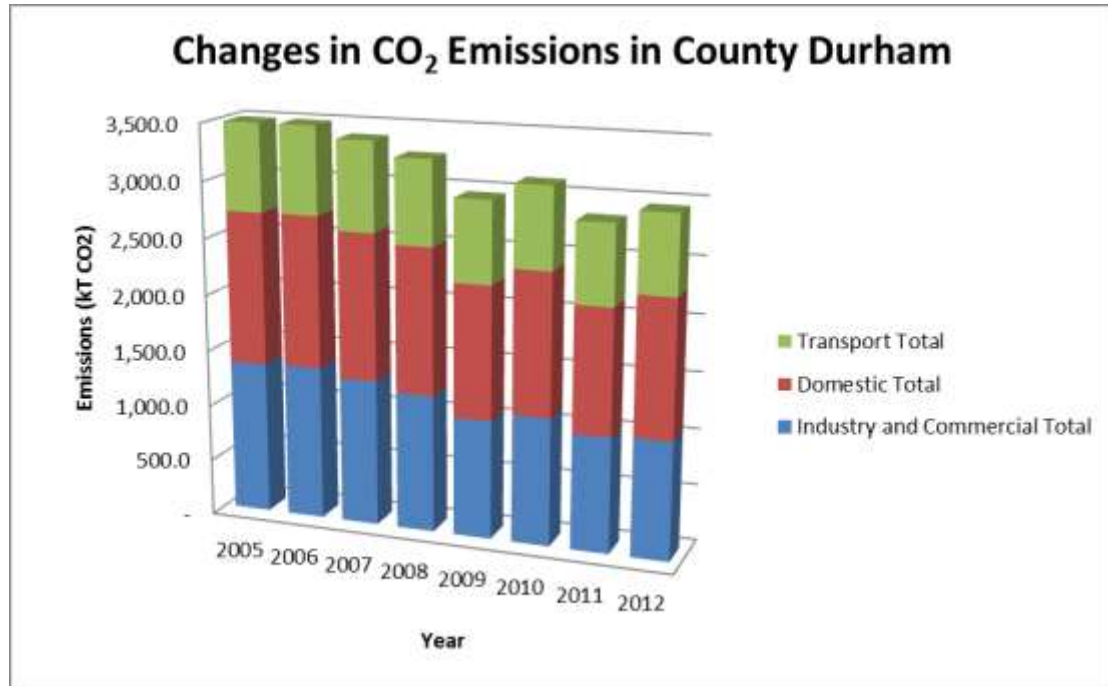
It is recognised that with a complicated subject such as climate change, certain aspects will also appear in other documents. For example, within the County Durham Partnership there will be a significant cross-over and common objectives with the work of the Altogether Wealthier and Altogether Healthier groups. We will look to integrate further with these groups and identify areas of mutual benefit or potential conflict of interest. An indication of documents influencing or influenced by the climate change work can be found in Appendix 5.

⁴ http://www.covenantofmayors.eu/index_en.html

Progress to date

The following graph shows the changes to overall carbon emissions between 2005 and 2012 (the most recent data).

Table 2. Graph showing Emissions from County Durham



The data shows good progress but there is uncertainty as to how much of this is due to the economic downturn. It is likely that as the economy returns to growth, emission rates could level out or even rise if action isn't taken to decarbonise our economy.

In 2010 and 2012 the graph shows the emissions levels increasing a little. These reflect a national trend primarily due to a particularly cold winter and a more carbon intensive mix in power stations (more power from coal power stations).

2020 Vision

“By 2020 County Durham will be a thriving, resilient and engaged low carbon community”.

Headline Objectives

Reducing our Emissions
County Durham will reduce CO ₂ emissions by 40% by 2020 from 1990 levels, ensuring year on year reductions.
We will reduce the demand for energy, ensure homes and businesses are energy efficient and will promote alternative low carbon forms of energy generation.

Adapting to a Changing Climate
County Durham will be a highly resilient place to live.
We will build upon the Council’s Adaptation Action Plan and ensure that individuals and organisations are more prepared for the challenges of a more extreme environment.

How will the Vision be achieved?

Partnership working is an integral element that runs through the Strategy; such is the importance that we place upon it. The Area Action Partnerships as well as the Town and Parish Councils will be key partners in delivery of this strategy at a community level. The Climate Change Steering Group, which is independent and has a strategic focus, will monitor and challenge the Council and other partners on the delivery of the strategy, as will County Councillors through the Overview and Scrutiny Committee.

Although the Climate Change and Sustainability Team in Durham County Council is responsible for co-ordinating the strategy, it should be stressed that it is a responsibility of all teams, partners and ultimately the residents and businesses of Durham to deliver on the actions.

The Climate Change Strategy has identified seven key themes that will enable us to achieve the vision and objectives.

1. Public Sector Performance
2. Low Carbon Economy
3. Built Environment
4. Natural Environment
5. Transport and Infrastructure
6. Community Engagement
7. Impacts Beyond our Boundaries

These themes will cover the majority of actions that will be taking place however, given the nature of the work, there will inevitably be times when projects cut across themes. In these instances we shall endeavour to allocate the project to the most appropriate theme.

The remainder of this Delivery Plan is devoted to these themes and each provides a description of the actions and key projects and initiatives in the County.

The table of actions in each theme shows a list of issues that are felt to be significant and they should be seen very much as a portfolio of work that the group wishes to address. In some cases, the work is very much in its infancy and may not develop for a number of years, but it is felt important to include it for completeness. In this regard, the Steering Group would welcome contact from groups who feel they can contribute to the actions and help with delivery.

The section following the seven themes goes into more detail about the projects that the Council and the Steering Group will be concentrating on in 2015-16.

Issues to bear in mind whilst reading the document

The primary focus of the Delivery Plan is to address carbon emissions that are specified and measured in accordance with our commitments-this is essentially to meet the criteria set by the national Government and to meet the Covenant of Mayors requirements. Whilst there are slight differences between the reporting requirements of these measures, both cover a similar range of factors, namely the carbon produced by energy use in electricity, heating, hot water, and transport. For more information on the carbon targets, see Appendix 1.

These measures obviously exclude the significant emissions associated with our lifestyles and, for example, the purchasing or consumption of goods from outside the County. Whilst the Climate Change Steering group recognises the significance of these impacts and will highlight good practice in addressing them, because of the limitations of time and resources, it will not be attempting to quantify or directly reduce these emissions.

Public Sector Performance

*It's not a choice between our environment and our economy; it's a choice between prosperity and decline - **President Barack Obama (2009)***

Vision:

County Durham will have a strong and flexible public sector, working together to ensure emissions are reduced on an annual basis, and resilience is embedded into services.

Outcomes:

Durham is a county where partners work together to reduce environmental impacts and eliminate waste. Sustainability is recognised as an overarching ethos which pulls together all the three strands of environmental protection, social inclusivity and economic regeneration.

Public Sector Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Demonstrate political commitment to acting on climate change	Endorse the Climate Change Strategy and Delivery Plan	all appropriate Climate Change Steering Group members (CCSG)	
	Sign up to Climate Local initiative	Durham County Council (DCC)	DCC has signed up to the initiative- complete
Establish baseline information	Maintain details of County Durham's emissions	DCC	DCC to compile the information
	Monitor and update our vulnerability to climate impacts	DCC/CCSG	Assess key services for vulnerability to impacts from climate change
Improve the awareness and knowledge of climate change issues for public sector staff	Provide training to decision makers and staff	all public sector	DCC Members training in climate change and Warm Up North provided in 2014. Further engagement planned for 2015

Action	Detailed Action	Key Organisation	Further Details or Projects
	Identify and implement ways for finance to actively support climate change action	all public sector	Funding being sought. See Key Projects for details
Monitor and report on actions and progress	Publish emission data at organisation level	all public sector	DCC and Durham University data published on their internet pages
	regularly review targets and objectives	all public sector	
Incorporate climate change issues into decision making	Ensure that mitigation and adaptation are factored into key decisions	DCC/all	Ensure a Sustainable Procurement policy is followed. DCC's procurement policy is to be updated in 2015/16
			Ensure that key policies and projects are assessed against sustainability criteria (e.g. SEA/EIA)
Reduce the carbon emissions from the public sector estate and transport	Develop and deliver carbon management plans	all public sector	DCC and Durham University Management Plans being reviewed
	Raise awareness of carbon savings to staff through behaviour change	all public sector	DCC-Updates provided through staff bulletins and via Eco-champions. Durham University has active communication with staff and students
	Deliver climate change work in schools	DCC and others	Continue the Eco-schools programme and seek funding for additional work

Key Projects

Durham County Council-Carbon Management Plan

Durham County Council has adopted a Carbon Management Plan which is the central document co-ordinating carbon reduction programmes for council operations.

Since the baseline year of 2008/9 the Council is on-track to achieve a 22% reduction in emissions by the end of 2015. This will be achieved through a number of programmes such as replacing older equipment, heating and lighting improvements, and renewable energy generation. As of 2013-14 it has made savings of 16%.

Durham University-Carbon Management Programme

Durham University's first Carbon Management Plan ended on the 31st July 2014 and planning is now underway for the second phase which will run from 2014-2020. The plan will include emissions from electricity, gas, business travel, waste, water and refrigerant gases and the targets being developed.

Both the first and the second Carbon Management Plans have a mix of projects. These projects include both physical modifications to buildings and infrastructure and the promotion of positive environmental behaviours amongst staff and students.

A recent example of some of the work from the Carbon Management Plan includes the 'Fume Cupboard Energy Reduction Scheme' which incorporated both physical modifications to equipment as well as changing the behaviours of the users. As a leading research establishment there are inherent energy needs in carrying out its work and the energy use in fume cupboards play a significant part of their total emissions. The University reviewed their operation and needs and identified that both system changes and behavioural adjustments could make noticeable changes.

The Chemistry department piloted a scheme to re-engineer the systems and introduced automatic switch off of to certain fume cupboards at low use periods (weekends/out of term). A new lab user protocol was introduced to supplement this and between them the changes are estimated to save 138 tonnes of CO₂ per year.

Another project in the Carbon Management Plan focussed on the Catering Operations. Durham University's catering operations have set out to make their operations socially, economically and environmentally sustainable. It aims to provide quality food with full provenance, challenge industry standards on sustainability and ensuring that needs of future generations can also be achieved.

As part of the project it:

- Encouraged behavioural change in catering staff so that catering equipment was only switched on when needed.
- Changed menus to reduce CO₂ emissions-
- Chose food that required less cooking/utility use

- Developed a local and sustainable food supply chain-reducing delivery miles and supporting the local economy
- Achieved the MSC (Marine Stewardship Council) accreditation which allows students to choose an accredited sustainable fish choice for their meal, protecting endangered or at risk species.

Read more about Durham University's Carbon Management Programme at <https://www.dur.ac.uk/greenspace/cmp/>

Solar Photovoltaic Installations

In 2011 and 2012 **Durham County Council** installed 850kW of solar photovoltaic panels onto 36 of its most suitable buildings. These panels should offset around 375 tonnes of CO₂ per annum.

In 2015 onwards it will continue to investigate how it can facilitate similar work on schools, and the wider community sector.

Spennymoor Town Council has also installed 180m² of solar panels onto the Town Hall roof. The Town Hall had been having increasing problems with water ingress through the roof and took the decision to install solar PV panels whilst the roof was being renewed. This harmonising of work means that the system is likely to cover their costs in less than 9 years.

Renewable Energy

Durham County Council is currently reviewing its wider estate for the potential to develop additional renewable energy. A number of sites could be feasible to progress and preliminary investigations are underway.

County Durham Waste Strategy

Durham County Council has a statutory responsibility for collecting and disposing of municipal waste produced from residents within County Durham. Included within its Municipal Waste Management Strategy are targets for diverting waste from landfill and increasing reuse, recycling and composting performance. The delivery of these targets is supported through the National Waste Management Plan for England, the National Planning Policy Framework (NPPF) and National Planning Policy for Waste (NPPW).

Disposing of waste in landfill, particularly organic waste, generates significant volumes of greenhouse gasses such as carbon dioxide and methane, and these represent a noticeable contribution to overall emissions. Recycling materials such as steel and aluminium means more of these limited resources are available for the future and saves energy as new raw materials are not extracted.

By 2020 our targets are to reuse, recycle or compost approaching 50% of household waste and recover at least 75% of Municipal Solid Waste. Achieving these targets will mean that emissions from landfill will be

minimised and more rare resources will be conserved. This will ensure the Council meets its obligations under the European Waste Framework Directive to drive sustainable waste management up the Waste Hierarchy, with disposal as the last resort.

In 2013 Durham County Council entered into waste contracts to ensure that almost all municipal waste collected is diverted from landfill. Instead of being buried, waste that is not reused, recycled or composted, is now taken to a new energy from waste plant at Teesside.

The most recent data shows that over 99% of the municipal waste from County Durham is diverted from landfill, and the Energy from Waste (EFW) plant generates enough electricity to power 17,000 homes. This places us well ahead of our diversion (recovery) target.

As well as council led initiatives there are numerous organisations supporting these objectives, including the various furniture re-use groups and community groups such as the Teesdale Conservation Volunteers.

WOW Bus/Legacy Gyms

Durham County Council's Leisure Services has ran a 'Wellness on Wheels' bus and Legacy Gyms project. This bus comes with a small gym inside and visits villages for 6 week periods providing fitness facilities direct to the community, reducing the need to travel. If there is sufficient demand and local interest, a legacy gym can be incorporated into existing local buildings such as village halls. This community run facility enables the health and fitness benefits of a gym to be delivered locally, reducing the need to travel and supporting the retention of local facilities. To date 16 legacy gyms have been provided in towns and villages around Durham, reducing emissions from travel to the gym, enabling more people to access fitness facilities and increasing usage of community buildings.

Eco-Schools and Schools Carbon Reduction Programme

Durham has been running a successful Eco-Schools programme for many years and now has over 100 schools taking part. It has also ran a schools carbon reduction programme to work with schools directly to lower their carbon emissions. To date the programme has achieved a 12% reduction in emissions from primary schools.

Durham County Council Climate Change Adaption Action Plan

This document, produced in 2011-12 is the result of a comprehensive assessment of the Council's key services and functions. It highlights the areas that the authority needs to concentrate on to ensure service continuity based on the most likely impacts from climate change.

Low Carbon Economy

*Anyone who believes in indefinite growth on a physically finite planet is either mad or an economist - **Sir David Attenborough***

Vision:

County Durham will be known for its thriving low carbon economy, and helping to encourage innovation, new products and services. It will be a leading location for green business growth capitalising on the key strengths of the area.

Outcomes:

County Durham will have numerous green jobs and be an expanding centre of excellence for training and enterprise, ensuring that by 2020 sustainability is embedded within business.

Efficiency and energy reduction will be core activities within all businesses. Business will be more efficient and will regularly carry out energy efficiency checks.

Technology Innovation Centres including Durham University and the region's HE and FE institutions will continue to be at the forefront of research and development in low carbon technologies, and working with the County's businesses to support the sector.

Over 26% of the County's electricity consumption will be made up from low carbon and renewable energy sources with 6% of the County's heat being generated by low carbon/renewable sources. There will also be an expansion of community owned renewable energy schemes.

The transition to a low carbon economy will take considerable effort in supporting existing businesses in making a transition to low carbon but also ensuring that any new businesses adopt a low carbon approach from the outset.

Low Carbon Economy Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Promote a low carbon economy	Work with the Local Enterprise Partnership to ensure low carbon growth is key to economic development	DCC/ County Durham Partnership	
	Develop the area's digital infrastructure	DCC/ County Durham Partnership	Digital Durham project
	Work to provide opportunities through the Green Deal for local businesses and job creation	DCC	Warm Up North
	Support new technological innovation in fields related to climate change mitigation and adaptation	Business Durham, Durham University, Durham Energy Institute	
	Provide support to low carbon businesses and help develop markets	DCC/ Business Durham	
	Ensure information is available so consumers are aware of the best energy efficiency/renewable option for them	DCC	Business Energy Efficiency Programme
Support local businesses to become more energy efficient and install renewable energy	Raise awareness of benefits and incentives	DCC/ Business Durham	

Action	Detailed Action	Key Organisation	Further Details or Projects
	Help businesses feel confident enough to make the investment in energy efficiency	DCC/ Business Durham	
Build business resilience to climate change	Help businesses understand the risks associated with climate change	DCC	signpost existing data and services
	Hold awareness raising events	DCC	
	Promote businesses offering adaptation measures	DCC/ Environment Agency	
Promote a sustainable and resilient food supply chain	Implement the Sustainable Local Food Strategy for County Durham	Durham Community Action	Some funding for future work has been secured-additional sources being investigated
	Support sustainable food purchase options	various	farmers markets, food co-ops
	Support community growing projects and encourage more people to grow food at home or in allotments	various	
Promote sustainable businesses	Recognise and promote initiatives such as the Green Tourism Award	DCC/ Business Durham	
	Deliver the County Durham Environment Awards	DCC	

Key Projects

European Regional Development Fund (ERDF)

From 2015 to 2020, County Durham has the potential to access up to around 16 million Euro's for work on Low Carbon Economy development. A number of projects are being proposed and are included in various sections of this document.

Low Carbon Business Programme

Durham County Council is working to develop a package of support for small businesses within Durham. The programme is aimed at reducing business energy costs for local enterprises and both reducing carbon emissions and increasing business resilience to energy price rises.

The project is initially intended to run from 2015 and will look at running business to business workshops and seminars, providing case studies of improvements by business type and raising awareness of financial options such as the Green Deal. The support will come through two projects

Business Energy Efficiency Project (BEEP)

- The production of communication material targeted at businesses, outlining measures they can take to reduce their energy bills along with the creation of an on-line micro site to reinforce the energy efficiency message and signpost action and support. A number of case studies will be included showing actions small businesses in Durham have taken to reduce their bills.

Durham Energy Efficiency Loyalty Scheme (DEELS)

- A Durham loyalty scheme will be developed. This would encourage local manufacturers, suppliers and installers of energy efficiency and renewable energy technologies to offer reduced prices or special offers to local businesses and residents of Durham. In return they would be supported through promotional material and publicity through the scheme.

This is one of the projects that could link into the ERDF funding.

Digital Durham

This project looks to extend high speed broadband across the whole of County Durham which could have significant effects on enabling the more rural areas to develop businesses closer to, or at home. It should allow those who are in currently less connected communities to access better services and promote teleworking/teleconferencing, which can reduce mileage. By September 2016 the programme aims to deliver superfast broadband to 96% of premises in the County, 98% will have fibre optic service and all properties will have a connection of at least 2Mbps. So far the programme is about 50% complete and over 50,000 homes and businesses are now able to access fibre.

County Durham Food Strategy

Durham Community Action has prepared a County Durham Local Sustainable Food Strategy in partnership with interest groups, the health sector, local authorities and industry representatives. The Strategy is using "Food that is produced and consumed in or near County Durham that is healthy for people

and the planet, and supports our local economy” as the working definition of sustainable local food. Further funding bids have been prepared and a number have been successful in allowing projects to be developed.

Whilst it is anticipated that the Food Strategy should assist in reducing overall global emissions, it is recognised that certain actions may increase the recorded carbon emissions in Durham. As well as delivering global carbon savings, it will also strengthen the local economy and provide health and wellbeing benefits to residents.

Biomass Supply Chain development

The Council is investigating the possibility of an ERDF bid to develop the biomass supply chain across the County and using woodland owned by the authority as a potential fuel source.

Built Environment

*We are like tenant farmers chopping down the fence around our house for fuel when we should be using Nature's inexhaustible sources of energy — sun, wind and tide. ... I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that-***Thomas Edison, 1931**

Vision:

County Durham will have a strong and resilient built environment, with high quality, innovative and above all, sustainable development adding to the vibrancy of towns and villages.

Outcomes:

New and refurbished buildings across Durham will be as energy efficient as possible in both construction and use, helping to provide warmer homes, eradicate fuel poverty, and reduce cold related illness.

Facilitated by planning policies a greater proportion of the County's energy needs will be met from appropriate renewable sources. The towns, villages and the City of Durham will be resilient to the impacts of climate change.

The design of the built environment will help reduce the need to travel, and the relative attractiveness of the private car will be minimised by improving the accessibility of facilities and services.

Built Environment Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Use the planning system to promote energy efficiency and a low carbon community which is resilient to the impacts of climate change	Establish planning policies that support a low carbon community	DCC	These will be included in the County Durham Plan and cover topics such as, but not limited to, renewable energy, sustainable transport, energy efficiency, housing and green infrastructure.

Action	Detailed Action	Key Organisation	Further Details or Projects
	Ensure that building standards on energy efficiency and other climate change issues are properly enforced	DCC	
	Showcase exemplar low carbon buildings	all	
	Work with developers to ensure new sites are built to be resilient to the impacts of climate change	DCC	
Assess planning policies and strategies against sustainability criteria	Ensure the County Durham Plan undergoes formal Sustainability Appraisal	DCC/Environment Agency	A full sustainability appraisal has been carried out
Ensure climate change and low carbon issues are considered in planning decisions	Train Council Members on the planning committee in climate change and energy issues	DCC	Current members have been trained. Review as planning committee changes
Work with households to promote energy efficiency and reduce fuel poverty	Use the Green Deal, ECO, public health and capital funding to maximise domestic energy savings	DCC	
	Promote Feed In Tariffs (FIT's) and Renewable Heat Incentives (RHI's) to the domestic sector	DCC	

Action	Detailed Action	Key Organisation	Further Details or Projects
	Ensure the most vulnerable residents are aware of grants and options for financial and energy savings via the DCC Warm Homes Campaign and Warm Up North	DCC/Health Sector	Work is being coordinated by the County Durham Energy and Fuel Poverty Partnership
	Support individuals and groups to reduce emissions and adapt their homes and businesses to a changing climate	DCC/ various	

Key Projects

County Durham Energy and Fuel Poverty Partnership

The County Durham Energy and Fuel Poverty Partnership (EFPP) brings together a wide variety of key strategic partners to coordinate energy efficiency and fuel poverty actions across County Durham households.

The EFPP is responsible for monitoring the delivery of the actions set within the HECA Report, the Affordable Warmth Action Plan and the Warm up North programme and maintains key links to the Climate Change Steering group

Warm Up North

Warm Up North is the regional approach to the Government's Green Deal Initiative. The Warm up North Partnership has four objectives:-

- To promote social wellbeing in the North East, by lowering the levels and impact of fuel poverty and contributing to public health;
- To promote economic wellbeing in the North East and promote the green economy by safeguarding and creating employment, skills and the economic capacity of the area;
- To improve the energy efficiency of domestic properties and publicly owned non-domestic properties across the North East;
- To reduce carbon dioxide emissions from domestic and publicly owned non-domestic properties across the North East.

Energy Efficiency Schemes

Durham has delivered a number of projects to improve domestic energy efficiency and reduce fuel poverty in Durham. Recent progress includes:

In 2012-13 County Durham had the highest take up of Warm Front Scheme energy improvements for vulnerable households within the North East region. There were a total of 476 energy efficiency heating improvements including gas boiler replacements were carried out as part of the scheme at a value of £637,535.

A project in partnership with Durham Community Action to support collective procurement of fuel oil to help reduce fuel poverty.

Targeting off-gas settlements for alternative solutions to their heating needs.

Running a series of community consultation events on the Green Deal with the County Durham Residents Association.

County Durham has had the highest uptake of Carbon Emissions Reduction Target (CERT) funded insulation measures in the North East region with over the period 2008- 2013 with over 54, 000 homes insulated

Promote FITs and RHI to domestic and commercial properties

Durham County Council will promote the opportunities for domestic and commercial properties to take advantage of the incentive schemes. The Feed in Tariff (FIT) and Renewable Heat Incentive (RHI) are the 2 primary financial incentives to encourage the installation of renewables in properties. In addition to reducing energy demands this will encourage local employment and generate additional income that can offset costs or strengthen the local economy.

Durham City Hydro Electric Scheme

As part of the Freemans' Reach site in Durham City, a 100kW hydro electric plant was installed on the River Wear, a first for a city centre location. The renewable energy from the scheme will generate up to 75% of the energy requirements of the site

District Heating at Key Sites

As part of a strategic approach to planning across Durham City, Durham County Council is conducting feasibility studies in the potential for district heating schemes at key development locations. If these prove viable, they could enable key areas to be powered from a low carbon source.

Natural Environment

*By 2030 the demand for resources will create a crisis with dire consequences. Demand for food and energy will jump 50% by 2030 and for fresh water by 30%, as the population tops 8.3 billion - **Warning from Prof John Beddington, UK Chief Scientist, addressing SDUK 09 conference (March 2009)***

Vision:

County Durham will have a comprehensive and sustainable network of multi-functional green spaces and corridors throughout the County that, whilst being accessible to the public, connect and enhance bio-diverse habitats, enhance the quality of place and serve to ensure the County is more resilient to extremes of weather.

Outcomes:

By 2020 the County will have an interconnected green infrastructure network, linking habitats and providing space for residents to relax and enjoy. It will be adaptable and resilient to likely impacts, and will play an important role in an integrated approach to mitigating and adapting to climate change.

Natural Environment Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Promote biodiversity, greenspaces and green infrastructure that helps the area adapt to climate change	Work with the Coastal, Heritage and Landscape Partnership to identify opportunities to protect the natural environment from climate change	CCSG	
	Identify climate risks to critical species/habitats and work to protect them from climate impacts	CCSG/Coastal, Heritage and Landscape Partnership	
	Support individuals and groups wanting to improve their local environment and highlight examples of good practice	CCSG/ various	

Action	Detailed Action	Key Organisation	Further Details or Projects
	Take prompt action to control spread of invasive species resulting from climate change.	Environment Agency/various	
Conserve and improve areas with a high embodied carbon	Work with partners and landowners to protect and restore peatlands as a functional ecosystem and address the issue of erosion	North Pennines AONB	
	Work to identify, protect and conserve other significant carbon sinks	DCC/ Coastal, Heritage and Landscape Partnership	
Promote the resilience of the natural systems through the planning system	Ensure Habitat Regulation Assessments (HRA) are completed on all appropriate plans and strategies that could have an impact on a European Designated Wildlife Site.	DCC	
	Through Green Infrastructure Implementation Plans, identify and develop opportunities to support environmental adaptability	DCC	
	Promote the use of SuDS (Sustainable Drainage Systems) and other measures of flood resilience.	DCC/Environment Agency/ developers	The North East Combined Authority has begun work on a guidance document on SuDS for developers
Utilise the natural environment to assist County Durham adapt	Examine existing environments and their potential/preparedness for climate change	DCC/ other organisations with open spaces	E.g. check parks/gardens for shade or flood alleviation.

Action	Detailed Action	Key Organisation	Further Details or Projects
to climate change			Suitable planting regimes

Key Projects

Local Nature Partnerships

There are two Local Nature Partnerships operating within County Durham. The Three Rivers Partnership covers the lowland and coastal areas whilst the Northern Upland Chain covers the area across upper Tees and Wear dale and the Area of Outstanding Natural Beauty.

These partnerships act as strategic bodies co-ordinating work on the natural environment and are able to address issues at a landscape scale so are particularly important in addressing climate related issues.

Peatland Programme-North Pennines Area of Outstanding Beauty

The Peatland Programme is run by the North Pennines Area of Outstanding Natural Beauty and aims to conserve and enhance the internationally important peatland resource within the North Pennines and to promote peatland conservation at local, national and international levels.

Natural England recently estimated that England's peatlands store around 584 million tonnes of carbon and there are 900 square kilometers of peatland in the North Pennines.

- ❖ **Restoration**-Drain (Grip) blocking. In the past peatlands have been drained to make them more economically productive however this has caused damage to the fragile habitats. By blocking these drains the peat can be restored and the ecosystem recovered.
- ❖ **Promotion of best practice**-educating land owners about the benefits of the peatland and helping them manage the land in a sympathetic manner.
- ❖ **Celebrating**-Peatlands are a globally important ecosystem, however their roles in planetary carbon dioxide regulation, water provisioning and as a habitat are not widely appreciated.
- ❖ **Research**-increasing knowledge of carbon storage and erosion and land management techniques to improve the habitat.

The Programme has recently been awarded £500,000 to continue its work in restoring badly eroded peat in the AONB.

Durham Heritage Coast

Durham's Heritage Coast is a changing environment and hosts numerous important and rare species. Adapting to changes in the natural environment from erosion, leading to the potential loss of key habitats, and managing increased recreational access are key challenges to ensuring the continuation of the unique coastline.

Lower Wear Catchment Plan

A programme of projects led by the Environment Agency aimed at bringing the lower Wear Catchment area up to the standards required by the Water Framework Directive. As part of this, there are numerous schemes such as river clear ups and gulley improvements which should help reduce the incidents of flooding downstream. It is also looking into issues with combined sewers and drains which tend to cause significant pollution during and after flood events.

Transport and Infrastructure

*The world we have created today as a result of our thinking thus far, has problems which cannot be solved by thinking the way we thought when we created them - **Albert Einstein***

Vision:

County Durham will aim to reduce CO₂ emissions from transport, through the promotion of travel choices and alternatives to private car travel, ultra low carbon vehicles, walking, cycling and more integrated travel planning.

Outcomes:

By 2020 the County, as a result of the goals, objectives and actions taken from the North East Local Transport Plan and the County Durham Transport Delivery Plan, will be beginning to see improvements in emissions from transport, especially in Durham City. There will be an increased number of cycle ways and footways, and the associated infrastructure will be in a condition that meets the challenges from the extremes of weather.

Transport and Infrastructure Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Encourage sustainable transport	Promote sustainable transport in accordance with the National Planning Policy Framework (NPPF), the emerging Transport Plan for the North East and the relevant Local Plan.	DCC	Access to sustainable forms of transport must be integrated into the design of new developments. All future development should be planned to maximise opportunities for walking, cycling, public transport, car sharing and electric vehicles.
	Encourage developments and organisations to develop and implement Travel Plans	DCC	

Action	Detailed Action	Key Organisation	Further Details or Projects
	In accordance with the NPPF, give preference to developments with good sustainable transport options or potential	DCC	
	Ensure new developments provide priority parking opportunities for car sharing and those using Alternative Fuel Vehicles.	DCC	Electric vehicle charging infrastructure and car sharing bays will be required where 100 parking spaces or more are being provided. The detail of how this policy will be delivered is covered in the County Durham Parking and Accessibility Guidelines.
Work towards a low carbon transport system	Promote the use of low carbon vehicles and transport	DCC	
	Develop the necessary infrastructure to enable low carbon transport	DCC	Charging posts, public transport facilities
Deliver a more resilient transport network	Assess the vulnerability of the transport network to likely climate impacts	DCC	Partially complete through Resilient Roads Mapping project.
	Develop contingency planning for the travel network	DCC	
Raise awareness and knowledge of sustainable transport options	Deliver various campaigns targeting different sectors- commuting, social, school, business etc.	DCC	

Action	Detailed Action	Key Organisation	Further Details or Projects
	Develop a Transport Plan for organisations or main buildings	all CCSG partners	
	Ensure main public buildings promote sustainable transport options for visitors	all CCSG partners with public buildings	

Key Projects

Transit 15

This project is intended to address congestion hot-spots on several key public transport corridors that radiate from Durham City. Various aspects of the project have begun to be implemented which should improve bus timetable reliability. This is designed to increase public confidence in services making them a more realistic choice for some journeys and thereby reducing emissions from private car use.

Local Sustainable Transport Fund – Local Motion

The Department for Transport's Local Sustainable Transport Fund (LTSF) programme is intended to boost the local economy through addressing congestion. Traditionally there has always been a positive correlation between economic growth, congestion, and carbon emissions. The LTSF initiatives are intended to break that connection.

The Local Motion project is aimed at non-sustainable journeys associated with school travel, leisure, travel to work and business journeys themselves. In Durham, the project area is Bishop Auckland, Shildon and Newton Aycliffe.

By encouraging a shift to sustainable modes wherever possible and practicable, network congestion should be reduced thereby allowing essential transport to operate more freely and efficiently. The project also includes delivering the Safe and Fuel Efficient Driving (SAFED) programme to businesses.

Additional funding (£840,000) has been secured to deliver Local Motion to Work in Crook, Willington, Spennymoor, Ferryhill and West Cornforth, building upon the successes and experience gained in the existing Local Motion project.

Expanding the South Durham Local Motion project into these new communities is the next stage of delivering our long term vision for sustainable transport in County Durham. It continues a scalable approach of delivering changes in travel behaviour that will continue to be developed over a number of years. Beyond March 2016, projects will focus on sustainable travel to work in and around Durham City to support planned major growth in jobs and housing as part of the Durham Local Plan. European Structural and Investment Funds totalling £7.5m have been secured towards sustainable transport and will be used to support this future work.

Street Lighting Upgrade

Durham County Council is carrying out a programme to upgrade more than 41,000 street lights across the county. It will replace existing light fittings with the latest light emitting diode (LED) lights which will reduce energy consumption by up to two thirds, alongside a dimming programme.

The programme is part of the Street Lighting Energy Reduction Project which will reduce carbon emissions and save almost £24 million over 25 years

Local Sustainable Transport Fund-Safe and Fuel Efficient Driving

This 4 year project is run in partnership with Darlington Borough Council and aims to provide training to organisations who need to travel as part of their business. The training is aimed at improving the skills of employees and improving the safety and fuel efficiency of their driving. In the past year over 230 people have been trained and on average each trainee has shown a 27% improvement in fuel efficiency with the potential to save 1 tonne of carbon per year if the training is carried over into their regular business travel.

Local Sustainable Transport Fund – Walk to school

This has the same funding background and overall aims as the LSTF Local Motion Project but this element is being delivered in partnership with Living Streets and is focused on specific programmes in schools. Target areas are based around the Transit 15 corridors.

An additional year's funding has been secured and the project will be focusing on walking at a community level rather than just engaging schools in the coming year.

Plugged in Places

Electric vehicles are now a viable transport alternative for many and the market share is expected to increase over the next few years. Electric vehicles generate carbon based on their power source rather than at the point of use so the emissions depend on where the electricity comes from.

Home charging will be the preferred choice for some drivers, but the reassurance of publically accessible charging points adds confidence for drivers. Durham County Council has partnered with Charge Your Car and

through funding from Plugged in Places has added to the extensive network of charging points throughout the North East.

Commonwheels Car Club in Durham City

The Car Club provides a flexible alternative to owning a vehicle- members can hire a car on a short term basis and pick one up from several locations around the city. At the moment there are 4 cars available in the city. Several car club members have either got rid of a second car or managed to do without one altogether. Adapting to 'social' car use tends to have a knock on effect of reconsidering other journeys; adopting a more sustainable, and low carbon alternative instead of automatically using a car.

Newton Aycliffe to Shildon Cycleway

A cycle route along the historic rail corridor from Shildon to Newton Aycliffe has been built and now provides a direct link for walkers and cyclists. The provision will address long-term trespass problems and provide a legitimate route for those wanting to walk and cycle this relatively short distance.

Initial indications show that the route has been warmly welcomed by users commuting between the two locations on foot and by bike, as well as accommodating recreational use.

New Railway Station at Horden (Peterlee)

A new station at Horden (Peterlee) will improve access for passengers on the Durham Coast Line. It will connect areas of high population with areas of employment (such as the Tees Valley and Tyne and Wear conurbations) as well as making East Durham more attractive for inward investment. The proposal has been evaluated and found to be commercially viable and a funding package for the new station is now being developed.

The new station, along with proposed increased services on the Durham Coast Line, will contribute towards modal shift and reduce the area's dependence on the car for travel.

Bishop Auckland Station Improvements and Extra Services on Bishop Line

The renovation of this station will increase the numbers of people who can access the rail network. The increasing rail passenger numbers will include a proportion who will make a switch from less-sustainable car use as well as opening up employment opportunities for residents. As part of a new rail franchise for the area, the future rail operators of the Bishop Auckland to Darlington Line will increase services to every hour by 2019. There will also be 3 extra services on a Sunday by 2017.

Rolling Stock-All rolling stock on the Bishop and Durham Coast Line will be subject to refurbishment to new or nearly-new standards by 2020. This will increase the attractiveness of rail travel and contribute towards modal shift.

Electricity Demand Management-

Northern Powergrid are working with Newcastle University, DCC, local schools and the Weardale Area Action Partnership to deliver a customer engagement project to reduce electricity demand at peak time (therefore reducing the maximum supply needed). It will encourage and reward volunteers who offer to keep their high demand household goods (TV's, washing machines etc.) idle during peak demand periods.

Community Engagement

*Nobody made a greater mistake than he who did nothing because he could only do a little - **Edmund Burke, Whig MP for Bristol 1774-80***

Vision:

County Durham is a highly engaged and proactive area, with the Council and its partners delivering upon priority actions.

Outcomes:

By 2020 County Durham residents will be well informed of the issues around climate change and whilst we appreciate there may not be universal agreement over the causes of climate change we hope to have an acknowledgment of the need to reduce emissions and use resources efficiently, adapt to climate changes and appreciate the potential benefits to the community and the wider County.

Community Engagement Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Promote community action on reducing carbon emissions	Share expertise and advice with community groups	County Durham Community Energy/ all partners	
	Advise on funding and provide grants for community organisations looking to develop carbon reduction projects	DCC/ North Pennines AONB	
	Look to develop a network of community groups to assist each other with similar projects	CDCE	Also include work to develop a community renewables register
Work with local, regional and national interest groups to raise awareness of, and to mitigate and adapt to, climate change		all partners	Partnership with VONNE to develop regional community energy project

Action	Detailed Action	Key Organisation	Further Details or Projects
Foster greater links between climate change, fuel poverty and health promotion strategies		DCC/Health	Wide ranging -active lifestyles, fuel poverty, benefits of green spaces
Work with health authorities to increase understanding of the local health impacts of a changing climate		DCC/Health	
Improve the resilience of our communities to future climate impacts	Identify communities at risk and develop actions	E.A./Civil Contingencies Unit (CCU)	
	Develop and deliver resilience seminars for areas at risk	Civil Contingencies Unit/E.A.	A number of events have already been held
	Support community groups wishing to increase their resilience	E.A/ CCU/DCC	Flood Wardens and on-going engagement events
Ensure health and social care providers are resilient to climate change impacts	Identify and work to minimise the key risks to these services	Health Sector/CCSG	
	Identify and train key staff in likely impacts and in adapting their service	Health/CCSG	
	Look to develop contracting arrangements with external providers that include requirement to have business continuity plans (flood/heat waves etc.)	Health/CCSG	

Key Projects

Community Energy

Various communities across Durham have begun taking steps to generate low or zero carbon power in their area. Groups have begun investigating the possibilities of generating electricity from hydro, wind and solar and heat from biomass district heating networks.

This area of work is receiving particular interest at both a national and local level. Over the next few years we will be looking to develop more support and advice for communities or groups looking to invest in energy generation. Nationally the Government is allocating funding and support to this area of work and the Council and other key organisations are looking to support pro-active local groups.

Members of the CCSG are working on projects within Durham and the North East to help communities develop their own energy projects.

- The group is working on a regional project with the Voluntary Organisations' Network North East (VONNE) and Community Energy England to secure European funding for this area of work.
- The Climate Change Steering Group has helped Chilton and Oakenshaw develop their own community groups to tackle various climate change issues.

Oakenshaw Wind Turbine

This project, initiated by the local community association, has resulted in the installation of a 70m high wind turbine on farmland near the village. The community group has worked with the landowner and residents to secure a successful project and is being rewarded with an annual donation which will be used to support local projects.

Engage with community and interest groups.

As mentioned throughout this document, the scale of the work required to reduce our emissions and adapt to climate change is beyond the scope of any single organisation. To make the changes required it will take many organisations and individuals working together at all levels. To achieve this, existing and new community and interest groups will be involved and encouraged to incorporate climate change issues into their work. Some groups are naturally aligned to the aims of the strategy whilst others may not have recognised the contribution that they could make. To make the plan a success across the County, various methods will be used to engage with the

different groups from presentations at meetings to documents advising on best practice/awareness raising.

ShocFlood

A programme run by Climate Change Schools Project and the Environment Agency through schools to raise awareness of flooding in communities using schools as a hub.

Providing Funding for Sustainability and Climate Change Projects in Durham

The Council can provide a grant fund (for example through the AAP's) to assist groups looking to develop sustainability projects in their areas. Projects may also be eligible for other funding streams such as the County Durham Foundation and the SITA Trust. Many of the funding options can be used for both mitigation and adaptation measures.

Affordable Warmth Action Plan

Whilst not designed to reduce carbon emissions, this Action Plan aims to protect the most vulnerable people from the increasing cost of heating their homes.

Action under the Plan can provide much needed improvements in heating systems and provide a coordinated approach to energy needs in the domestic sector.

Education and awareness

It is important to help people realise the potential impacts of climate change and what individuals and groups can do. Whilst free technical and financial support is more limited than it used to be, there are still sources available. The CCSG will endeavour to ensure that the people of Durham are as well informed as possible. In particular it will:

- Continue to raise awareness in schools through support for the Eco-Schools programme
- Develop exemplar projects and act as an initial contact for people wishing to develop their own schemes.
- Work to ensure that residents and groups are aware of national and local schemes and opportunities as they develop.

Environment Awards

The County Durham Partnership runs this annual environment competition which highlights a number of excellent projects delivering environmental benefits across the County. Categories including Climate Change, Built

Environment, Volunteer Group and Schools and Colleges can all demonstrate and reward excellence in climate change projects.

Impacts Beyond our Boundaries

Forget about making poverty history. Climate change will make poverty permanent - Nazmul Chowdhury, Practical Action, Bangladesh (2009)

Vision:

Residents of County Durham are aware of the impacts that are faced by communities outside of the County. We will endeavour to ensure that climate related impacts are not increased as a result of County Durham operations.

Outcomes

We will aim to have a collective approach to climate change issues with a broader understanding of the impacts and opportunities. When products are not available locally, fairly traded and associated sustainability classifications should be a standard requirement for purchases.

Impacts Beyond our Boundaries Actions

Action	Detailed Action	Key Organisation	Further Details or Projects
Work with neighbouring authorities and organisations on larger projects		all	Regular meetings held and a number of opportunities for cooperation have been identified
Look to incorporate indirect carbon emissions in partnership organisation decision making		all	Explore opportunities, for example in procurement following the Social Value Act
Promote appropriate sustainability accreditations and local groups		all	Support local groups- Fairtrade, Food Groups and co-ops
Work across Europe to develop international programmes that share best practice.	Deliver and build upon the Renergy project	DCC	A project to highlight best practice in renewable energy development for communities. The main project is now complete and it has now moved on to communicating the findings to local groups and officers.

Key Projects

Reenergy

Durham County Council has been involved in a European project set up to communicate and transfer best practice between European partners in energy efficiency and renewable projects. The project has looked at enabling action within communities and Durham is highlighting work in Oakenshaw, Chilton and the business community as its three main areas of work. The project is now coming to a conclusion and is now working to disseminate best practice from the various partners. The project has been 75% funded from European sources.

European Regional Development Fund and other EU Funding Streams

Members of the Climate Change Steering Group will be looking at the opportunities presented by the ERDF and other European funding streams. The existing partnerships will provide an excellent starting platform for bids as many contacts are already in place.

Actions in years 2015-17

In 2015 and 2016 the Climate Change Steering Group and Durham County Council will be aiming to make significant progress on the following actions from the plan:

Action	Project	Main themes affected	Detailed action
Demonstrate political commitment		Public Sector Performance	Obtain widespread commitment from partners and key organisations.
Establish baseline information		Public Sector Performance	
Identify and implement means of finance to actively support climate change action	European Rural Development Fund (ERDF)/(European Social Fund (ESF)	all	Work in partnership to develop bids for European funding for climate change projects
Reduce the carbon emissions from the public sector	Develop and deliver carbon management plans	Public sector performance, Built Environment, Transport and Infrastructure	
	Deliver climate change work in schools	various	Continue the Eco-Schools and Schools Carbon Reduction Officers programmes. Ensure schools have the information they need to manage their emissions
Promote a low carbon economy	Support new technological innovation in fields related to climate change mitigation and adaptation	Low Carbon Economy	Prepare ERDF bids
Support local businesses to	Develop an ERDF project to promote	Low Carbon Economy	

become more energy efficient and install renewable energy	business energy efficiency		
Promote a sustainable and resilient food supply chain	Implement the Sustainable Local Food Strategy for County Durham	Low Carbon Economy	
Promote Sustainable Businesses	Deliver the County Durham Environment awards	All	
Use the planning system to promote energy efficiency low carbon community which is resilient to the impacts of climate change	Embed relevant policies within the County Durham Plan	Built Environment	
Conserve and improve natural areas with a high embodied carbon	Support the Peatlands Project	Natural Environment	
Promote biodiversity, greenspaces and green infrastructure that helps the area adapt to climate change	Work with the Coastal, Heritage and Landscape Partnership to protect the natural environment from climate change	Natural Environment	
	Promote the use of SuDS (Sustainable Drainage Systems) and other measures of flood resilience	Built Environment, Natural Environment	
Work towards a low carbon transport system	Promote the use of low carbon vehicles and transport	Transport and Infrastructure	
	Develop the necessary infrastructure to enable low carbon	Transport and Infrastructure, Built Environment	

	transport		
Raise awareness and knowledge of sustainable transport	Deliver various campaigns targeting different sectors- commuting, school, business etc.	Transport and Infrastructure	
Work with local, regional and national interest groups to raise awareness of, and mitigate and adapt to, climate change	Develop an ERDF project for community energy	Community Engagement, Low Carbon Business	
Improve the resilience of our communities to future climate impacts	Develop and deliver resilience seminars for areas at risk	Community Engagement, Built Environment	
	Support community groups wishing to increase their resilience	Community Engagement	
Work across Europe to develop international programmes that share best practice	Ensure the findings from the Renergy project are shared and developed across Durham	Impacts Beyond our Boundaries, Community Engagement,	

In 2015 and 2016 the Climate Change Steering Group will be concentrating its efforts in three main Project areas:

- a) Making communities more aware of and resilient to the impacts of extreme weather events
- b) Making the Council, homes and businesses more energy efficient
- c) Improving infrastructure to support sustainable travel

A more detailed plan for these short term project areas will be devised in forthcoming group meetings.

Indicators

The main indicator for progress is the amount of emissions produced across the County. There are also a number of tracker indicators that give an indication of performance against issues related to climate change. These are mainly annual datasets and will be reported on that basis.

Carbon emissions generated across County Durham

Carbon emissions by sector-

- Domestic;
- Transport;
- Industrial/commercial.

Amount of renewable energy generated in County Durham

Carbon Emissions generated by key organisations-DCC, Durham University

Number of domestic properties countywide receiving energy efficiency measures

Delivery of flood resilience programmes.

Number of communities engaged with the Flood Warden programme

Number of community groups engaged with in a year

Number of schools taking part in Eco-Schools and Schools Carbon Reduction Programmes

Number of properties in Fuel Poverty

Appendix 1-Carbon Targets

Throughout the document we've tried to keep the issue of carbon targets as simple as possible to ensure the basic message is clear. This Appendix goes into more detail as to where the data, targets and figures have come from.

Over time Durham County Council has committed to two targets on carbon reduction which have been adopted by the Steering Group. One is based on national aspirations and the other from a European initiative-the Covenant of Mayors. The Climate Change Steering group has retained both targets because, whilst they are similar in nature, they differ slightly in how they record emissions and grant access to additional support networks.

40% saving from 1990 levels.

1990 is a common baseline year for carbon emission targets and is often referred to, particularly at the international level. The data available at the time was quite general and tended to be at a national scale, so it can be difficult to apportion the volumes and emissions at the time to Durham. Using a carbon calculator tool, we have taken Durham emission data from 2005 (when accurate figures became available) and extrapolated it back to 1990. Between 1990 and 2005 there was a considerable drop in carbon emissions as much of the County moved away from coal fires and boilers and connected to the gas network. There was also a shift away from heavy industry and new legislation meant higher standards of insulation in buildings.

We calculate that emissions from within the present County Durham boundary would have been approximately 5,000,000 tonnes of CO₂ in 1990.

The 40% reduction target therefore requires us to reduce these emissions to 3,000,000 tonnes by 2020. The most recent data is for 2012 where County Durham was responsible for producing 2,951,000 tonnes. On this basis, we have technically reached the 40% target but we are aware that some of the reduction factors may be linked to the current economic situation. We will continue to monitor emissions and strive to keep them below this level as the economy recovers.

22% saving from 2005 levels.

In 2005 the Government introduced a performance management indicator for local authorities- 'National Indicator 186 Greenhouse gas emissions from a local authority area'. At the same time it also started collecting accurate data from the various sectors that contribute to these emissions at a local level. The data is available on the DECC website.

Durham County Council signed up the Covenant of Mayors, a European initiative to support carbon reduction and in doing so elected to target a 22% reduction based on 2005 emissions.

In 2005 County Durham was responsible for 3,490,000 tonnes and by 2012 this was 2,951,000, which shows a 15% reduction over 7 years. The target of a 22% reduction means the total emissions need to be reduced to 2,722,200 tonnes by 2020.

Whilst we are not looking at reductions on a per capita basis, it is worth noting that during the same time our population has increased. In 2005 our emissions were 7 tonnes per person whilst by 2012 was 5.7. Looking at the figures on a per capita basis our emissions over this time have reduced by 19%.

Appendix 2 Durham County Council Sustainable Energy Action Plan (SEAP)

The SEAP is being developed in conjunction with the County Durham Plan. When it is complete, it will link the Climate Change Strategy and Delivery Plan.

Appendix 3 Glossary/Abbreviations

AAP: Area Action Partnership

CoM: Covenant of Mayors

CO₂: Carbon Dioxide, a gas that causes climate change. Often used as a general term to cover all greenhouse gases rather than being strictly carbon dioxide emissions.

CCSG: Climate Change Steering Group. Part of the Altogether Greener Environment Partnership

DCC: Durham County Council

DECC: Department of Energy and Climate Change

DEFRA: Department for Environment, Food, and Rural Affairs

FIT: Feed in Tariff, a scheme that pays people for generating renewable electricity

Green Deal: the most recent incentive to encourage people to invest in energy efficiency improvements. Acts as a long term loan where repayments should be less than the savings on utility bills

RHI: Renewable Heat Incentive. A scheme that pays people for generating heat from renewable/low carbon sources.

SuD: Sustainable Drainage Systems

Appendix 4 Additional Reading

Department of Energy and Climate Change (DECC)

<https://www.gov.uk/government/organisations/department-of-energy-climate-change>

The Carbon Plan: Delivering our low carbon future

<https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions—2>

Intergovernmental Panel on Climate Change (IPCC)

<http://www.ipcc.ch/>

Department for the Environment, Food and Rural Affairs (DEFRA)

<http://www.defra.gov.uk/>

Environment Agency (E.A.)

<http://www.environment-agency.gov.uk/>

<http://www.environment-agency.gov.uk/research/137557.aspx>

Association of North East Councils (ANEC)

<http://www.northeastcouncils.gov.uk/>

Climate NE

<http://www.climatenortheast.com/>

Energy Saving Trust (EST)

<http://www.energysavingtrust.org.uk/>

Appendix 5 Associated Documents

This appendix highlights some of the key documents which are connected to the work of the Climate Change Strategy. Given the scope of the work this list should not be seen as exhaustive and will evolve over time.

Durham County Council Documents.

The Council Plan

RED Service Plan 2014-17

The County Durham Plan

Durham County Council Carbon Management Plan

Air Quality Action Plan

Housing Strategy

Affordable Warmth Strategy

Joint Strategic Needs Assessment

Joint Health and Well Being Strategy

County Durham Partnership Documents

Sustainable Community Strategy

Altogether Greener Action Plan

Altogether Wealthier Delivery Plan

Natural Environment

Land of the Three Rivers Local Nature Partnership-Terms of Reference

North Pennines Area of Outstanding Natural Beauty Management Plan

River Management/Flooding

Climate Change Adaptation on the River Wear-Environment Agency

River Wear Catchment Flood Management Plan-Environment Agency

ClimateNE

Summary of Climate Change Risks for North East England

Economic Implications of Climate Change-North East Study

Climate Change Action Plan for North East England

North East Declaration on Climate Change

The North East England Climate Change Adaptation Study

For further information relating to the Strategy or Delivery Plan, please contact

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