Durham County Council

Climate Emergency Response

Action Plan: 2020 to 2022

February 2020

CLIMATE EMERGENCY RESPONSE PLAN

APPENDICES

Contents

Section 1

Introduction

1 Introduction

1.0.1 This document presents our Climate Emergency Response Plan for the next two financial years. The actions and priorities to tackle both the Council's and County Durham's contribution to climate change have been informed by feedback from the 2019 Climate Emergency consultation.

Background

1.0.2 On 20th February 2019, Durham County Council declared a Climate Emergency in recognition that unless emergency action is taken, global warming will continue on its current trajectory toward 3°C with disastrous consequences. Specifically, the following targets and actions were agreed within the meeting of the Full Council:

> Immediately adopt a new Durham County Council target of 60% [carbon reduction] by 2030[(i)] making significant progress towards making Durham County Council and County Durham carbon neutral taking into account both production and consumption emissions.
>
> Investigate what further actions are necessary to make County Durham carbon neutral by 2050 and pledge to achieve this. [(ii)]

1.0.3 The council's declaration called for action on this emergency, and for a report setting out the actions we will need to take to achieve the 2030 target and an initial report on what actions would be necessary to make County Durham carbon neutral by 2050.

1.0.4 Accordingly, a Climate Emergency Update Report was presented back to Full Council in July 2019 which described: [(iii)]

- Existing action on climate change and achievements to date;
- What the Council needs to do to achieve its targets;
- What the county as a whole, working in partnership could do; and
- What measures are necessary on a national level.

1.0.5 Full Council resolved that wider consultation on the measures outlined in the report, including with elected Members, take place to help inform a plan of action that can be presented to cabinet in early 2020. The climate emergency consultation was held between the 19th September and 31st October and this document is our climate emergency response plan.

1.0.6 In addition to the resolution made by Full Council, all partners on the County Durham Partnership have signed up to a joint Vision for County Durham 2035. This was formally adopted by the council on the 23rd October 2019. This vision recognises that

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i From 2008/09 levels

ii Note the Council target is a gross target which cannot be met by offsetting, but the county's target may include offsetting, such as tree planting.

iii Climate Emergency Update Report (supporting documents)

climate change is one of the most important issues facing society today and that a lot can be done locally to respond to this threat. This vision will be delivered through an integrated framework of partnership and organisational plans and strategies across the County Durham Partnership. The vision document specifically references this response plan as one of those plans.

Work To-Date

1.0.7 The declaration of a Climate Emergency in February 2019 was not the start of Durham County Council's journey to carbon neutrality. Since becoming a unitary Authority in 2009, the Council has shown leadership and foresight by funding and developing projects that have helped to substantially decrease the Council's and the County's Carbon Footprint.

Council

1.0.8 There has been considerable progress in carbon emission reduction since Durham County Council's first Carbon Management Plan, which covered 2010-15. This plan has been superseded by a second plan covering the years to 2020. This second plan aimed to meet a reduction of 40% from 2008/09 levels by April 2020. This was uplifted to 45% in January 2019 after the Council successfully met 40% reduction two years early in April 2018. It is important to note that this target was constructed as a gross target, which can only be met through real carbon reduction and cannot be achieved by offsetting (e.g. tree planting). This target was beaten in March 2019, when the Council's carbon reduction reached 47%.

1.0.9 Example Council Projects:

- The Street Lighting Energy Reduction Project has been one of the most successful carbon reduction projects. The savings have been achieved by simple replacements of wasteful lighting with efficient LEDs, as well as dimming and removal in some places,
- LED Lighting replacements have helped to reduce energy use in offices by about 20%,
- The Solar Photovoltaic Array project was started in 2012 and saw solar PV arrays installed on 36 of our buildings,
- ECO2 Smart Schools - Programme of engagement in schools as well as assistance with energy monitoring,
- One of the first City Centre Hydro Schemes in the Country.

County

1.0.10 In 2010, the Council and the County Durham Partnership agreed a target to reduce carbon emissions across County Durham by 40% by 2020 (based upon 1990 levels). This includes emissions from the domestic, business, commercial, and transport sectors. This exceeded the Government target set in the Climate Change Act of a 37% reduction by 2020.

1.0.11 By 2017, County Durham had achieved an overall reduction of 54% from 1990 levels on a per capita basis, exceeding the national performance by 7%. Population has increased in that time, so overall the county reached 52% reduction by 2017 and is currently on course to meet 60% reduction by 2020.

1.0.12 Example County Projects:

- Development of whole street external wall insulation projects and domestic energy advice,
- Development of the EV charging infrastructure,
- Increased woodland cover and maintenance programmes,
- Peatland restoration projects in conjunction with the AONB.

1.0.13 There is much that can be achieved by local government and others, however policy and funding levels are still set from central government and can have far reaching consequences for carbon reduction targets. Becoming a carbon neutral county is an enormous task, and one that cannot be achieved without the support of our national government.

Developing a Climate Emergency Action Plan

1.0.14 From the level and nature of responses to the consultation it is clear that tackling climate change is an important issue. 100% of respondents who provided detailed comment to the update report and about 8% of respondents to the public survey also felt strongly enough to state that more urgent action and targets are required.

1.0.15 The links between addressing climate change, inequalities and health and wellbeing were also identified with some respondents recognising that addressing climate change could also positively:

- Increase levels of active travel (through greater access to cycle networks and public transport);
- Increase access to nature and green spaces;
- Tackle fuel poverty and cold home-related health problems (through the provision insulation schemes for example);
- Encourage healthier diets; and
- Reduce pollution

1.0.16 The consultation responses have therefore since been used to develop two action plans, combined into one document - one for the council's emissions and one for countywide emissions. Both have been evaluated, as far as possible, for both cost and carbon saving potential.

1.0.17 This document does not go into detail on current performance or existing projects, as this is already detailed in the July Update Report. Rather, it details the additional actions that will be taken over the next two years, and summarises actions needed over the longer term, to deliver sufficient carbon savings across the council and County Durham.

1.0.18 The details of carbon savings and project costs are as accurate as possible at the time of writing. As projects develop and further research is undertaken, the accuracy will improve. Many of the projects will pay back from the savings achieved. The Council will explore all opportunities for grants and funding. Furthermore, new partners will inevitably emerge that can add their own plans to those already covered in this document.

1.0.19 The actions outlined reflect the consultation findings and we believe are the most appropriate for the council and the county to take to address the climate emergency. To successfully meet the challenge, we will endeavour to engage all necessary parties, work in partnership with other organisations, and find the help that we will need to deliver the outcomes. To help kick start the delivery of actions that may otherwise be unviable, the Council has also made £3M available over the next 2 years, with the second year subject to financial settlement. This is in addition to other sources of funding.

1.0.20 The Action Plan does not address Climate Change Adaptation and resilience. However the Council remains committed to ensuring all communities are prepared for the impacts of a worsening climate and continue to work with, offer advice and support to the most vulnerable communities, through for example flood, drought, wildfire, snow and storm resilience plans.

Structure of this Document

1.0.21 This section sets out the background to the development of this document and to the climate emergency consultation that was undertaken. Section 2 looks at what the council can do to lower it's own emissions and section 3 looks at the emissions from County Durham as a whole. Finally, sections 4 and 5 cover the Governance arrangements, and Asks of Government, highlighting issues that are beyond the remit of Durham County Council and need addressing at a national scale.

1.1 Climate Emergency Consultation

1.1.1 This section provides a brief overview of the Climate Emergency consultation process.

Method

1.1.2 A wide ranging consultation took place between the 19th September and 31st October which included the following elements:

- **Durham County Council intranet staff survey** which built upon earlier staff workshop sessions held in May.
- **Online countywide public survey** which provided members of the public, elected members, representatives of community organisations, businesses and other County Durham organisations the opportunity to:
    - Respond to the detailed questions within the Climate Emergency Update Report; and / or

  - Take part in a shorter public survey.
  - Further comments could also be sent to a designated Climate Emergency email address.

- **Young person's engagement including**:

  - Children's and Families Partnership workshop with 28 pupils across different year groups from Parkside Academy

  - Global Climate Strike Day workshops - two sessions held with pupils from 4 primary schools and 7 secondary schools

  - In-school sessions with 27 primary schools and 394 pupils

- **Other stakeholder engagement** including face to face engagement with:

  - Area Action Partnership Coordinators
  - Town and Parish Councils
  - Partnership groups e.g. Environment; Safe Durham; Better Together; Health and Wellbeing; Housing; Economy
  - Internal Council Management teams e.g. Overview and Scrutiny Committee
  - Social movement groups such as Extinction Rebellion

1.1.3 All of the above were supported by appropriate press releases, web and intranet content, Facebook, twitter posts, staff magazine, County Durham News, Altogether Greener newsletter, use of Durham Voice, emails, stakeholder and members briefing documents etc.

Responses

1.1.4 A total of 502 responses were received to the staff survey and 523 responses to the public survey. 90% of public survey responses came from individuals, 4.8% from people in organisations, 3.1% from businesses and 1.9% from community groups. Some of the questions allowed people to provide multiple answers which explains why some totals/percentages add up to more than the number of respondents.

1.1.5 10 detailed responses were provided to the questions within the Climate Emergency Update Report and over 40 emails were sent to the Climate Emergency email address over the consultation period.

Section 2

Durham County Council's Carbon Emissions

This section looks at the carbon emissions from Durham County Council's operations and the actions we have planned to reduce this carbon footprint.

2 Tackling the Council's Emissions

2.0.1 This section looks at the carbon emissions from Durham County Council's operations and the actions we have planned to reduce this carbon footprint. This includes a discussion on the responses to our consultation, followed by a breakdown of the targets and milestones we are aiming for, and ending with the Action Plan that we'll need to follow to reach those targets.

2.1 Consultation Outcomes

2.1.1 The consultation asked council staff and the wider public what measures the council should be taking to achieve its carbon reduction targets. Below are the top responses to our questions and a brief outline of how we will respond. For details on specific actions, please see Section 2.3 - Council Action Plan.

2.1.2 In order to ensure a successful carbon reduction plan, we must **embed carbon reduction in the culture of our organisation**. We must embrace carbon reduction in every aspect of our work if we are to succeed in meeting our targets. We will lead the way by stipulating that carbon impacts are assessed as part of every major decision and action made by this authority. A system of governance and set of overarching policies will therefore be required.

2.1.3 We asked council staff and the public which three objectives you feel we, as a council, should be prioritising to reduce our emissions.

2.1.4 In the public survey,

- over half the respondents (53%) said that the council should maximise the generation and storage of renewable electricity on council land and buildings;
- 39% felt that the council should be looking to ensure that new council buildings are very low or zero carbon;
- 39% also felt that reducing the need for staff to travel should be a priority; and
- 38% wanted the council to upgrade the energy efficiency of our buildings.

2.1.5 A proportion of responses from the public stressed the importance of the issue and the need to treat it as a priority. Aligned to this was a need to raise awareness, work in partnership with other organisations, and for the council to show leadership on climate issues.

2.1.6 When we consulted staff, their results were fairly similar.

- 58% of staff thought that reducing the need to travel was a priority
- 49% wanted to see the council maximise the generation and storage of renewable electricity on council land and buildings; and
- 41% wanted to ensure that new council buildings should be very low or zero carbon.

2.1.7 We also asked young people what they thought we as a council could do across a variety of engagement sessions. Transport, building design, renewable energy and tree planting were popular across all age groups. They also recognised the importance that individual actions can play, and that awareness of environmental issues should be increased.

2.1.8 From these results, it is clear that there are three areas of priority that should be considered; **Electricity** (renewable generation and storage), **Heat** (low carbon buildings), and **Transport** (staff travel). Along with embedding carbon reduction into our culture, our action plan directly reflects these responses by connecting each action to one of these areas of priority.

- Embedding Carbon Reduction in Our Culture
- Priority 1: Electricity - renewable generation, battery storage, and energy efficiency
- Priority 2: Heat - low carbon buildings, better insulation, and energy efficiency
- Priority 3: Transport - low carbon vehicles, and less need to travel

2.2 Council's Carbon Budget

2.2.1 Everything we do has an effect on the environment we live in; from heating and lighting our leisure centres to collecting refuse or cutting grass. All of our services are responsible for emitting harmful greenhouse gases which together produce a significant overall carbon footprint.

2.2.2 Durham County Council reports its carbon footprint to central Government as CO_2 equivalent (CO_2e), which includes all major greenhouse gasses rather than just carbon dioxide. The section of this plan relates to the areas of the the council's internal operations, which are:

- Buildings owned and used by the council, including schools, leisure centres, library and offices
- Fleet vehicles owned and used by the council, such as refuse collection vehicles
- Staff business mileage, for cars, trains and air travel
- Street lighting.

2.2.3 The scope excludes:

- Domestic properties
- Staff commuting to and from work
- Buildings owned by us which are leased to and operated by third parties such as industrial units.
- Procurement of goods and services

2.2.4 The target set by council in February 2019 was to reduce our carbon emissions by 60% by 2030 from 2008/09 levels.

Raising the Bar

The council is part of the county. Therefore, the council's emissions are also subject to the target of becoming carbon neutral by 2050. It is vital that we aim to reduce the council's carbon footprint as much as possible as soon as possible, since the last emissions will be the hardest to eliminate. A number of the comments received through our consultation also suggested that the target set for the Council to reduce its emissions by 60% was not challenging enough given the Climate Emergency.

The Council (as measured in 2018/19) has already reduced its carbon footprint by 47% from 2008/09 levels. Whilst 2019/20 performance is unknown at present, it is anticipated to reduce still further. The measures contained in this report, supported by extra investment, provide a further 6,638 tonnes (5.5%) of annual reduction, with potential for more from currently unquantifiable actions.

This allows progress to be ahead of the curve. Therefore an even more ambitious target of 80% reduction by 2030 is now proposed for consideration. If we are successful in achieving a reduction of 80% from 2008/09 levels by 2030, it will put us in a much stronger position from which to work toward our 2050 aim.

2.2.5 The table below shows where we are now, and the milestones we hope to reach between now and March 2030.

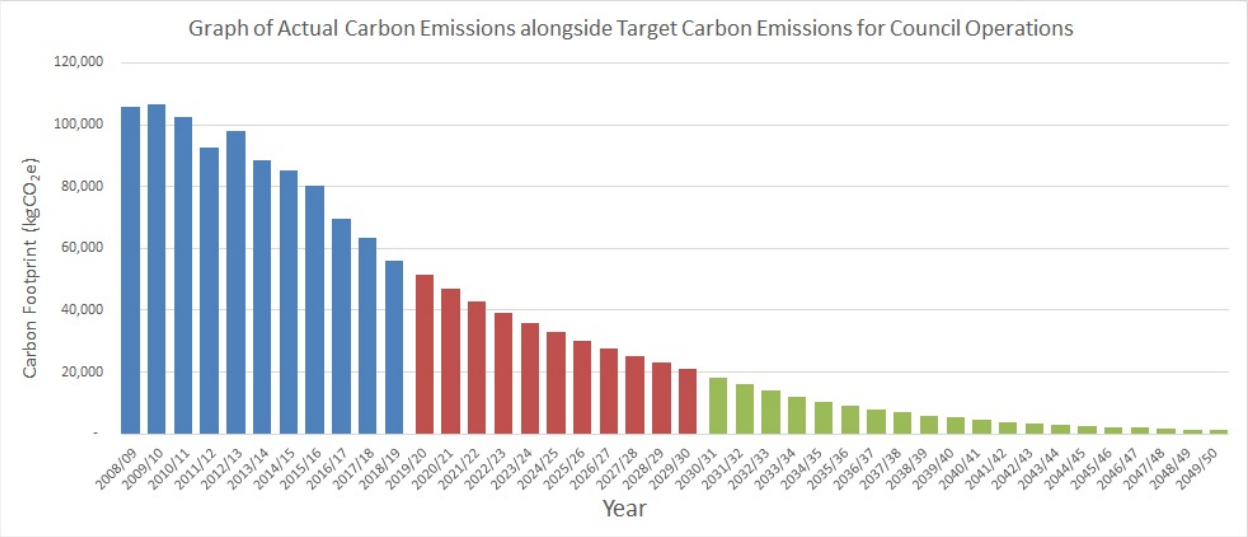
Table 1 Carbon emission milestones to 2030

Year	Total Footprint tonnes CO_2e per year	% Reduced from 2008/09
2018/19	56,139	47%
2021/22	42,305	60%
2024/25	31,880	70%
2029/30	21,471	80%

2.2.6 To achieve these milestones and our overall target, we must reduce carbon emissions from each area of the council's operations, including buildings and transport. We will aim for 9% annual reduction from now until 2024/25, then 8% reduction until 2027/28, and 7% reduction in the last two years to 2029/30.

2.2.7 In the graph below, the blue section shows our actual annual carbon emissions since 2008/09, the red section shows our annual targets up to an 80% reduction in 2029/30, and the green section shows how we may then continue reducing our carbon footprint to approach carbon neutrality in 2050. The green section is based on 13% annual carbon reduction.

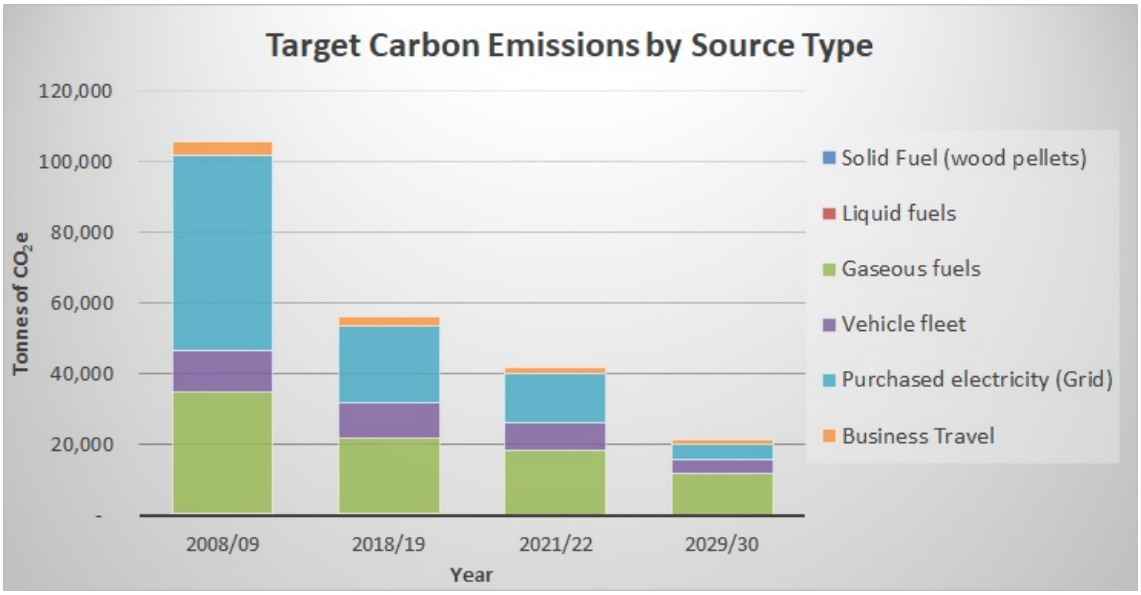
Figure 1 : Graph of Durham County Council's actual carbon emissions and future target emissions



2.2.8 The graph above suggests that the target of 80% reduction by 2030, shown in red, may be an appropriate target to aim for if we intend to reduce our carbon footprint to zero by 2050.

2.2.9 The following graph shows how we expect our emissions to be distributed following successful delivery of our action plan. The first two years in the graph, 2008/09 and 2018/19 show actual data and the progress that was made over the first ten years of carbon management at Durham County Council. The second two years in the graph show the expected results of this first two year action plan, to 2021/22, and the overall target of 80% reduction by 2029/30.

Figure 2 : Graph of actual and target carbon emissions by fuel type



2.2.10 The following table shows this in detail. Some figures, such as gaseous fuels, are based on what we believe is possible and others, such as business travel, are based on what will be necessary. This is because we have full control over how much work can

be done on reducing the use of gaseous fuels for heating buildings, but reduction in fossil fuels from business travel requires a much greater change in how we work and how we deliver our services to the public.

Table 2 Table of Target Emissions by Source Type

Carbon Source	Actual Data tonnes CO_2e per year		Targets tonnes CO_2e per year	
	2008/09	2018/19	2021/22	2029/30
Solid Fuel (Biomass)	91	11	12	23
Liquid Fuels	511	383	230	0
Gaseous Fuels	34,371	21,239	18,053	11,681
Vehicle Fleet	11,596	10,345	7,759	4,138
Business Travel	3,804	2,411	1,567	965
Grid Electricity (including distribution)	55,335	21,751	14,117	4,344

2.2.11 The action plan in the next section shows in details how we will achieve these targets and milestones over the next two years as well as an outline of actions to meet the targets set for 2030 and 2050.

2.3 Council Action Plan

2.3.1 Durham County Council's carbon footprint accounts for approximately 3% of the carbon footprint of the county as a whole. This section looks at how we will reduce these emissions from the Council's own operations.

2.3.2 The following table details the council's overarching priorities to ensure that a climate emergency response is embedded in our culture. These overarching policies will provide the framework through which our ambitious projects listed in the Action Plan (Table 4 ': Durham County Council's two year Action Plan') may succeed.

Embedding Carbon Reduction in Our Culture

Table 3 : Overarching Policies for Carbon Reduction.

Project Description	Work to-date	Action for 2030	Outcome for 2050
Carbon Management Plan A five year plan for internal activities, following on from previous plans since 2010. This is a detailed internal council document which includes individual responsibilities and reporting structures which are too in-depth for this plan.	A carbon management plan has been in place since 2010. It is updated every five years. It has included projects such as LED lighting, PV installations, low carbon heating, building energy efficiency retrofits, and more.	This document will cover detailed actions to be taken by teams within the council, including changes to processes and behaviour. Where possible, each service area will be given a carbon budget to stick to.	By 2050 the carbon management plan should be renamed energy management, as our utilities will no longer be provided by burning fossil fuels.
Climate Champions Support network of active and aware staff to maintain energy efficient behaviours, education, and engagement.	The Eco-Champion network was launched in 2010 and was re-branded in 2019 to Climate Champions as part of the Climate Emergency.	All staff will be aware of their responsibility to keep their carbon footprint to the minimum practical level in 2030.	By 2050, it will be difficult for staff to have a large carbon footprint as our transport, heat, and electricity will all be low or zero carbon.
Induction Training Produce a training course for all new staff and new members on low carbon working.	Councillors have a Climate Change Champion who represents them and their carbon reduction actions.	All staff will be aware of their responsibility to keep their carbon footprint to the minimum practical level in 2030.	By 2050, it will be difficult for staff to have a large carbon footprint as our transport, heat, and electricity will all be low or zero carbon.
Low Carbon Guidance Documents Produce guidance for staff on ways to save energy and reduce resource use at work.	Guidance has been available through the Eco Champions Network and now through Climate Champions.	All staff will be aware of their responsibility to keep their carbon footprint to the minimum practical level in 2030.	By 2050, it will be difficult for staff to have a large carbon footprint as our transport, heat, and electricity will all be low or zero carbon.
Low Carbon Procurement Take steps to evaluate and reduce the climate impacts of our key contracts.	Durham County Council has been embedding sustainability into its procurement practices for many years, and have been at the forefront on many	By 2030 all of our procurement processes will consider climate impact as a high priority.	In 2050, no contract will be taken on that would have a significant contribution to climate change.

Project Description	Work to-date	Action for 2030	Outcome for 2050
In the first year of the action plan we will produce a schedule of contracts due for renewal and begin work on addressing climate change within the specifications and scoring criteria where appropriate.	issues such as sustainable timber standards and catering procurement. Sustainability is incorporated into the evaluation of significant contracts.		
Low Carbon Project Investments Extend the criteria for Invest to Save funding on a case by case basis for projects which have carbon reduction as a main aim.	Carbon reduction projects that also save money have been progressed where their payback period has been less than 12 years.	Carbon reduction to be considered as an important factor in its own right when considering new projects.	No new projects will be taken on that have a carbon footprint without including appropriate offsetting works as part of that project.
Low Carbon Decision Making Climate Change to be included as a category in the implications appendix for all council reports.	Climate Change Strategy subject to Overview and Scrutiny committee annually. Sustainability Appraisal conducted for major plans and/or policies. Climate Change implications now considered in all Corporate decision papers.	All council decisions to be made with climate change in mind.	No council actions will have a significant carbon footprint without suitable offsetting.
Low Carbon Employee Development All Council job descriptions to include requirement for staff to have due regard where possible to limiting the carbon impact of the activities undertaken through exercising the role. Carbon reduction efforts to be included in Personal Development Reviews (PDRs) for every role.	Carbon reduction advice has been available for staff on an optional basis as part of Eco Champions and on the Intranet.	All staff to be aware of their responsibility to consider carbon in all of their actions and to discuss this as part of their PDRs.	No council staff will have a significant carbon footprint without suitable offsetting.
Low Carbon Leadership Durham will be the first county council to have a corporate director with a climate change brief.	Council has a Climate Change Champion who works with the portfolio holders for environment and economy to promote carbon reduction actions	Low Carbon Leadership embedded across the county.	Low Carbon Leadership embedded across the county.
Work within the Council's OPEN values The council's values are that we are: Outcome focused, People focused, Empowering, and iNnovative. Carbon reduction is a major part of these values as we are focused toward our targets, have consulted our population, will empower our staff to make their	Durham County Council's previous values have included "Altogether Greener" which focused on becoming more environmentally friendly.	Future descriptions of the council's values will include a clear commitment to carbon reduction.	The council is committed to working toward a carbon neutral County Durham by 2050 and this will be reflected in the council's overall vision.

Project Description	Work to-date	Action for 2030	Outcome for 2050
own contributions to those targets, and will be innovative in our approach to projects where the solutions may not be straight forward.			
Divestment Investigate the possibility of divesting our pensions and other investments away from fossil fuel industries. These actions will not influence the carbon footprint that we report as they are out of the scope. However, they do have significant influence on the problem when considered as a whole global issue.	Carbon factor is considered in the procurement of our electricity.	A reduction in fossil fuel investments should be achieved by 2030.	No investments should be in fossil fuel industries, including aviation, by 2050.
Sustainable and Low Carbon Events Work with partners to embed sustainability and good carbon management practices into major events managed by Durham County Council	Initial policy being drafted and actions being incorporated (e.g. single use plastics and work to remove the need for generators)	All major events must be low carbon, factoring in broader issues such as transport and catering	All events must be carbon neutral

2.3.3 The following table lists the actions that the council will take over the next two years to work toward the target of 80% reduction by 2030 from 2008/09 levels. This list is not exhaustive, as we may find new projects as the years progress. It is also subject to review in response to changing circumstances.

2.3.4 It covers only two years as this is as far into the future as we can reliably predict our actions and the finances that support them. We have an outline of what we will pursue beyond 2022, which is described at the end of this section. This outline will be shaped into a more detailed action plan through learning from the successes and failures that we may see over these first two years.

2.3.5 According to our carbon budget set out in Section 2.2, we must reduce our carbon footprint by at least 8,782 tonnes over the next two years to March 2022. The costed actions in the next table do not add up to this figure, but fall short by a little over 1,000 tonnes. Some actions in the table have unconfirmed figures (TBC) which have not been counted, so the actual shortfall should be less than 1,000 tonnes. The remainder will have to be made up by external actions, such as a further reduced electricity grid carbon factor, or through further internal actions which will require additional funding.

2.3.6 There are already existing projects that the council is undertaking/has completed in these areas - such as installing solar panels, LED lighting, heat pumps and energy efficiency retrofits. The projects below are additional to our existing projects, and in addition to our first priority of embedding carbon reduction into our culture. The actions are grouped

into the priority areas that you said were important; 53% of staff and 44% of public respondents said that the council should maximise the generation and storage of renewable electricity on council land and buildings. 39% of public and 41% of staff said we should increase the energy efficiency of our buildings. 39% of public and 58% of staff said that reducing the need to travel should be a priority.

2.3.7 The priorities that emerged from our consultation are therefore:

- Priority 1: **Electricity** - renewable generation, battery storage, and energy efficiency
- Priority 2: **Heat** - low carbon buildings, better insulation, and energy efficiency
- Priority 3: **Transport** - low carbon vehicles, and less need to travel

Table 4 : Durham County Council's two year Action Plan

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
Electricity	**Solar PV** Install solar panel arrays on suitable council buildings.	£180	43	Pending (Invest to Save)	March - 2021	Renewable electricity generation installed on all financially appropriate buildings and land.	A significant proportion of electricity used in council buildings will be self-generated. The remainder will be taken from the low carbon national grid.
Electricity	**LED Lighting Replacements** Installing LEDs in nine council owned buildings. (second phase of project)	£400	200	**Yes** **(Invest to Save)**	May - 2020	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.	More LEDs - no lights in Council properties to be less efficient than LED by 2030
Electricity	**Enlighten** Installing LED lighting in schools. First phase of nine schools.	£500	120	**Yes** **(Invest to Save)**	March - 2020	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.	More LEDs - no lights in Council properties to be less efficient than LED by 2030
Electricity	**Gala Theatre Theatrical LED Lighting** Installing LED stage lights.	£133	20	**Yes** **(Invest to Save)**	May - 2020	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
Electricity	**LED Street Lighting** Continuing the replacement of old inefficient street lights with LEDs. (First two years of the next phase of the project, which will take three years in total.)	£3,500	1,100	Pending (Invest to Save)	March - 2022	All street lights to be LED by 2030.	All lighting in all council buildings, including external lighting, to be LED or equivalent by 2050.
Electricity	**LED Lighting Replacements Continued** Where invest to save cannot be used, other funds will be used to provide LED lighting.	£50	50	Pending (Other Council funds)	March - 2021	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.	More LEDs - no lights in Council properties are to be less efficient than LED by 2030.
Electricity	**Electric Bin Hoists** Install electric motors on 6 bin lorries so that engines do not need to run while bins are being lifted.	£8	TBC	**Yes**	March - 2022	All bin hoists to be electric by 2030.	No Council vehicles to use any fossil fuels by 2050.
Electricity	**Depot Renewable Generation** Our depots use a lot of electricity and this will increase with the addition of electric vehicle charging points. Investigations are underway to find suitable places for renewable	TBC	TBC	Pending (Invest to Save)	March - 2022	More renewable electricity generation to be installed at appropriate locations across the council's estate.	A significant proportion of electricity used in council buildings is self-generated. The remainder is taken from the low carbon national grid.

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
	electricity generation and storage at our depots.						
Electricity	**Electricity Grid Decarbonisation** National effort to reduce the carbon footprint of the electricity grid.	£-	3,400	N/A	Ongoing	It is expected that the carbon factor of the national grid will be reduced significantly by 2030. Our estimate is based on previous years' data.	To conform with national policy of being carbon neutral by 2050, the national grid must be close to zero carbon by 2050.
Electricity	**ECO2 Smart Schools** Programme of engagement in schools as well as assistance with energy monitoring.	£80	354	**Yes**	March - 2022	All schools to have the opportunity to access energy management services and a sustainability education programme.	No schools in County Durham to use any fossil fuels by 2050. Education programmes like ECO2 Smart Schools will aid this transition.
Electricity, Heat, & Transport	**Zero Carbon Depot** Transform the whole site at Morrison Busty Depot to be zero carbon, including all buildings and vehicles.	£4,000	590	Pending (ERDF)	March - 2021	Learn from this project and carry out more whole site actions.	All DCC sites are carbon neutral.
Electricity & Heat	**Louisa Centre** Mine water heat pump to provide low carbon heat with solar PV to generate the necessary electricity. Also other energy	£3,500	503	Pending (ERDF)	December 2021	Learn from this project to inform future mine water heating projects.	No fossil fuels to be used to heat council buildings by 2050. Heat from mine water is likely to play a large part in this.

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
	efficiency measures in the building.						
Electricity & Heat	**New Headquarters** We are leaving the old County Hall and moving to a much lower carbon building in the City Centre. The building will be very well insulated and includes low carbon lighting and ventilation, as well as rooftop solar panel generation (subject to planning).	TBC	TBC	**Yes**	2021	The building is prepared to be added to a district heating scheme in the city centre, through which it will receive low carbon heat. Approximately 3 hectares **(iv)** of trees would need to be planted each year to offset this new building.	No fossil fuels to be used to heat council buildings by 2050. All council actions will be carbon neutral, including the use of this building.
Electricity & Heat	**Building Energy Management Systems** Install BEMS in appropriate council buildings to better control heating and lighting, and reduce need to travel.	£200	20	Pending (Other Council funds)	March - 2021	All large council buildings to have BEMS by 2030.	Energy controls to be accessible through BEMS at all council buildings by 2050.
Heat	**Depot Heat Pump** Removal of fossil fuel boiler to be replaced with an air source heat pump at Annfield Plain Waste Transfer Station.	£18	30	**Yes** **(Invest to Save)**	March - 2020	Learn from this project and aim to replace more fossil fuel boilers with heat pumps if successful.	No direct fossil fuel heating will be in use in 2050. Many more heat pumps may be required to achieve this.

iv Estimated approximation, dependent on occupant behaviour and other external factors.

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
Heat	**Away from Oil** Replacing oil boilers with low carbon heating alternatives. Investigations are underway to complete this at some rural schools that have no access to the gas network, and some council depots.	£250	68	Pending (Other Council funds)	March - 2021	Complete removal of all oil boilers from all council properties.	No oil will be burned for heating in any building in County Durham in 2050.
Heat	**Improving Gas Use** Replacing older gas boilers with more efficient models.	£250	20	Pending (Other Council funds)	March - 2021	No gas boilers less than 90% efficient to be used in Council properties by 2030.	No fossil fuels to be burned for heating by 2050.
Transport	**Low Carbon Fleet** Installation of necessary infrastructure to begin transition to electric fleet vehicles in the first two years. Evaluate options for refuse lorries to be fuelled by biogas.	£150	N/A	Pending (Other Council funds)	March - 2021	Significant proportion of Council fleet to be electric by 2030. Remaining fleet may be fossil fuel, hybrid, or other alternative fuel.	No Council vehicles to use any fossil fuels by 2050.
Transport	**Reduce Business Miles** Encourage remote meetings and working at most appropriate location by working with the Inspire	£-	120	N/A	Ongoing	Greater use of remote meeting tools, such as video conferencing, webinars, or telephone meetings, to reduce the need to travel.	Some travel will still be necessary, but this will be conducted using low carbon vehicles such as electric cars, bikes, or public transport.

Priority Area	Project Description	Project Cost (Thousand £)	Annual Carbon Saving (tCO_2e)	Funding Secure? (Source)	Expected Completion Date (Month - Year)	Action to 2030	Outcome for 2050
	programme and internal management.						
Transport	**Pool Cars** Transition to electric vehicles for our staff pool cars and the chair of the council's vehicle. Aiming to have 26 electric pool cars and 40 electric vans in this period.	TBC	TBC	TBC	March - 2022	No fossil fuel only pool cars to be in use by 2030. Some could be hybrids.	By 2050 no fossil fuel vehicles should be in use in County Durham.
TOTAL	**At least 6,638 tonnes saved of 8,782 tonnes of CO_2e required to be saved by March 2022**					**Save a further 20,834 by 2030.**	**Become carbon neutral by 2050.**

2.3.8 In addition to the actions in the table above, further actions will be carried out by the Council which will reduce our carbon emissions, but are less easily measured. We also have a responsibility during this climate emergency to carry out any further actions to reduce our contribution to global warming even if those actions would not directly contribute to our targets. These are described in the table below.

Table 5 : Additional actions without clear calculable carbon reduction figures.

Priority Area	Project Description	Action for 2030	Outcome for 2050
Heat	**Heat Recovery** Find ways to use heat wasted in industry in the county, instead using it to heat our buildings or swimming pools.	Collaborate with industrial partners to locate waste heat find ways to utilise this.	No heat to be unnecessarily wasted in County Durham. All heat that is generated and can be used, will be used.
Other	**Green Carbon Sinks** Work should be done to protect our green areas, reduce the amount that we cut our grass, increase tree planting, and protect our wildlife. Actions range from only using peat-free compost in our nurseries to creating new hedgerows and habitats.	Grass verges to be kept with minimal cutting. Landscaping tools to be electric, rather than fossil fuel.	Grass verges to be kept with minimal cutting. No fossil fuels to be used in landscaping tools.

Priority Area	Project Description	Action for 2030	Outcome for 2050
	Cutting the grass less will reduce our carbon footprint, but the offsetting actions such as tree planting will not be counted toward a reduction in council emissions.		
Electricity & Transport	**Low Carbon Public Transport** Solar Car Ports to be installed at Council car parks which could be used to provide the electricity to charge electric vehicles, including busses. Improvements are also planned for our city's park and ride schemes, to make it easier to keep cars out of the city. These are likely to start by 2022 and could save 500 tonnes per year.	A significant reduction in the number of fossil fuel vehicles will be seen in County Durham by 2030.	No fossil fuel vehicles will be needed to travel within County Durham by 2050. Infrastructure will be in place to support this.
Electricity	**Low Carbon Kitchens** Work with schools catering services	Ensure all catering staff employed or subcontracted by DCC are appropriately trained in energy efficiency.	Our schools meals will be prepared in a carbon neutral manner across the County. No fossil fuels will be burned directly for this by 2050.
Heat & Electricity	**Low/Zero Carbon New Buildings** Take a fabric first approach to building design and ensure that all new buildings exceed standards required by building regulations.	All new buildings will be much lower carbon by 2030.	By 2050, all buildings in County Durham will be low or zero carbon.
Other	**Waste and Recycling in Council Buildings** More, better recycling and composting in council properties. Including office furniture re-homing & re-use scheme.	Integrate food waste and composting to all waste and recycling collections.	The vast majority of waste from council operations will be recycled or re-used by 2050.
Electricity & Heat	**Improve Schools with Swimming Pools** Investigations to be carried out to find ways to improve energy efficiency at schools with swimming pools, particularly those whose pools are used by the community.	No gas boilers less than 90% efficient to be used in Council properties by 2030.	No fossil fuels to be burned for heating by 2050.
Transport	**Low Carbon Staff Cars** Review / re-provide the staff car lease salary sacrifice scheme so as to make low emission vehicles a more affordable option than standard petrol or diesel.	The new lease scheme will run from April 2020 for four years until March 2024. From 2024 to 2030 a new scheme should be in place to encourage further use of low carbon vehicles.	By 2050 no fossil fuel vehicles should be in use in County Durham.

2.3.9 The action plan is a working document, and may be updated and added to at any time. To follow our progress, visit https://www.durham.gov.uk/article/4487/Tackling-our-carbon-footprint.

2.3.10 The projects in these tables are expected to cost £13.2 million.

2.3.11 £4.7 million of this will come from Invest to Save budgets, £7.5 million from grants and investment match. £718,000 is coming from additional funding for delivering the Action Plan, and £80,000 comes from school budgets

2.3.12 Our work will not be done when the two year action plan is complete. We will need to continue cutting carbon for much longer. However, it is not possible to accurately set out a detailed plan beyond the next two financial years.

2.3.13 From April 2022 we expect the focus of our efforts to be shaped by lessons learned from the actions of the first two years, and since 2009. In addition, care will be taken to observe outside trends, such as how quickly the national electricity supply is decarbonising, which would determine the carbon benefits of our spending resources on generating renewable electricity.

Carbon Factors

A Carbon Factor describes the amount of carbon dioxide equivalent that is released into the atmosphere for each unit of energy or fuel used.

Durham County Council uses carbon factors supplied by the government's Department for Business, Energy, and Industrial Strategy, BEIS. These are national average carbon factors, and do not take into account our location or the tariff that we may have agreed with our supplier. In fact, the electricity that the Council currently purchases does have a lower carbon factor than the national average, but advice from BEIS is to use the national carbon factors.

Furthermore by buying from a company that produces lower carbon electricity we are investing in a low carbon future, but not directly changing where our electricity actually comes from. Our choice to buy lower carbon electricity will not be ignored, however. It can be counted as an off-setting action which will help us reach carbon neutrality as a County.

2.3.14 National efforts will reduce the carbon factor of grid electricity through increased use of renewable generation in place of fossil fuel power plants. This means that generating our own electricity should be less of a priority than reducing our use of fossil fuels for heating. Renewable electricity generation projects should still be pursued, but can be carried out through ordinary invest to save procedures. Any additional funds found to support the climate emergency should be spent on our direct sources of emissions: from heat and transport.

2.3.15 The more pressing issues are how to decarbonise heat and transport as these require a shift away from fossil fuels at the point of use. We will work alongside the actions in the Countywide Action Plan, collaborate on heat networks including one of our large buildings alongside some other domestic, commercial, or industrial properties. We must also keep up to date with improvements to heat technologies from around the world, and build on research from examples of excellence such as at Heerlen in the Netherlands.

2.3.16 Similarly, we will work with external organisations to find the best ways to decarbonise our fleet, as this may include a range of options from electric vehicles to other alternative fuels. We will require co-operation from all areas to achieve drastic decarbonisation of transport, however, as many journeys are currently made in privately owned fossil fuel cars.

2.3.17 We will maintain relationships with the Durham Energy Institute, the Department of Business Energy and Industrial Strategy, and other appropriate bodies, to ensure a scientific and joined up approach in each of these areas. We will also work with Business Durham, BEIS and FSB to explore the economic opportunities for the Council.

Section 3

County Durham's Carbon Emissions

This section looks at the carbon emissions the whole of County Durham and the actions we have identified as required to reduce this carbon footprint.

3 Tackling County Durham's Emissions

3.0.1 This section provides an overview of the outcomes from consultation relating to tackling climate change across County Durham and reducing emissions from all of our households, buildings, businesses, organisations and travel activity. This section also explains the milestones we need to reach in order to keep us on track to meet the 2050 target and concludes with an Action Plan that we will need to implement with help from others.

3.1 Consultation Outcomes

3.1.1 The countywide consultation asked the public, elected members, businesses, community groups, stakeholders, organisations, and young people what action should be taken across County Durham to tackle climate change and how others can help. This section provides an overview of the consultation outcomes with further detail provided in Appendix B.

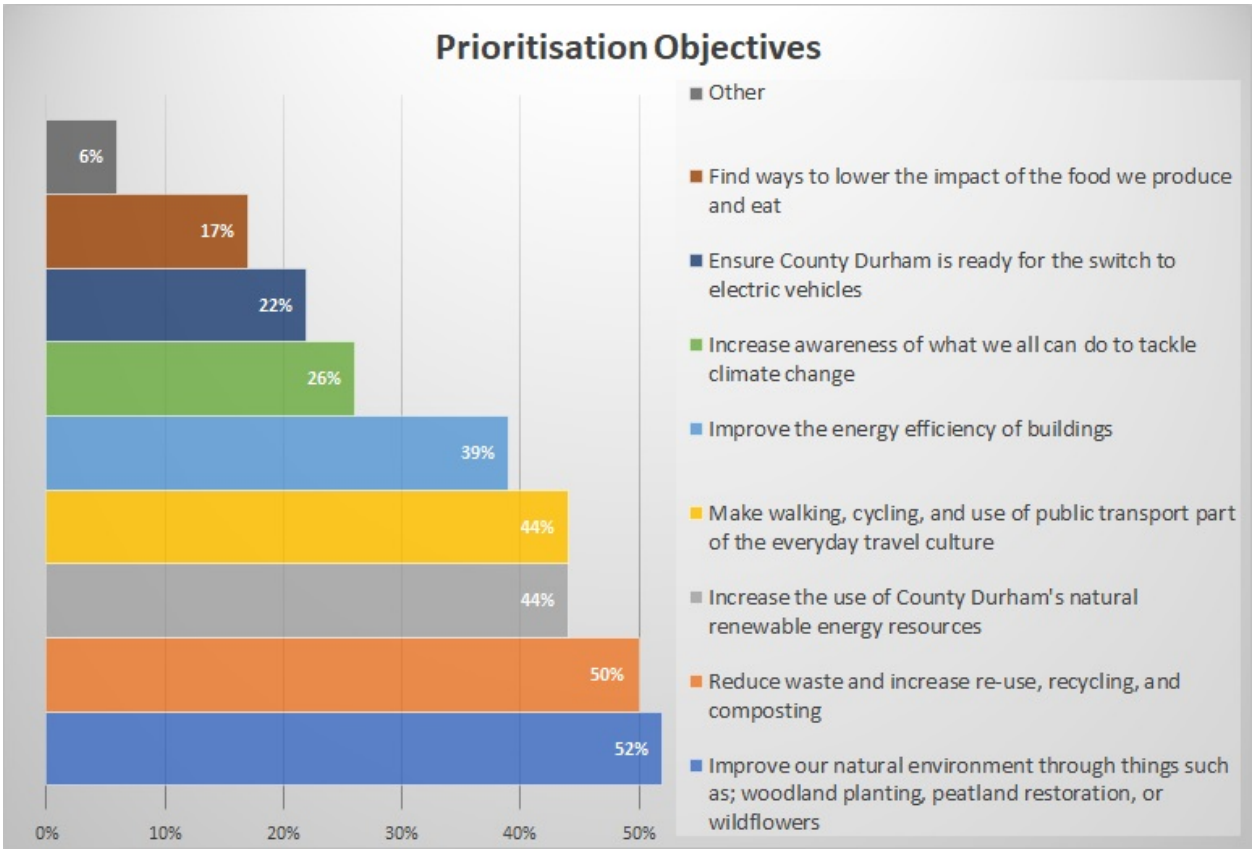
Public Survey Responses

Please choose three objectives which you feel should be prioritised across County Durham as a whole:

1. 52% of respondents felt that improving our natural environment, through projects such as woodland planting, peatland restoration or wildflowers is a priority;
2. 50% of respondents thought we need to reduce waste and increase re-use, recycling and composting, and
3. 44% wanted to see an increase in the use of County Durham's natural, renewable energy resources.
4. 44% also wanted to make walking, cycling and the use of public transport to be part of the everyday travel culture.

3.1.2 The following chart depicts the objectives which were selected as priorities through the consultation.

Figure 3 Priorities for Tackling Climate Change



Do you feel there is anything missing from the Countywide actions?

3.1.3 There were 628 comments to this question. The main themes coming out of this were, i.e. those with more than 30 aggregated responses were:

1. Travel (154 responses);
2. Planning (92 responses);
3. Waste (48 responses);
4. Nature (44 responses)
5. Awareness Raising / Encouragement (37 responses)

3.1.4 More detail can be found in Appendix B, however the headline responses against each theme were as follows:

Table 6 Headline Responses

Rank	Theme	Headline Comments
1	**Travel**	Improvements to public transport are needed to provide more incentive over private car use
2	**Planning**	More action on Planning influencing low carbon and sustainable development is needed
3	**Waste**	Introduce a UK wide standard recycling scheme to make recycling simpler and collect a greater range of recyclable materials

Rank	Theme	Headline Comments
4	**Nature**	More woodland and trees are needed in County Durham
5	**Awareness Raising**	More information is needed regarding what we can all do to help tackle climate change and what actions will have the biggest impact

Do you have any further comments regarding how we are looking to tackle the climate emergency and achieve our targets?

3.1.5 This was an open-ended question and the responses to this question were quite varied. The most popular choices here centred around travel (45, 17%), Planning (38, 14%) and increasing awareness (20, 7%). Aligned to this was a need to raise awareness, work in partnership with other organisations, and give residents and businesses more encouragement to take action.

3.1.6 A number of responses also highlighted the need for urgent action (18, 6%). These responses stressed the importance of climate change and the need to treat the issue as a priority, the county needs to move swiftly and deliver actions.

What are the good things you feel your business/community group or organisation are doing at the moment to help with the climate emergency?

3.1.7 This part of the survey was aimed specifically at businesses, organisations and community groups. These responses provided useful insights into how these groups are working to address climate change.

3.1.8 They highlighted the importance of partnership working and developing networks to deliver on the targets. They also drew attention to the actions that each are doing within their respective field, covering research, awareness and training as well as increasing recycling, energy improvements and more sustainable transport.

What are the good things you feel you are doing at the moment to help with the climate emergency?

3.1.9 This question provided a good number of responses (over 1000), with the following being the most popular themes:

1. Waste reduction and recycling (268; 24%);
2. Travel (259; 23.5%);
3. Food (119; 11%) and;
4. Energy Efficiency (99; 9%)

3.1.10 Looking in more detail, recycling and avoiding single use plastics, walking more and driving and flying less were the most popular. Changing diet followed by improving energy efficiency at home were also popular choices.

3.1.11 Looking at what people could do in the future, the trends were similar. Most people wanted to avoid packaging and single use plastics (79% of respondents), switch off unnecessary equipment (76%), recycling more (72%) and using less heat at home

(71%). Other popular choices were repairing items rather than buying new (63%), paying more attention to the impact of their food choice (63%) and eating less meat (51%) and driving less/walking more (63%).

Detailed Responses

3.1.12 Detailed responses to the Climate Emergency Update Report and emails were also received over the consultation period. The responses and issues raised broadly reflect those provided to the public survey. However, some of the common additional issues and suggestions included:

- The milestones set towards meeting the 2050 target need to be more ambitious;
- Farming practices and agriculture need to be reflected within the Action Plan;
- Car Idle free zones should be introduced, particularly outside of schools; and
- An online, climate emergency resource would be welcomed.

Young Person's Engagement

3.1.13 County Durham's young people were also engaged through a number of specific sessions. Further details of the outcomes from this are provided in Appendix B and are summarised as follows:

- Young people in County Durham are well educated in relation to climate change and what simple behaviour changes they can make in response, including walking and cycling more;
- They expect to see more change in how energy is generated across the county and how we drive around, with electric vehicles becoming the norm;
- Food and eating less meat, reducing consumption of resources, waste and single use plastics was highlighted regularly;
- Young people would like more trees and wildflowers; and
- Whilst online platforms are popular more young people receive information from parents/family and school.

Consultation Conclusion

3.1.14 Bringing everything together, the consultation process has highlighted that in order for County Durham to play its part in tacking the climate emergency, actions will be needed on the following as a minimum:

- Improving the natural environment;
- Waste reduction, re-use and recycling;
- Renewable energy;
- Walking, cycling and public transport;
- Transition to ultra low emission vehicles;
- Farming / Agriculture; and
- Awareness raising - online platforms will be useful in this regard but a range of communication methods are likely to be required.

3.1.15 The response plan should also support and facilitate the good things people are already doing and would like to do more of including:

- Partnership working;
- Research;
- Training, influencing others; and
- Taking individual / organisational responsibility for waste/resource use, energy efficiency, modes of travel, diet and local food production/consumption.

3.2 County Durham's Carbon Budget

3.2.1 Research is currently being conducted by a number of respected academic institutions to identify how much carbon each local authority area can release while also meeting the set carbon reduction targets. We will review this research in the context of what can be achieved within County Durham, and may need to adjust our own carbon budget[v] in the course of these actions.

3.2.2 We have set our own targets for carbon reduction, with the aim of becoming carbon neutral by 2050. Our next milestone towards reaching the 2050 target is that in 2020 County Durham's carbon footprint should be 60% less than it was in 1990. This has been raised from a previously suggested milestone of 55% in response to consultation. Following that, our milestone for 2025 is that the County's footprint should be 72% less than it was in 1990.

- 60% of carbon emissions to be eliminated or offset by 2020, and
- 72% of carbon emissions to be eliminated or offset by 2025.

3.2.3 The scope of the carbon emissions that we report for the county are covered by the following areas:

- Scope 1 (Direct Emissions) - carbon dioxide emissions from sources located within County Durham. This includes only emissions that occur directly within the county, mainly from burning fossil fuels such as in a car engine or central heating boiler.
- Scope 2 (Indirect Emissions) - carbon dioxide emissions occurring as a consequence of the use within County Durham of electricity supplied by the national grid. These emissions are indirect as the carbon is released at the power plant, which may be outside of Durham.
- Other Factors - while it is not possible to include all of our impacts in the data that we report (e.g. carbon associated with the manufacture of goods outside of County Durham); projects which influence emissions outside the county may be included in the response plan. In addition, we can include offsetting work, which would count toward undoing the damage caused by scopes 1 and 2. Offsetting is taken into account when the county's carbon footprint is calculated, such as the use of land for forestry.
- Excluded Emissions - The countywide carbon footprint does not include emissions caused by long distance through travel on the A1 motorway, flights, or on the rail network.

3.2.4 Emissions data are also broken down into Domestic, Industrial and Commercial, and Transport emissions. This detail will be useful in determining which projects are going well, and which need more assistance.

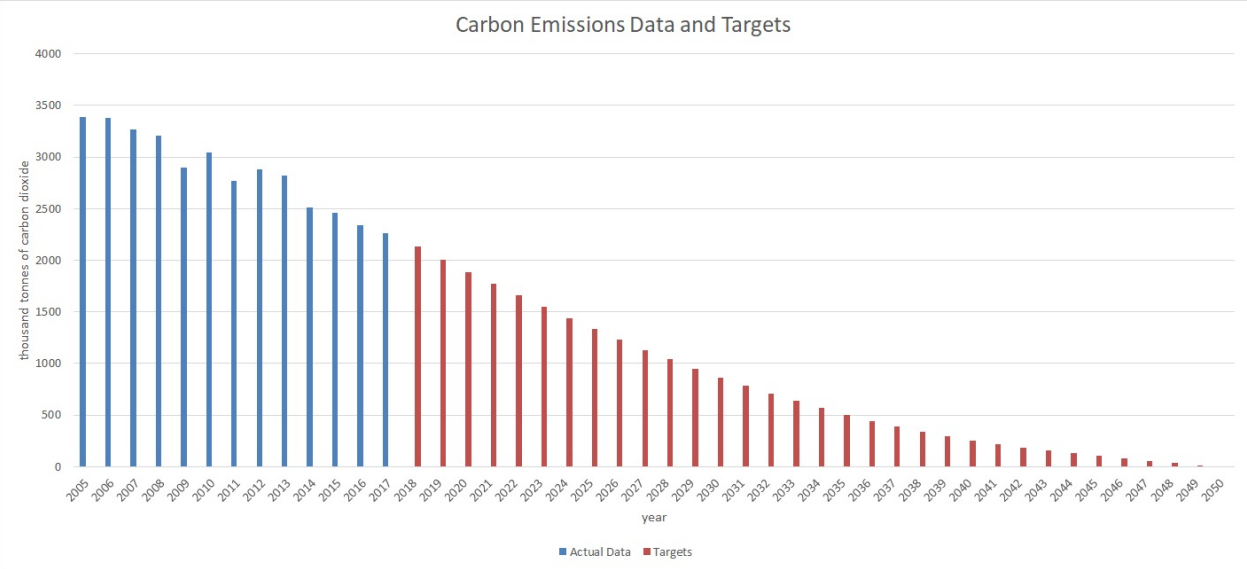
v That is the total maximum amount of CO_2 that we can release between 2020 and 2100 without causing irreversible damage to the planet.

Milestones

3.2.5 The following graph shows the actual annual carbon footprint of the county in blue, and our calculated target annual carbon footprints in red. These are estimated and will be updated when new data become available.

3.2.6 If we achieve the annual milestones shown in the graph below, we will release 20.8Mt of CO_2 by 2050. We hope to be able to improve upon this figure with help from government, business, and the public.

Figure 4 Graph of County Durham's Actual Carbon Emissions since 2005 and Target Emissions up to 2050.



3.2.7 Milestones and actions beyond the next two years will be adjusted based on our performance, the success of our projects, and the support and collaboration received from other organisations within the county as well as members of the public.

3.3 Countywide Action Plan

3.3.1 Section 2.3 outlined the actions that are needed to reduce the emissions from the Council's own operations. These account for only 3% of the carbon footprint of the county as a whole. This section therefore outlines how we will tackle the remaining 97% and includes partner actions where known. It is envisaged that as the response plan is further developed it will incorporate wider partner activity to address their own carbon emissions.

3.3.2 The action plan outlines projects which will reduce and offset emissions over the next two years, however actions needed to 2030 are also summarised. The projects and actions included are those that the council and/or partners are currently progressing, are aiming to get funding for, or are in the design stage. The action plan is a high level, working document and will be updated and added to as necessary to reflect new information and partner projects across the public, private and voluntary sectors. We will continue to work alongside Area Action Partnership's (AAP's), Town and Parish Councils and communities to encourage carbon reduction planning and delivery of activities at a local level.

3.3.3 To follow our progress, please visit www.durham.gov.uk/climatechange.

3.3.4 The following table incorporates actions linked to the priority areas highlighted through the climate emergency consultation i.e.:

- Improving the natural environment;
- Waste reduction, re-use and recycling;
- Renewable energy;
- Walking, cycling and public transport;
- Transition to ultra low emission vehicles;
- Farming / Agriculture; and
- Awareness raising.

3.3.5 The costs associated with the projects in this table come to over £50 million. Some projects have a sliding scale of cost and effectiveness so this should be seen as indicative rather than definitive. This money will not all come from Durham County Council budgets and it incorporates a number of projects already costed or funded (e.g. the new Durham Bus station).

3.3.6 In addition to this, research has been carried out investigating the cost to improve housing across the County. It is estimated that to make the necessary energy efficiency improvements, the cost across Durham would be around £1,400 million. A breakdown of these improvements is shown in Project D4 below, and some initial projects are included in the domestic project area.

Table 7 : County Durham's Two Year Action Plan

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
Renewable Energy	**Renewable Energy**	RE1. Develop and safeguard a portfolio of Council owned land suitable for renewable energy developments.	Time Only	None Directly	Design Stage	July 2020	Programme of installing renewable energy technologies on DCC land	All electricity generated or consumed in County Durham to be fully renewable	Durham County Council
		RE2. Establish a Special Purpose Vehicle (SPV) to enable DCC to install renewable energy technologies on partners' land and buildings and become a green electricity provider	£40,000	None Directly	Design Stage Will create a centralised fund	October 2020	Programme of installing renewable energy technologies on partners' land and buildings		Durham County Council
		RE3. Promote and support community renewable energy schemes through the Neighbourhood Planning process, partnership working, repowering and any other mechanisms including a new climate change loan scheme	£500,000 (rotating fund)	On-going programme of community energy schemes	Design Stage **(Funding Confirmed)** Rotating fund so no net cost over initial contribution	Ongoing	Continue to monitor progress and invest more funding if successful	Community engagement and ownership plays a strong role in local energy	Durham County Council
	New technology and Innovation	NT1. Set up joint research and business development with Durham University, NETPark, Energy	£50,000	N/A	**Funding Confirmed**	Ongoing	Ongoing partnership-based energy entrepreneurship	County Durham has become an international leader in energy technologies	Durham County Council; Businesses; Universities

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		Catapults and local businesses to develop and exploit new energy technologies					technology research and development programme Creation of new start-up companies		
		NT2. With partners explore sites and new technologies for electricity generation, storage and management across different end uses (EVs, heat, industry, hydrogen, etc.)	Staff and partner time	None Directly	Design Stage	Ongoing	Innovative programme of renewable generation, smart grids etc.	Resilient whole energy system, with integrated physical generation, digital management, markets and policy that fully and seamlessly meets the County's needs for transport, heat and power	Durham County Council; Private Developers
		NT3. Install electric power points in 3 main market places to replace diesel generators	£30,000 plus staff time	Approximately 3kg CO_2 for each litre of diesel burned in a typical generator.	Design Stage **Funding Confirmed**	October 2020	Investigate opportunities and install points in other public spaces.	No diesel generators in use throughout County Durham	Durham County Council
		NT4. Solar Car Ports (with batteries) on car parks including park and ride and other public car	£5m (estimate)	500	Design Stage	N/A	Solar Car Ports installed on majority of Council car parks	Fully integrated EV charging infrastructure for electric vehicles	Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		parks to power electric buses and vehicles							
Buildings and Heat	**Business Support**	BS1. Projects to support SMEs to reduce their energy use including Business Energy Efficiency Project (BEEP 2),	BEEP cost 5.5 full time staff for three years ERDF	877	Existing Project **Funding Confirmed** (ERDF)	2022	investigate ways to fund beyond 2022 and part commercialise model of decarbonising SMEs	No fossil fuels are used in the heating of buildings in County Durham (includes homes, business premises and community buildings). All properties are ultra- insulated and use sustainable	Durham County Council; Businesses
		BS2. Network of larger businesses to support SMEs with energy efficiency	Staff and partner time	TBC	Design Stage	Ongoing	All business have support mechanisms		Durham County Council; Businesses
		BS3. Shared business clustering - Bishop Auckland	£200,000	10	Design Stage **Funding Confirmed**	TBC	TBC		Durham County Council; Businesses
		BS4. Increase in the proportion of local food grown and sold in the County. A thriving local agricultural sector supplying food to local markets	Staff and Partner time	Durham Food Group	Existing Project	2020	TBC		Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		BS5. Work with BEIS and other partners to help develop a national process to support SMEs on energy efficiency. BASEE Project	£20,000	N/A	Existing Project **Funding Confirmed**	2021	TBC		Durham County Council; Businesses; Government
		BS6. Pilot research to explore changes to application of Business Rates to remove disincentives to installation of renewable energy or efficiency measures	£40,000	TBC	New Project **£40,000 provided by BEIS to fund DCC to carry out this study on their behalf** **Funding Confirmed**	2021	TBC		Durham County Council;
	Sustainable Tourism	ST1. Develop a project to support energy efficiency in smaller tourism and food related businesses, learning from international best practice through SME Power and support the work of the Durham Food group	Staff Time	TBC	Existing Project **Part funded through Interreg Europe**	Increase in the proportion of local food grown and sold in the County	A thriving local agricultural sector supplying food to local markets		Durham County Council Durham Food Group Visit County Durham

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
	Domestic	D1. Advice - currently provided through DCC's (1) Managing Money Better service to private sector tenants and owners.	£60k per year including overhead (funded through Warm Homes Fund and DCC)	N/A	Existing Project **<u>Funding Confirmed</u>**	Ongoing	£750K domestic fuel saving debt right off	£1m domestic fuel savings debt right off and Significant carbon savings	Durham County Council
		D2. Solid Wall Insulation scheme	250 homes £2m (cost to authority £500K)	300t CO_2e (annual for the life of the installation ie 7,500 tCOe)	Design Stage ERDF bid to be submitted in January 2020	2022	Further 5000 properties insulated 10% solid wall stock	30,000 properties insulated 60% stock	Durham County Council
		D3. HEET Project (Energy Friends)	£22,000k annually	TBC	Design Stage Interregg Europe Bid	2023	50 Energy Friends recruited	10,000 energy friends visits	Community Groups; DCC
		D4. Domestic retrofit measures: Solid Wall Insulation Cavity Wall Insulation Loft Insulation Floor Insulation Window Glazing	£1,383m 508m 117m 26m 177m 554m	191,000 72,900 30,700 10,400 32,400 44,500	No	N/A	County Durham to be well on its way to meet retrofit measures	All housing stock has had appropriate measures fitted	Durham County Council; Central Gov

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		D5. Work with landlords to improve building quality / energy efficiency / higher standards and improve enforcement actions	£100k annually (landlord officers)	Dependent on occupant behaviour.	Existing Project **Funding Confirmed** (DCC Private landlord officers in post)	Ongoing	All landlords to have properties with EPCs D or above	All landlords to have EPcs of C or above	Durham County Council; Private Landlords; Social Housing Providers
		D6. Supporting low carbon heating in off gas homes	£2m	100t CO_2e	Existing Project **Funding Confirmed** (Warm Homes Fund)	2022	Continued Roll out in off gas areas	100% new heating systems installed to be non carbon and renewable heat sourced	Durham County Council
		D7. Homeowner Energy Efficiency Loans Scheme	£150,000 (Project Pilot)	TBC	Design Stage	2021	Reduced fuel poverty and Co2 emissions	More efficienct homes	
	Geothermal Projects	G1. Further develop a district heating scheme for Durham City including Freemans Reach, Passport Office,	£150,000	1500t CO_2e (when built)	Design Stage HNDU bid for 60% of funding to be submitted in December	2021 For feasibility	Fully implement a district heating scheme for Durham City – cost circa £15 million with a 40 year payback with 1500t CO_2 annual potential saving	County Durham has led the way nationally in the development of new, sustainable heat technologies. Multiple Durham based businesses have been established and are thriving	Durham County Council
		G2. Support and enable a deep geothermal district heat scheme for Bishop Auckland	£4,810,000	1,032t CO_2e	Design Stage £2,886,000 ERDF application submitted	2022	Fully implement a deep geothermal DH scheme in Bishop Auckland		Auckland Castle Trust

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		G3. Undertake research to identify opportunities for mine-water and other sustainable heat (and cooling) schemes across County Durham – includes heat storage	(Heat Hub, (15,000) Durham university joint post, (50,000) Earth Sciences students free except for staff time)	N/A	Existing Project **Durham University has contributed £15,000**	July 2020	Development of plan to roll out specific feasibility studies for using minewater across the County.		Durham University; Durham County Council
		G4. Support a mine-water district heating scheme for Seaham Garden Village	£3m	1,474	Design Stage **HNIP funding confirmed**	2030	Technology proven, in order to roll out to other areas		Coal Authority; Durham County Council
		G5. Assessment for use of pumped mine-water heat in Horden	£25,000 plus staff and partner time	N/A	Design Stage **Funding Confirmed**	2022			Durham County Council; Coal Authority
• **Transition to ultra low emission vehicles** • **Walking, cycling and public transport**	**Electric Vehicle (EV) Infrastructure**	EV1. Install at least 100 community backed EV charge points in more rural areas of County Durham within 5 minutes' walk of properties without off-street parking (SOSCI Project)	£150,000 materials cost, £100,000 staff time and (£1 million installation cost)	Between 29 and 74,000 EV's are projected to be parked on street by 2030 across the LA7 area. This could potentially save between 43 and 130,000t of CO_2 over the same area	Existing Project **Funding Confirmed** Innovate UK funded project	2022	Assist in the roll out of further charge points across the County	Integrated EV infrastructure across the County and the region	Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		EV2. Community EV infrastructure in more urban areas of the County (complements SOSCI)	£200,000	Dependent on purchase of EVs.	Existing Project **Funding Confirmed**	2023	Assist in the roll out of further charge points across the County		Durham County Council
		EV3. Facilitate the provision of ultra-rapid EV charging and EV filling stations where appropriate	Staff time (EV Working group)	Dependent on purchase of EVs.	No To be provided by commercial partners – possible rental income if on DCC land	Ongoing	Have at least 5 ultra rapid charging stations in County Durham		Commercial Partners
		EV4. Encourage and incentivise commercial organisations to switch to EVs – especially taxis, fleet and delivery firms	Staff Time	Dependent on purchase of EVs.	Design Stage	Ongoing	All taxi's and majority of delivery firms are utilising EV or other low carbon technologies	No petrol or diesel transport exists in CD	Durham County Council
		EV5. Explore two-way EV charging infrastructure as the technology develops (V2Street project)	Income of £4,500	Dependent on purchase of EVs.	Existing Project Innovate UK project	2020	Work with partners to further develop technology	Fully integrated systems that support two way charging across County Durham	Durham County Council
		EV6. Investigate gaps in the network and opportunities for additional installations, including tourism hotspots	Staff time (EV Working group)	Dependent on purchase of EVs.	Design Stage	2022	Assist in the roll out of further charge points across the County	Integrated EV infrastructure across the County and the region	Durham County Council; Visit Durham

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
	Alternative Fuels	AF1. Work with partners to research new technologies for vehicle fuel such as hydrogen, bio gas, etc.	Staff Time	N/A	Design Stage	Ongoing	Continue to assist partners in the research of alternative fuel technologies		NELEP; Regional Transport Team; INTEGRAL
	Cycling and Walking Strategy	CW1. Completion of Local Cycling and Walking Infrastructure Plans for 12 main towns (LCWIPs)	Approx.£280,000	Propensity to Cycle Tool (PCT) used in the process builds in CO_2 savings	Existing Project **<u>£70,000 for first 3 towns confirmed.</u>** Approx. £210,000 for 9 other towns.	2024	Continuation of LCWIP's for smaller towns	All settlements have a LCWIP	Durham County Council
		CW2. Continuation of the ParkThatBike scheme	£65,000 over 5 years	TBC	Design Stage Estimate £50,000 needed for next 3 years to cover shortfall and address continued demand	2024	Infrastructure fully supports cycling	Community buildings, tourist attractions, workplaces and key destinations support cycling journeys	Durham County Council
		CW3. Construction of priority routes identified in LCWIPs and associated infrastructure	£500,000+ More accurate costings once LCWIPs developed and feasibility and outline design undertaken	CO_2 saving pat of evidence base to identify priorities so individual schemes will indicate CO_2 savings.	Design Stage External funding sought.	2029	Fully integrated cycling infrastructure	Numbers using routes for active travel increase year on year	Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		CW4. Complete construction of Great North Cycleway (NCN 725)	£500,000+	May be possible to identify CO_2 on specific sections if using the PCT.	Design Stage External funding sought.	2024	Fully integrated cycling infrastructure	Numbers using GNC for active travel increase year on year	Durham County Council
		CW5. Construct Cycling Super Routes linking key settlements within 5 miles of Durham City	£500,000+	May be possible to identify CO_2 on specific sections if using the PCT.	Design Stage External funding sought.	2024	Fully integrated cycling infrastructure	Numbers using routes for active travel increase year on year	Durham County Council
		CW6. Support the use of e-bikes and e-cargo bikes especially for last mile deliveries	Not costed up	N/A	No	N/A	Reduction of town and city car journeys		Commercial Partners
	Integrated public transport	PT1. Comprehensively redesign / develop Durham City's bus station as the County's main bus interchange	£8,000,000	TBC	**Funding Confirmed**	2021	EV charging in everyday use		Durham County Council
		PT2. Extend real time information, journey planning software and interactive mapping information	£3,200,000	TBC	Design Stage Projects included as part of the transforming cities fund (TCF)	2021	Specify, procure and deliver new Real Time Passenger Information (RTPI) system, journey planning and interactive mapping software	Passengers have digital access to information on expected arrival times, disruptions and fares	Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		PT3 Identify and introduce bus priority measures in areas of need	£35,000	TBC	Design Stage (Two projects identified as part of the TCF bid)	2021	Additional measures to be identified and introduced.	More reliable and punctual operation of bus services	Durham County Council
		PT4. Continue the commitment to underwrite a comprehensive bus network for the County	£2,500,000	TBC	**Funding Confirmed**	Ongoing			Durham County Council
		PT5. Increase the provision of park and ride for Durham City	£4,500,000	TBC	One additional site and one site extended as part of the Transforming Cities bid	2022	Further additional capacity as required	All busses are zero carbon	Durham County Council
		PT6. Bring in electric buses for the Durham City park and ride routes	£250,000 per bus	500 tonnes of CO_2 per annum	Design Stage Possible ERDF bid	2022	Additional Bus services converted to electric		Durham County Council
		PT7. Support a transition to ultra-low emission buses across the County	£25,000 per bus	TBC	Design Stage Possible national funding bid	2021			Durham County Council
	Broadband	B1. Reduce the need to travel through IT including increased roll out of high-speed broadband	$8,540,000	TBC	**Funding Confirmed**	2022	Superfast broadband available to 100% properties	TBC – Driven by developments in technology	Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		connectivity, especially in rural areas							
	Transport Behaviour	TB1. Support a programme of sustainable travel awareness campaigns across all sectors and geographies in the county	Staff Time	Unknown	No	Ongoing	Increased engagement and awareness		Durham County Council
		TB2. Run a campaign to raise awareness of and prevent the pollution resulting from vehicle engines left idling (e.g. taxis, buses, school pick up etc)	Staff Time	Unknown	No	Ongoing			Durham County Council
		TB3. Explore opportunities for an increase in carclubs	Offer support to external organisations looking to locate	Only if they use EV's	No	Ongoing			Durham County Council
		TB4. Support sustainable transport research projects with partners such as Decarbonate, etc.	Staff Time	Unknown	No	Ongoing			Various

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
• Improving the natural enviornment • Farming / Agriculture	**Policy**	Pol1. Explore the implementation of a Carbon Offsetting Fund for use by developers, businesses and their carbon and choose to support the programme of carbon storage schemes below	£40,000 set up cost plus seed-corn funding	Dependent on take-up. Target 10tCO_2 for each £100 added to the fund (TBC).	**Funding Confirmed**	Ongoing	Fully sustainable Carbon offsetting fund in operation	Projects funded across the County through the fund	Durham County Council
	Peatland	Peat1. Enhance the rate of peatland restoration through the Peatland Programme with the AONB Partnership. Approximately 1,400ha of bare peat remains in County Durham	£50,000	1 hectare of peat stores approximately 1,781 tonnes of carbon.	**Funding Confirmed** To fully implement all areas will require substantial funding	Ongoing	All of County Durham's significantly 'at risk' peatland has had remediation works	All county Durham's peatland is fully restored and healthy with an effective long-term management programme in place, safely storing 2,493,400 tonnes of carbon (AONB figures)	AONB Partnership; Durham County Council
		Harwood	£173,771	119.2	Design Stage	N/A			
		Holwick	£259,708	186.4	Design Stage	N/A			
		Valance Lodge	£750,718	341.5	Design Stage	N/A			

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
	Blue Carbon	BC1. Blue carbon: off- shore oyster / mussel bed creation and kelp eco-system development (stores three times as much carbon as tree planting but Durham's seabed has been badly damaged)	£40,000	Organic carbon deposition of 4,000 tonnes pa Inorganic deposition 300 tonnes pa **(vi)**	Design Stage **Funding Confirmed** Note Blue Carbon measures do not have the ongoing revenue costs that terrestrial sequestration does.	2022	Links to regional marine restoration programme, SeaScapes programme and regional Blue Carbon Programme	Thriving eco system along the Durham Coast 1,200,000 tonnes of Carbon deposited	Durham Heritage Coast Partnership
	Tree Planting	TP1. Major tree planting and habitat creation schemes across the County to maximise carbon storage, working with partners, communities, AAPs, schools, and landowners	£300,000	I hectare of woodland stores approximately 400 tonnes of carbon	**Funding Confirmed** (assumes forestry commission grant)	2023	Extend existing and identify further land areas that could be used for tree planting	An integrated and resourced woodland portfolio	Durham County Council
		TP2. Support the Durham Woodland Revival project to manage and plant woodlands with partners, landowners and communities	£820,000 (4 yrs)		Existing Project **Funding Confirmed** (£50,000 unconfirmed)	2023	Build on success of project to enable more communities to manage woodland and work with landowners to manage and plant more woods	Multi purpose woodland managed by local people and healthy forest network	Durham County Council

vi Based on Scottish figures and Durham Coast to 6 mile

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		TP3. Durham Hedgerow Partnership	£20,000/annum		Existing Project **Funding Confirmed**	Ongoing	Continue to support landowners to manage and plant hedgerows	Health Hedgerow networks	Durham County Council
		TP4. Managing DCC woodland estate . 2000ha of DCC woodland under management, with Forestry Commission approved plans	N/A		Existing Project	Ongoing	On going programme of works to manage woodlands	Well managed multi-purpose forest estate	Durham County Council
		TP5. Tree Week grants for small projects in community and landowners	£6000/pa		Existing Project **Funding Confirmed** Funded by DCC for 25 years	Ongoing	Continue to provide support	Increased tree cover in the public realm	Durham County Council
		TP6. Urban Tree Challenge Fund, to plant larger specimen trees in towns and villages	£1m		**Funding Confirmed** (in principle for 3 years)	2023	Continue to maintain existing tree stock and increase number of trees in urban environment	Increased urban tree canopy	Durham County Council
	Land Management	LM1. With Durham University and other partners undertake a programme of research into the effectiveness of different natural carbon storage systems	Research costs and staff time	N/A	Design Stage	Ongoing	N/A	N/A	Durham County Council; Durham University

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		LM2. Promote existing guidance for land managers across the County on maximising carbon storage (includes large land owners, T&P Councils, allotment holders, tourist destinations, etc)	Staff time	N/A	N/A	2021		All land is appropriately utilised	Durham County Council
		LM3. Implement an urban street tree replacement scheme including urban fruit trees	Planting time with communities and aftercare, depending on numbers	TBC	Design Stage	2023	A phased planting scheme over 20 years to account for losses, to ensure sustainability and ongoing links to communities	A network of suitable tree species within suitable areas, well managed and cared for by the local community	Durham County Council
		LM4. Promote green infrastructure and green wall schemes alongside reduced mowing regimes and managed urban rewilding through the Planning process	Funded through S106 and Planning conditions	TBC	Advice through the planning process on a case by case basis	Ongoing	New schemes developed and integrated alongside new/existing developments.	A network of sustainable green spaces managed sympathetically, with significant local buy-in.	Durham County Council
	Agriculture	Agr1. Consider how soil conservation, soil regenerative farming, and agro-ecology can be promoted with farmers and landowners	Staff time	TBC	N/A	N/A	Delivered through existing partners, such as NFU	A thriving local agricultural sector supplying food to local markets	Durham Food Group

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
	Sustainable Food	SF1. Support the work of the Durham Food Group	Staff time	N/A	N/A	Ongoing	Increase in the proportion of local food grown and sold in the County		Durham Food Group
Waste reduction, re-use and recycling	**Waste Management**	WM1. Consider the introduction of a food waste collection scheme to households across County Durham.	TBC based on model adopted	TBC	Design Stage	N/A	To keep a watching brief on and respond to the phase 2 consultation regarding the Government's proposal to fund and introduce free, weekly food waste collections to households by 2023.	Food waste, home composting and garden waste is taken out of the waste stream through a combination of home collection and composting	Durham County Council
		WM2. Promote and encourage home composting with carbon management guidance.	A DCC scheme currently operates to offer reduced price compost bins to residents. Additional funding could generate further subsidy or provide free home compost bins to residents.	TBC	Existing Project **<u>Funding Confirmed</u>**	N/A	Continue to offer and promote home composting schemes to residents (Ongoing since 2002 e.g. free, buy one, get one free, half price etc.)		Durham County Council
		WM3. Promote the uptake of garden waste collections to households across County Durham.	TBC	TBC	Existing Project	N/A	Continue to offer and promote the uptake of garden waste collections to residents. Assess detail of new Gov funded		Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
							scheme when detail is released in 2020		
		WM4. Provide information and advice to residents, schools, businesses and community groups in order to facilitate awareness and behavioural change towards sustainable waste management practices	TBC	TBC	Existing Scheme **Funding Confirmed** The Strategic Waste Management Team fund 4 x temporary Recycling Assistant posts from the existing service budget	N/A	Continue to offer free educational advice to all relevant stakeholders regarding the Council's waste and recycling services.		Durham County Council
	Plastics	Plas1. Continue to promote sign ups to the Single Use Plastics Pledge across Durham in order to encourage the reduction of, and seek alternatives to, the use of single use plastics	Staff Time	N/A	Existing Scheme DCC and its partners have produced a bespoke SUP reduction pledge in March 2019. This is part of a wider action plan which is available in order to reduce SUP use [vii]	Ongoing	Continue to raise awareness and seek alternatives to the use of SUPs across County Durham.		Durham County Council

vii www.durham.gov.uk/singleuseplastics

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
	Procurement	Proc1. Sustainable procurement – research and produce guidance on carbon reduction in procurement across all sectors	Staff Time	Not likely to contribute to our targets as most items are procured from outside of the County.	Existing Scheme Further develop existing work	Ongoing			Durham County Council
Advice, Support and Awareness Raising	**Schools**	Sch1. Continue and grow schools work through OASES to include home energy awareness	£20,000 per annum	N/A	Additional to the current Eco2 Smart Schools programme	Ongoing		The community of County Durham has been fully engaged in the climate emergency work that has taken place. Everyone has had the opportunity to contribute their own expertise. People recognise the climate and environmental benefits that have been achieved	OASES; Durham County Council
		Sch 2. Children 4 Climate Change. In collaboration with Durham University OASES are working with schools across County Durham to understand climate science and provide active citizenship opportunities to raise raise awareness in communities through interactive website	TBC	TBC	Existing Project	Ongoing			OASES; Durham County Council
	Communities	Com1. Set up a revolving loan scheme to support carbon reduction projects across the community	£500,000 (also reported under Electricity)	TBC	Design Stage	Ongoing	Residents and communities are fully engaged and have access to resources and expertise to help them reduce emissions		Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		Com2. Large scale programme of awareness, involvement, to support behavioural change, and promote community grants/opportunities. Working with AAPs, Town and Parish Councils and other community organisations	£100,000	Significant indirect carbon savings	Design Stage **<u>Funding Confirmed</u>**	2021			Durham County Council
		Com3. Set up and manage an online interactive website for the climate emergency	Annual staff cost	N/A	Design Stage Will require significant staff time on-going to respond to public input	2020			Durham County Council
		Com4. Include a 'What you can Do' section for individuals in the website	Staff time	N/A	Design Stage	2020			Durham County Council
		Com5. Engage with local, technical expert organisations in order to align research, development and investment priorities	Staff time	N/A	N/A	2020			Durham County Council
		Com6. Work in partnership with public health bodies	Staff time	N/A	N/A	Ongoing			Durham County Council

Priority Area	Project	Project Description	Project Cost (£)	Annual Carbon Saving (tCO_2)	Existing Project / Funding Confirmed / Design Stage	Operational Start	Action to 2030	Outcome for 2050	Who the action lies with
		on shared goals such as active travel and wellbeing							
		Com7. Promote the Environment Awards, in particular the Innovation and Climate Change categories	Staff time	N/A	N/A	Ongoing			Durham County Council
	Research and Innovation	Res1. Engage in multiple joint research projects with Durham University and Energy Institute to actively engage students on our work and add extra research capacity to our work.	Staff time	N/A	Existing Project Student research is generally provided free of charge	Ongoing	Durham continues to lead the way in research and innovation, working with partners to achieve results and share best practice	Durham is a centre of excellence in low carbon research and innovation	Durham University; Durham County Council
		Res2. Work across the region with Local Authority partners and the NELEP in order to develop regional projects and to learn from regional best practice.	Staff time	N/A	Existing Project	Ongoing			NELEP; Durham County Council

1. DCC - Durham County Council

Section 4

Governance

This section looks at how these action plans will be governed.

4 Governance

In the Consultation You Said...

4.0.1 Responses to our consultation repeatedly highlighted that in order to successfully tackle climate change we all need to work together in partnership. Responses to Q28 and Q29 within our Climate Emergency Update Report specifically identified:

- The need to include the education sector in any new partnership structure;
- The need to ensure climate change is not couched within an 'environment' partnership due to its cross-cutting nature. Rather that an independent climate change partnership could be formed which other partnership groups then feed into and report to;
- The need to consider forming a Citizens' Assembly; and
- Overall support for an online climate change resource which provides more information and progress towards targets.

4.0.2 This section sets out how we intend to set up governance processes for both the Countywide and Council Response Plans in response to the consultation. This is a plan for the first two years, and will be reviewed, evaluated and renewed throughout the two year period.

Countywide Response Plan:

Countywide Technical Engagement

4.0.3 Durham County Council needs to continue to work with private and public sector organisations in order to engender good practice and learning across organisations. Durham County Council will contribute to other Climate Emergency Plans, however we will continue to work partners to help meet the overarching targets detailed within the Countywide Action Plan. We will therefore engage with key enabling organisations such as Durham Energy Institute / Durham University, BEIS, NHS, Federation of Small Businesses, Northern PowerGrid, Northumbrian Water, Housing Associations, Northern Gas Networks, The Coal Authority, Environment Agency, Durham Community Action, and major employers.

Countywide Engagement

4.0.4 It is clear from the consultation that people wanted greater engagement and involvement on climate change issues. A review of the County Durham Partnership is currently taking place and it will be essential that climate change is at the heart of future arrangements. This is expected to be completed by Summer 2020 and the Environment Partnership will provide interim governance and direction until then.

4.0.5 Until the revision of the new County Durham Partnership is finalised, it will not be appropriate to create new formal engagement networks or panels, however public engagement will continue in the meantime. Officers are continuing to meet with AAP sub-groups, Town and Parish Councils and key partners in order to take forward the necessary contacts and actions.

Climate Emergency Website

4.0.6 The central element of our engagement across the County will be a new Climate Emergency website where everyone will be invited to sign up to do their bit to tackle the climate emergency. The website will contain updates on progress against our targets as well as information about new projects, achievements, events and opportunities.

4.0.7 Individuals and organisations will be encouraged to share what they are doing to reduce their emissions and there will be an opportunity for them to links up with others to create joint action. There will also be regularly updated guidance for local organisations that declare a climate emergency, a set of actions that individuals can take at home, school and work. The website will also offer the opportunity to calculate your carbon footprint and offset activities via the Carbon Offset Fund, which will be showcased there.

County Durham Climate Pledge

4.0.8 We will develop a pledge that individuals and organisations can sign up for, helping to align and record carbon reduction pledges across the County.

Council Response Plan:

Carbon Management Programme

4.0.9 The Carbon Management Programme has played a central role in our work in reducing carbon emissions over the past ten years. Changes to the Council's structure and in the climate emergency priorities mean that it is now time to review and enhance the membership of the Carbon Board:

4.0.10 In addition to the current membership which includes Environment, Assets, Schools, Resources,Procurement and Project Management, we need to add representatives from Transport, Public Health, IT and others. Quarterly meetings should be held, reporting to senior management.

Climate Champions Network

4.0.11 In order to maximise the opportunity for every member of the Council's staff to be involved we need to develop and expand the Climate Champions Network to ensure that every business group is represented. An additional role should be added to the remit of the network - to review the Council's Response Plan for their own group's areas of work and to report progress, opportunities and blockages on at least a quarterly basis.

Monitoring

4.0.12 The Council's carbon footprint is monitored annually, at the end of each financial year. Figures are published online by the end of the July immediately following the end of the year, so the figures are delayed by approximately three months. The figures are available here: http://www.durham.gov.uk/article/4487.

4.0.13 Day to day, our Low Carbon Economy Team staff monitor utility usage in all of our buildings to ensure that there is no waste, and to find buildings that may benefit from energy efficiency interventions.

4.0.14 The carbon footprint of the whole county is provided by central government and covers each calendar year. The data take longer to compile, as they are far more complex, and are usually released around 18 months after the end of the year. So, figures for County Durham's carbon footprint in 2019 are expected to be available in the summer of 2021. We publish those figures here: http://www.durham.gov.uk/climatechange

Performance Indicators

4.0.15 A new suite of performance indicators will be developed to encompass the full range of services that will be engaged in delivering against the Plan, such as Housing, Schools, Transport, Fleet etc.

Overview and Scrutiny

4.0.16 The Overview and Scrutiny Committee will play a central and proactive role in monitoring and overseeing delivery against both the council and countywide elements of the Plan. They will receive regular progress reports and identify opportunities for further development of the Plan.

Section 5

Asks of Government

This section lists what actions and support we need to receive from National Government in order to achieve our goals.

5 Asks of Government

5.0.1 An important part of the Council's motion to declare a climate emergency was recognising the wider need for Government support, action, and resources and for collective action with other organisations and partners to deliver the target.

5.0.2 There is much that can be achieved by local government and others, however policy and funding levels are still set from central government and can have far reaching consequences for carbon reduction targets. Becoming a carbon neutral county is an enormous task, and one that cannot be achieved without the support of our national government.

5.0.3 We acknowledge that the Conservative Government made a number of pledges and investment promises in relation to fighting climate change in their 2019 manifesto, including for example:

- £9.2 billion in the energy efficiency of homes, schools and hospitals
- £1 billion in completing a fast charging network to ensure that everyone is within 30 miles of a rapid electric vehicle charging station
- £800 million to build carbon capture storage by the mid 2020's
- £640 million new Nature for Climate fund
- £500 million to help energy-intensive industries move to low-carbon techniques
- Support gas for hydrogen production, alongside increasing commitment to renewables.

5.0.4 Therefore, we ask government to deliver on these promises and also act on the following:

General

- Heed the advice contained within the Committee on Climate Change's Net Zero report in relation to how to achieve the net zero emissions target.
- Produce a coherent, stable policy with financial incentives for renewable energy, energy efficiency measures, re-introducing grants that have been withdrawn. Insulation rates in homes are 95% lower than they were in 2012 (source: Committee on Climate Change 2018).
- Include low carbon as one of the priorities in the Shared Prosperity Fund, fully replacing the loss of European funding.
- Continue to strive for international action on climate change and support other countries in their actions.
- Ensure existing environmental commitments are not diluted in any international agreements.

Electricity

- Set out a clear, long term strategy for renewable energy at a local level to enable Councils, businesses and community groups to develop projects with confidence. This should include Planning, project support and financial arrangements.
- Support Direct Network Operators (DNO'S) in facilitating robust upgrading of local electricity networks in order that national EV and Heat pump strategies can be successfully implemented.
- Continue with and further develop support for community and local energy.
- Cease operation of Coal/Oil Power Plants.
- Review immediately the use of Biomass in large scale electricity production as it is seen as counter-productive by most scientists.
- Review Planning guidance for on-shore wind, with controls and safeguards to protect the environment and landscape.
- Fund research and development into new battery storage technologies aiming to avoid the use of precious and rare earth metals such as lithium.

Heat

- Use legislation, financial instruments and regulation to support a transition to new heating technologies.
- Provide upfront financial investment and incentives and appropriate regulatory support for sustainable heating solutions such as minewater and deep geothermal heat which entail high upfront investment for drilling etc.
- Reward innovative cross vector (heat, power and transport) initiatives.
- Update Part L of the Building Regulations, at the earliest opportunity, to require developers to build to zero carbon standards.
- An insulation and fabric first approach is needed to reduce existing domestic heat demand. Grant funding needs to be made available through local authorities to roll out fully funded whole street schemes.
- Provide national advice, support and regulation to require landlords to make improvements to their domestic and commercial properties (require an EPC of minimum C).
- Establish financial support for domestic properties to install energy saving measures.
- Support Gas network operators in their research and development of hydrogen and biogas, as a replacement to the gas network.

Transport

- Increase support for the roll out of EV and ultra low emission transport by supporting both vehicle technology and infrastructure. Utilise or enable other mechanisms to encourage faster take up by the public.
- Further improve and fund new cycling infrastructure.
- Provide support for rapidly rolling out broadband to rural areas to enable a reduction in unnecessary commuting or business travel.
- Accelerate the phasing out of fossil fuel vehicles.
- Make electric vehicle charging infrastructure a regulated asset.

- Address disparities in the funding, provisioning and quality of public transport across the country.

Land Use and Carbon Sequestration

- Protect against unnecessary dredging and develop methods to support the wider take up of 'Blue Carbon' projects.
- Enable large scale woodland and rewilding programmes with appropriate support mechanisms.
- Ensure that any support for agriculture recognises the impacts on climate change and supports the transition to a low carbon industry.
- Allow peatland restoration to be included as part of carbon offsetting targets and increase protection of this valuable carbon storage resource through the planning system, particularly areas of deep peat.
- Introduce incentives for carbon sequestration and a programme of environmental improvements for carbon offset (eg tree planting rates are two thirds lower than they need to be).

Waste and Recycling

- Respond promptly to the Waste and Resources consultation in Spring 2020 on proposals to introduce separate, weekly food waste collections from households and businesses by 2023.
- Use regulations and legislation to require continuous improvements in packaging and a move towards a circular economy.

Other

- Planning requirements and guidance must be focused toward a carbon neutral future.
- Explore ways to improve the Business Rates system to encourage the installation of renewable energy generation measures on business premises.
- Make carbon footprint reporting mandatory for all large organisations across public and private sectors.
- Regulate utility prices to encourage low carbon heating, without increasing fuel poverty.
- Ensure major public sector projects place a high priority on low carbon solutions.
- Place a carbon reduction duty on Ofgem, to prioritise assisting individuals and organisations in lowering their carbon emissions through appropriate energy generation.
- Require a national programme of awareness raising for residents, communities, businesses and public organisations.

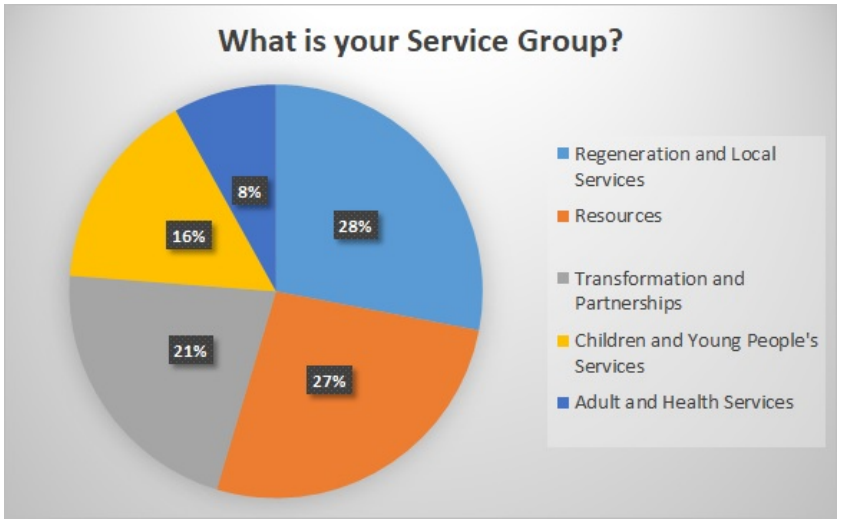
Appendix A

Staff Survey Results

A Staff Survey Results

A.1 A survey was sent to all staff at Durham County Council to find out their views on what we ought to be doing, as well as what their team may be able to do to help.

Figure 5 : Chart showing where our respondents work within the council



A.2 We asked council staff what they felt could be done in their team to tackle climate change. In order of preference ***you said:***

Table 8 : Responses from staff on what their team can contribute

What do you feel can be done within your own team to help with the climate emergency?	%	We Will
Travel: Smarter/flexible working and Travel: Location	27%	We will work with managers and Inspire to encourage less unnecessary travel and more acceptance of digital meetings.
Resource use: Electricity	16%	We will provide guidance on what can be turned off, how, and when.
Resource use: Paper	11%	We will provide guidance on what must be printed and what printing can be avoided.

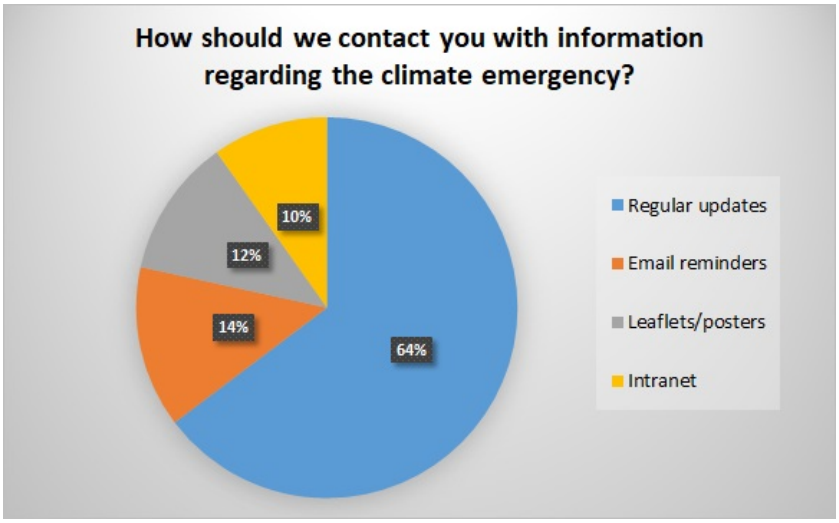
A.3 We also asked council staff how the council can help them reduce carbon emissions in their work. In order of preference ***you said:***

Table 9 : Responses from staff on what support they need from the council

How can the council help you do any of these?	%	We Will
Culture: Staff awareness and training (including upskilling)	10%	We will work with the Inspire team to provide a guide of what can be done to reduce your carbon footprint at work.
Travel: Smarter/flexible working	8%	We will work with managers and Inspire to encourage less unnecessary travel and more acceptance of digital meetings.

How can the council help you do any of these?	%	We Will
Travel: Sustainable modes	5%	Where working remotely is not possible, low carbon alternatives to fossil fuel cars will be offered.

Figure 6 : Staff preferences for how we should contact them with helpful information



A.4 We asked council staff what they felt the could personally do to tackle climate change. In order of preference ***you said:***

Table 10 : Responses from staff on what they personally can do to help

What do you feel you personally can do to help with the climate emergency?	%	We will
Switching off unnecessary lights and equipment	13%	We will provide guidance on what can be turned off, how, and when.
Avoid packaging and single use plastics	11%	We encourage staff to use their own re-usable lidded cups for hot and cold drinks away from their desk.
Reduce, reuse, recycle and compost as much as possible	11%	We will work with the waste and recycling team to ensure knowledge and bins are provided everywhere.
Use less energy for heating by turning down thermostats, wearing warmer clothes, insulating your home/buildings	10%	We will look at installing building management systems where possible which will allow better heating control.
Buy local food and produce and consider the environmental impacts	10%	We will look at reducing the carbon impact of the food we serve at our buildings, including use of local producers and a reduction in meat.

A.5 Some of the other things that staff mentioned they were personally doing to help included:

- Using Ecosia as a search engine (uses revenue from searches to plant trees)

- Using team meetings and everyday conversations with colleagues to raise awareness and spread the word about the climate emergency and the role everyone has to play in improving things
- Campaigning for local and national supermarkets to use alternative packaging
- Setting a good example for their children
- Growing their own vegetables
- Capturing rainwater and reusing it to reduce water consumption

Appendix B

Countywide Consultation Results

B Countywide Consultation Results

B.1 This section provides a review of the countywide consultation responses relating to how to best tackle County Durham's total emissions e.g. those emitted from all of our households, buildings, businesses, organisations and travel activity.

Prioritisation of Objectives

Table 11 : Objectives to be prioritised according to the public survey responses.

Please choose three objectives which you feel should be prioritised across County Durham as a whole:	%	We Will
Improving our natural environment, through projects such as woodland planting, peatland restoration or wildflowers is a priority	52%	We are already investing in our woodlands, peatland and wildflower sites and have identified additional funding of over £1m for additional projects
We need to reduce waste and increase re-use, recycling and composting	50%	The Council are continuing with recycling and composting awareness raising and are investigating food waste collections
Increase in the use of County Durham's natural, renewable energy resources.	44%	The Council are investigating ways in which we can maximise the use of renewable energy technologies on their land and are also investigating the establishment of a community revolving fund that will fund community renewable energy schemes
Make walking, cycling and the use of public transport to be part of the everyday travel culture.	44%	The walking and cycling delivery plan aims to increase the number and usability of cycling and footpaths across the County.
Improve the energy efficiency of buildings	39%	The Council have a programme to improve Council buildings and will support business and residents through a range of measures including the BEEP scheme to improve the efficiency of their homes and business premises.
Increase awareness of what can all do to tackle climate change	26%	The Council are reviewing how they communicate climate change issues and are developing a new climate change communications plan
Ensure County Durham is ready for the switch to electric vehicles	22%	The Council are partners in an Innovate UK project which aims to install over 100 EV charge points in rural areas in the County and are investigating other infrastructural developments
Find ways to lower the impact of the food we produce and eat	17%	We are working with Food Durham to explore opportunities to promote local food
Other	6%	

Do you feel there is anything missing from the countywide actions to tackle the climate emergency and achieve our targets?

Table 12 : What did respondents say is missing from the proposed action plan?

Do you feel there is anything missing from the countywide actions to tackle the climate emergency and achieve our targets?	Frequency
Travel	154
Planning	92
Waste	48
Nature	44
Awareness Raising	37
Other (33 categories <30 responses)	253
Total	628

Travel

B.2 Of the travel related responses over a third (33%) would like improved public transport. Specifically, a more efficient, better quality and affordable public transport system and associated infrastructure in order to provide more incentive over private car use. The introduction of multi-operator bus ticketing was also a popular response. Following improvements to public transport, 14% of respondents would like to see more support for cycling activity and use of E-bikes across County Durham. Suggestions included improving the network and quality of cycle tracks/routes, more dedicated cycle lanes, cycle parking and more use of E-bikes, particularly for last few mile delivery and courier services. The third greatest share of the travel responses (12%) related to ultra low emission vehicles (ULEV) e.g. electric vehicles, hydrogen, LPG and hybrid. Suggestions included grants/ subsidised loans towards the purchasing of ULEV vehicles, roll out of charging infrastructure and for public transport to make the transition to ULEV's.

Planning

B.3 Of the Planning related responses 64% wanted to see more action on Planning influencing low carbon and sustainable development, whereas the remaining 36% wanted certain types of development to be restricted/banned, including new roads, coal mining and out of town retail centres. Within the Submission draft of the County Durham Plan policy 30 includes an ambition that '.... seeks to achieve zero carbon buildings and provide renewable and low carbon energy generation..' it also confirms a commitment to go beyond Part L of the building regulations by 10% for all new major housing developments. However this could be superceeded by the current government consultation which seeks to further improve building regulations[viii]. This makes reference to the fact that should this be adopted, Local Planning Authorities will be unable to set new further energy standards.

viii https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings

Furthermore all new planning applicants need to submit a 'Sustainability Statement' setting down how schemes meet the energy requirements of policy 30. The policy also formalises the design review process for the Building for Life Supplementary Planning Document (SPD), which includes requirements in relation to access to services and facilities and measures in terms of access to public transport.

Waste

B.4 The top waste responses related to:

- Over a third of responses (35%) related to improvements to the householder recycling collection service through the introduction of a UK wide standard recycling scheme and the collection of a greater range of recyclable materials from the kerbside;
- 19% would specifically like to see the introduction of a food waste collection service; and
- 15% would like more information, awareness raising and reminders on what can and can't be recycled, (particularly in relation to plastics), where our waste goes to and more information on how and where to recycle materials not currently collected as part of the kerbside recycling service.

Nature

B.5 The top nature responses related to:

- Over a third of responses (33%) related to more woodland and trees in County Durham. Suggestions included encouraging everyone with a garden to plant at least one tree; providing incentives and initiatives for community tree planting schemes; protection of existing mature trees and proper management of existing woodland;
- 27% would like to see more protection for existing green spaces and wildlife sites; and
- 16% would like to see more rewilding of land within County Durham. Some successful examples of farms that have rewilded around the country whilst also contributing towards rural tourism were provided.

Do you have any further comments regarding how we are looking to tackle the climate emergency and achieve our targets?

B.6 This was an open-ended question and the responses to this question were quite varied. The most popular choices here centred around travel (45; 17%), planning (38; 14%) and increasing awareness (20; 7%). Aligned to this was a need to raise awareness, work in partnership with other organisations, and give residents and businesses more encouragement to take action. A number of responses also highlighted the need for urgent action (18; 6%). These responses stressed the importance of climate change and the need to treat the issue as a priority, the county needs to move swiftly and deliver actions.

What are the good things you feel your business/community group or organisation are doing at the moment to help with the climate emergency?

B.7 This part of the survey was aimed specifically at businesses, organisations and community groups. These responses provided useful insights into how these groups are working to address climate change. They highlighted the importance of partnership working and developing networks to deliver on the targets. They also drew attention to the actions that each are doing within their respective field, covering research, awareness and training as well as increasing recycling, energy improvements and more sustainable transport.

What are the good things you feel you are doing at the moment to help with the climate emergency?

B.8 This question provided a good number of responses (over 1000), with the following being the most popular themes:

- Waste reduction and recycling (268; 24%);
- Travel (259; 24.5%);
- Food (119; 11%) and;
- Energy Efficiency (99; 9%)

B.9 Looking in more detail, recycling and avoiding single use plastics, walking more and driving and flying less and changing diet were the most popular. Improving energy efficiency at home was also a popular choice. Looking at what people could do in the future, the trends were similar. Most people wanted to avoid packaging and single use plastics (79% of respondents), switch off unnecessary equipment (76%), recycling more (72%), using less heat at home (71%). Other popular choices were repairing items rather than buying new (63%), paying more attention to the impact of their food choice (63%) and eating less meat (51%) and driving less/walking more (63%).

B.10 Some of the other things people mentioned they were personally doing to help tackle the climate emergency included:

- Avoiding unnecessary consumption of products i.e. buying less
- Using a green energy provider
- Actively campaigning on climate change / lobbying Government
- Considering buying an electric/hybrid car
- Donating money to appropriate charities
- Taking time to educate myself on the issues
- Growing tree saplings and giving them away

Detailed Responses

B.11 As mentioned in section 1.1 of this document, 10 detailed responses were provided to the questions within the Climate Emergency Update Report and over 40 emails were sent to the designated Climate Emergency email address over the consultation period. The responses and issues raised broadly reflect those provided by the public survey. The following table identifies the most common additional issues/suggestions to those already covered in this section:

Table 13 : Additional responses.

You Said - Additional Issues / Suggestions	We Did
The milestones towards meeting the 2050 Countywide target need to be more ambitious - the earlier we make reductions the better	Please see section 3.2. We have increased our 2020 milestone from a 55% emissions reduction to 60%.
Farming practices and agriculture needs to be more strongly reflected within the countywide response plan	Please see the land management section of the Action Plan section 3.3
Recognition that decarbonising heat and transport are a high priority and especially challenging tasks to deliver	Agreed, please see section 3.3 for actions related to heat and transport
Consideration needs to be given to renewable energy flexibility and battery storage	Agreed. The Council will generally support projects relating to Renewable energy and battery storage, although all projects will still have to satisfy planning regulations
Need to work with landlords to raise energy efficiency standards	The Council has private landlord officers in place and is working with many to both reduce instances of fuel poverty and improve energy efficiency
Support given to further investigation of minewater heating schemes;	The Council is currently doing site investigations for minewater on a site in Stanley and are supporting other potential projects across the County. Minewater heat has significant potential across the Region
Support given for the early completion and forward funding of Local Cycling and Walking Improvement Plans (LCWIP's)	Funding is currently being sought for a range of projects included in the LCWIP's
Introduce Idle free zones, particularly outside of schools	The Council will develop guidance on idling
All schools to have travel plans	The Living Streets Programme are supporting schools to deliver sustainable travel initiatives and plans
Overall support given for an online climate emergency resource	The Council are developing a new Climate Change communications plan, which will include an online resource

Young Person's Engagement

B.12 County Durham's young people were asked the following questions across a variety of engagement sessions:

- What actions should be taken to reduce our carbon footprint?
- What could you do in your school / local community/ at home to support climate emergency action?
- What would be the best ways to reach young people/ how do they get their information?

B.13 The following box provides an overview of the engagement outcomes:

- Young people in County Durham are reasonably well educated in relation to climate change and the climate emergency that faces us.
- Young people are also well versed in many of the relatively simple behaviour changes: switch equipment/ lights off; turn down heating; walk/ cycle more etc
- In addition, they expect to see more change in how energy is generated in the county with lots of responses linked to installing solar panels either at school/ home in the community and investigating different forms of energy production
- Similarly, with transport the expectation that society will move towards electric cars/ buses/ lorries while also highlighting that public transport needs to be better across such a rural county but recognising they can walk/ cycle/ scoot more.
- In terms of the natural environment young people want to see more trees and flowers planted and fewer being cut down and less littering taking place
- The issue of food was raised regularly with young people aware of the climate impact of eating red meat, the move to vegetarianism/ veganism and the benefits of local food. Also eating more cold food at home and school.
- Consumption of resources is regularly highlighted too, looking to reduce and not waste resources; reducing screen time along with better recycling/ composting facilities. The issue of plastic use was raised many times too, probably because it is such a high-profile issue locally and globally at present.
- How climate emergency messages can be shared with young people are changing. Online platforms becoming increasingly popular but perhaps surprisingly more young people receive their information from parents/ family and school. With many still getting information from TV news and newspapers

Consultation Conclusion

B.14 Bringing everything together, the consultation process has highlighted that in order for County Durham to play its part in tacking the climate emergency action on the following will be needed as a minimum:

- Improving the natural environment;
- Waste reduction, re-use and recycling;
- Renewable energy;
- Walking, cycling and public transport;
- Transition to ultra low emission vehicles;
- Farming / Agriculture; and Awareness raising - online platforms will be useful in this regard but a range of communication methods are likely to be required.

B.15 The response plan should also support and facilitate the good things people are already doing and would like to do more of including:

- Partnership working;
- Research;

- Training, influencing others; and
- Taking individual / organisational responsibility for waste/resource use, energy efficiency, modes of travel, diet and local food production/consumption

Appendix C

Important Notes

C Important Notes

A Note about Offsetting and Carbon Neutrality.

C.1 The concept of carbon neutrality means balancing any remaining carbon emissions by mechanisms that capture carbon from the atmosphere such as tree planting, or that prevent other emissions such as by providing renewable electricity to the grid. [ix]

C.2 The Council's own carbon footprint measurements do not include offsetting or sequestration, but these actions may be included in due course in the external calculation of County Durham's carbon footprint. Any offsetting or sequestration works carried out by the council will therefore only count toward the county's carbon reduction figures.

C.3 Notwithstanding this, work will be undertaken to establish the annual carbon footprint of the new headquarters, which will be considerably more energy efficient than Aykley Heads. Steps will be taken to establish the levels of offsetting required to ensure carbon neutrality of this new building which, subject to implementation, will be externally verified. Although we aren't counting off-setting toward the council's targets, we will still carry out off-setting work like this where we can.

C.4 Whilst county emissions have halved since 1990, achieving the other 50% reduction will be a huge challenge, given our continued reliance on fossil fuels for heating and transport. To try to put this into context, offsetting County Durham's 2016 emissions would require carbon savings equivalent to installing solar panels on approximately 2,233 football pitches or planting 5,860 hectares of new broadleaf woodland. Therefore whilst offsetting remains a key element, it cannot be the only method used to achieve our targets.

ix Some forms of carbon sequestration, such as peatland restoration, are not currently counted and are subject to research by Natural England, although some businesses are incorporating this into their carbon offsetting plans (for example, Heathrow and Lancashire Peatlands). This may provide opportunities within County Durham irrespective of them being included in the figures.

Appendix D

Glossary

D Glossary

D.1 The following tables lists the acronyms, notations and terms used in this document:

Table 14 Glossary of acronyms

Acronyms	
AAP	Area Action Partnership
AONB	Area of Outstanding Natural Beauty
BASEE	Boosting Access for SME's to Energy Efficiency
BEIS	Department for Business, Energy and Industrial Strategy
BEEP	Business Energy Efficiency Project
BEMS	Building Energy Management System
DCC	Durham County Council
EPC	Energy Performance Certificate
ERDF	European Regional Development Fund
EV	Electric Vehicle
GNC	Great North Cycleway
HNDU	Heat Networks Delivery Unit
HNIP	Heat Networks Investment Project
IT	Information Technology
IPCC	Intergovernmental Panel on Climate Change
LCWIP	Local Cycling and Walking Infrastructure Plans
LED	Light Emitting Diode
LTP	Local Transport Plan
NELEP	North East Local Enterprise Partnership
OASES	Outdoor and Sustainability Education Specialists
PCT	Propensity to Cycle Tool
PV	Photovoltaics - Solar electricity generation
SME	Small and Medium sized Enterprise
SOSCI	Scaling on Street Charging Infrastructure
SPV	Special Purpose Vehicle
SUP	Single Use Plastic
TBC	To be confirmed
T&P	Town and Parish
ULEV	Ultra Low Emission Vehicle

Table 15 Glossary of notations

Notations	
°C	degrees Celsius.
kWh	Kilowatt hours - unit of energy such as electricity or gas
CO_2	Carbon dioxide

Notations	
CO2	Where it is not possible to change formatting, such as in image files, CO2 may be used in place of CO_2 or CO_2e.
CO_2e	Carbon dioxide equivalent - the amount that has the equivalent climate change contribution as one unit of carbon dioxide, which includes all known climate change gasses as well as CO_2.
CO_2e per kWh or CO_2 per kWh	Carbon Factors - Amount of carbon dioxide equivalent or amount of carbon dioxide that is released into our atmosphere for every unit of energy used.
CH_4	Methane
kg	kilograms
t	tonnes - Unit of mass equal to 1,000kg
kt	kilotonnes, equal to one thousand tonnes
ha	hectares
NOx	Nitrogen Oxides
SOx	Sulphur Oxides

Table 16 Glossary of terms

Terms	
Energy	Word often used to describe electricity and gas and other heat utilities.
Carbon Emissions	A general term for all greenhouse gas emissions, including CH_4 and CO_2 or CO_2e.
Carbon Footprint	Amount of carbon emissions directly associated with the organisation, area, or activity.
Carbon Neutral	Having no CO_2 emissions that are not also compensated for by additional carbon off-setting.
Carbon Off-setting	Additional carbon reduction elsewhere to compensate for the actual emissions associated with the organisation, area, or activity. This could include tree planting, carbon capture, or renewable electricity generation to be used other than by the organisation, area, or activity.
Carbon Reduction	Actual reduction of carbon emissions, which cannot include carbon off-setting.
Minewater	Water that naturally fills the abandoned mines beneath the ground.
Payback period	The amount of time a project takes to generate enough income or savings to off-set its cost.
the Council	Durham County Council
Zero Carbon	Having no CO_2 emissions at all from any aspect of the organisation, area, or activity.