

19 March 2021



**Climate Change Emergency Response
Plan – Year 1 Update**

**Report of Alan Patrickson, Corporate Director of Neighbourhoods
and Climate Change**

Electoral division(s) affected:

Countywide.

Purpose of the Report

- 1 To provide an annual update on progress of the Climate Emergency Response Plan (CERP), including an assessment of the impact of Covid-19 has had on Council and countywide carbon emissions.
- 2 To consider future challenges for new iterations of this plan beyond its initial two-year scope so that the plan can adapt, and progress to meet the long term, Council and countywide targets.

Executive summary

- 3 The Climate Emergency Response Plan adopted by Cabinet in February 2020 is a costed two year plan detailing over 100 projects that the Council with partners need to take towards achieving ambitious targets of reducing Council CO₂ reductions of 80% by 2030 (2008/9 baseline) and countywide of being totally carbon neutral by 2050. It was developed from extensive consultation across Council staff, community groups, residents, and schools.
- 4 Provisional estimates for the Councils carbon emissions during 2020/21 are approximately 43,297 tonnes of carbon dioxide equivalent (tCO₂e), a reduction of 16% compared with last year's 51,787tCO₂e, this is a significant drop with the year average since 2009/10 being 6%. It achieves a reduction against baseline of 59.1% Council activities.
- 5 For all the devastating impact Covid -19 has brought, it has undoubtedly had a positive impact on these Council emission figures, and its influence felt within weeks of the CERP being agreed. The "stay at

home” lockdowns for many office based staff meant reduced usage of buildings, as well as reduced business travel and fleet. The temporary closure of some services such as leisure centres, also has meant that building energy has reduced, but as these building still need to be maintained, not eliminated entirely.

- 6 Provisional estimates across the Council estate, reveal a 20% reduction in electricity from buildings, a 14% reduction in gas for heating and a 6% reduction in fleet and transportation (which may have been more if not for the cold winter). Whilst these reductions are of course very welcome, it is unlikely that these full benefits will remain, as they are associated with low occupancy buildings. Going forward however there is opportunity to build on this, for example increased levels of working from home, even when normal conditions arise.
- 7 Continued implementation of the projects Climate Emergency Response Plan will be crucial if the momentum gained from these short term benefits are to be sustained. The report confirms that the vast majority of actions against Council targets have been able to be implemented, for instance LED lighting has been installed in 9 further buildings, 27 charge points have been installed in anticipation of a growing fleet of electric vehicles and a projects ranging from the new headquarters (including rooftop solar panels), boiler replacements, and installation of ground source heat pumps. The Council has also during the year moved its electricity tariff to that based on 100% renewables.
- 8 What is even more encouraging is that the Council has been successful during the year with a number of key funding bids to support its reductions. For example we have recently been successful in a £5 million European Regional Development Fund bid towards a solar farm adjacent Morrison Busty Depot which alongside building energy efficiency measures , such as insulation, will transform an aged facility to one which will be energy self-sufficient, including eventually powering a fleet of front-line vehicles.
- 9 Covid-19 will also undoubtedly have had an impact on the countywide emissions too, but the nationally published figures have a two year time lag, so that the broad impact can only be speculated. Increased home working, coupled with a cold winter, will have increased carbon emissions for heating. Emissions relating to transport and industry will however have reduced, the International Energy Agency estimate that overall a decrease of 5.5% in global energy demand with 6.5% reduction in CO2 emissions. It is not certain if this will be reflected in County Durham figures.

- 10 Work has been undertaken on the ground with a number of countywide initiatives, and the majority of actions in the CERP have continued to progress. This has included a scheme commencing on over 100 community electric charge points across the county, continued support for businesses with 97 business audits and grants to reduce carbon emissions carried out, and the programme of tree planting continuing, for instance through the Urban Tree Challenge Fund (21,000 trees over 70 location). Progress has also been made in securing external grants, for instance, £1.8 million awarded for retrofit works to domestic properties in Chilton and Dean Bank.
- 11 During the last year the Council has received several accolades for its work in combatting climate change, including Climate Change Initiative of the Year through Association of Public Service Excellence (APSE) and Durham City being identified as UK's Greenest City by Solar Cities Campaign. These are not a cause for complacency however, as much more work needs to be done in achieving the challenging targets. It is also recognised that future iterations of this plan need to consider the opportunities for development of a green economy, to consider how already disadvantaged groups are not disproportionately impacted, and what the Council and partners can do more in adapting to some of the inevitable consequences of climate change.
- 12 As the current costed Emergency Response Plan covers the period to April 2023, it is suggested that during the course of this year a further report is presented detailing the ambitions and measures that would take the Council to 2025, just five years away from a time when and a Council target of 80% reductions will be required.

Recommendation(s)

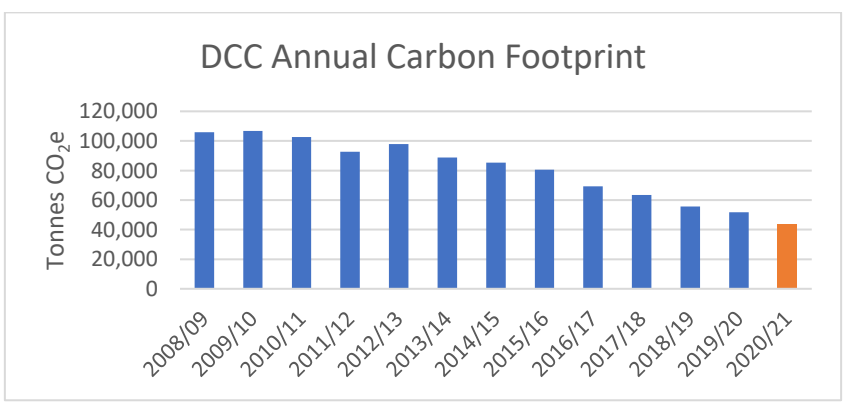
- 13 Environment and Sustainable Communities Overview and Scrutiny Committee is recommended to:
 - (a) Note the progress made against delivering the first year of the Climate Change Emergency Response Plan, as well as the forecast drop in Council emissions, magnified by the influence of COVID -19 across the estate and comment accordingly.
 - (b) Receive a further update report in 2021/22 on the progress made against delivering the actions of the Climate Emergency Response Plan.

Background

- 14 On 20 February 2019 the County Council declared a Climate Change Emergency and set ambitious targets to reduce its own carbon emissions by 60% by 2030 (from a 2008/9 baseline) and to investigate what further actions are necessary to make County Durham carbon neutral by 2050 (from a 1990 baseline). In February 2020, given the strong performance to date the Council target was raised to 80% reduction, however a reduction of this scale is extremely challenging.
- 15 The County Durham Climate Emergency Response Plan (CERP) is a two year (2020-22) £66 million action plan adopted by Cabinet in February 2020. It was developed as an inclusive plan from extensive consultation (over 1,000 respondents) and builds on the considerable work to date on energy reduction both from the Council and countywide with partners.
- 16 Within weeks of Cabinet approving the Plan, the country was in its first national lockdown arising from the Covid -19 pandemic and clearly this has had a dramatic impact, not just on the plan itself, but of course on carbon emissions both from the Council estate and countywide.
- 17 The CERP had over 100 specific actions over the two years. The remainder of this report summarises not only the progress made against these actions, but also estimates the impact of covid-19. Suggestions are also made as to issues and opportunities that will need to be incorporated into future plans.

Council Progress and Carbon Emissions

- 18 The provisional estimates and forecasts for the year end 2020/21 show remarkable reductions from last year's 51,787 tonnes carbon dioxide equivalent (tCO₂e) to approximately 43,297CO₂e a fall of a 8,490 tCO₂e in 2020/21. Whilst these are forecast only, they will certainly exceed (more than double) last years reduction which was 3,806 tCO₂e.



- 19 Much if this performance is attributable to the impact of Covid-19 which closed a number of Council facilities (such as leisure centres during lockdown), reduced occupancy in buildings, especially offices, reduced fleet and transportation, as well as personal business miles on travel.
- 20 Energy assessments across buildings taken from April to January, show a 20% reduction in electricity use. Gas reductions have also been evidenced, of approximately 14%, and comparisons based around “degree days” temperature methodology reveal this would have been greater if it not had been the relatively cold winter this year compared to the year before. Caution clearly needs to be exercised relating to the extent that these reductions can be sustained, and of course, some of the emissions may have been transferred to a domestic environment for those who worked from home. Nevertheless opportunity exists in future plans to adopts some of the practices gained from Covid-19 to reduce emissions.
- 21 The CERP contained Council 28 actions and progress against each is detailed in Appendix 2. The majority of projects and actions have been unaffected and summary, performance is detailed below:

Impacts	Council Actions
Actions with significant delays	0
Actions with delays	5
Actions unimpacted	20
Actions complete	3
Actions no longer required	0

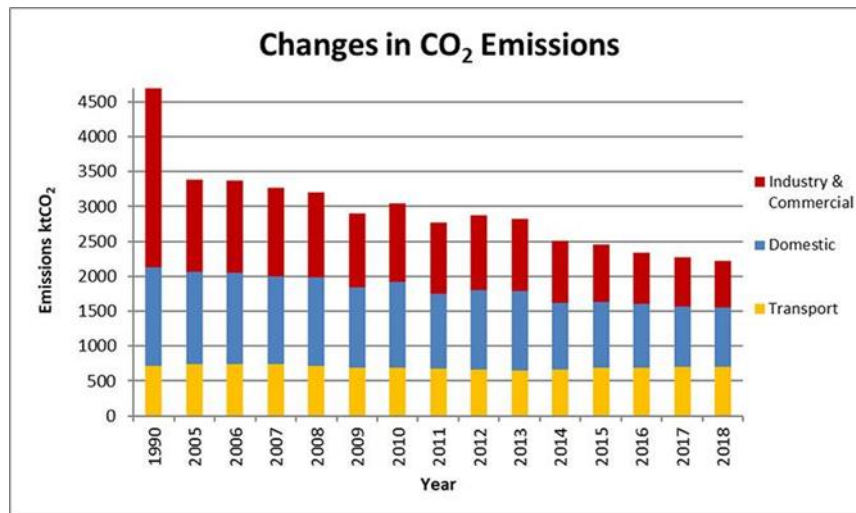
- 22 From the 5 temporarily delayed projects 4 were directly attributable to Covid and include the school LED lighting project which was hampered by access, the streetlighting LED scheme related supply chain issues, the pool cars (26 electric vehicles) as the need could not be justified at the present time, and the replacement gas boilers programme which slipped due to wider demands on the building and facilities maintenance team. The good news however is that all 4 can be progressed during 2021/22. One of the schemes that slipped, is the Louisa Minewater Heat scheme, which was dependent on Government Renewable Heat Incentive (RHI) to match against ERDF funding. The Government announced a phase out of the RHI funding and the potential grant provision shared none of the innate risks. The positive however is that the scheme is progressed to a point where alternative funding bids can be made (including most recently to Salix as part of the Government Decarbonisation of heat programme).

- 23 Progress on actions to reduce emissions from electricity has been generally good. Sites to install further Solar PV have been identified as well as a site for a potential wind turbine, whilst the existing solar panels continue to outperform expectations. LED lighting has been installed in over 9 DCC buildings in 2020 and a list of a further 20 buildings have been identified and surveyed as being suitable. Two schools have had LED lighting installed through 0% loans from the nationally run public sector SALIX scheme. The ECO2 Smart Schools programme is continuing despite lockdown disruption with a pilot of 'Energy Sparks' data portal with selected schools. All of the Councils electricity is now purchased from a supplier providing 100% renewable electricity.
- 24 Regarding both electricity and heat carbon reductions, the Zero Carbon Depot project at Annfield Plain was submitted to ERDF was successful with the award of £5 million (to be supported by an additional £3 million Council invest to Save Capital) This will now pave the way for a 3MW solar farm, battery storage, charging posts and energy efficiency upgrades to the Council depot offices. Once operational the solar farm is intended to meet all existing and future energy requirements, including the expanding fleet of electric vehicles. CO₂ savings are projected to be nearly 600t per year.
- 25 Regarding heat , work on a new strategic building energy management system (BEMS) has begun, which will mean a significant improvement in the control of energy and reduce the need to travel. A new Air Source Heat Pump has been installed at the Annfield Plain Waste Transfer Station to replace an existing oil system. Currently efficiency and reliability are being analysed.
- 26 Regarding transport, whilst the work on the pool cars has not progressed, to pave the way for a significant expansion 27 charge points have now been installed at strategic sites across the county. Furthermore all new vehicles are subject to a business case to explore the replacement with electric vehicles across various Council services and those replaced during 2021/22 will include a number of electric vehicles. The Council has also trailed and now ordered a fully electric refuse collection vehicle, which will be available from Summer 2021. Finally, business travel has significantly reduced as a result of the Covid-19 pandemic and whilst it will increase again when normal conditions arise, there is opportunity to build in the best of the recent practices, that avoid travel unless essential.
- 27 The CERP has also been flexible and opportunistic, for example making funding bids when opportunity arises. The Council for instance submitted to Highways England £2.28 million which would have

purchased 50 electric vehicles, for business use “try before you buy” but returned to the Council after 2 years. Unfortunately Highways England paused nationally on the scheme. In October 2020 the Government released £1 billion worth of funding to help decarbonise the public sector estate. The Low Carbon Economy team working alongside a cross section of services developed a long list of projects that potentially fitted the strict criteria (to be heat focused and deliverable by Sept 2021). Working alongside teams and services, a shortlist of seven projects has been applied for and we are currently awaiting the outcome of these applications.

Countywide Progress and Emissions

- 28 The latest figures for Countywide emissions, have a two year delay, consequently the latest figures are for 2018. By the end of 2018 the County’s emissions were 52.6% lower than in the baseline year of 1990, showing continued progress.



- 29 Without the figures for 2020 the impact of covid-19 is less clear. Increased home working, coupled with a cold winter, will have increased carbon emissions for heating. Emissions relating to transport and industry will however have reduced, the International Energy Agency estimate that overall a decrease of 5.5% in global energy demand with 6.5% reduction in CO₂ emissions. It is not certain if this will be reflected in County Durham figures, although with both the industry and transport carbon contribution taking nearly two thirds, it is highly likely that they will be suppressed more than the domestic sector increases.
- 30 If the anticipated reductions in carbon emissions do arise, caution needs to be exercised regarding if they can be sustained. Back in 2008-09, after the global financial crash, carbon emissions rose by 5% as a result of stimulus spending that boosted fossil fuel use. Clearly there is an opportunity for a more sustainable recovery.

- 31 CERP identified 85 actions for the Council and Partners that would benefit Countywide emissions rather than being linked solely to the Council estate. Just as with the Council actions, significant progress has again been made, as illustrated in the summary below, and detailed in **Appendix 3**.

Impacts	Countywide Actions
Actions with significant delays	3
Actions with delays	19
Actions unimpacted	58
Actions complete	1
Actions no longer required	4

- 32 One of the schemes not progressed was ERDF applications for solid wall insulation. The Housing Solutions team have however worked with the North East LEP and have had £1.8 million bid successful for energy efficiency retrofit projects in Chilton and Dean Bank. A further bid for £3.8m has also been submitted.
- 33 Another scheme not progressed was the minewater heat project in Horden. Elsewhere, the prospect of utilising minewater heat continues, for example Seaham Garden Village which has a national focus, being potentially the first development of its scale in the UK to be heated by minewater. This will make the development carbon neutral for heating and ensure residents and business have low cost affordable low carbon heat.
- 34 Support for community renewable energy schemes is ongoing through and a community loan scheme will be established in 2021/22. Work is ongoing with partners including, Durham University, Northern PowerGrid (NPG) and Energy Catapults, to undertake research and development.
- 35 Regarding electricity, opportunities for a solar farm and battery storage facility at Netpark are being assessed alongside other options for Solar Car Ports on park and ride sites. New electric points will be installed in Durham Market Place before April, allowing market traders to use direct electricity instead of diesel generators.
- 36 The Business Energy Efficiency Project (BEEP) continues to progress despite Covid restrictions and during the last year provided support for 97 businesses, with a total value of 292,000 for projects that emerged, and grant funding of 67,000. The work carried out utilising these grants will save 435 tonnes of CO₂ emissions.

- 37 There have been a number of Government funding packages released at short notice with challenging timescales for delivery. A further bid for £3.8m has also been submitted. Further work is ongoing to install Air Source Heat Pumps (ASHPs) in off gas communities (43 thus far). Support and advice is also ongoing to residents across the County on Smart Meters and the Managing Money Better Programme.
- 38 Regarding heat, funding from the Department Business, Energy and Industrial Strategy (BEIS), £100,000 has been secured to develop the business case for a town centre (Riverside area) district heating scheme, potentially based on utilising heat from the River Wear or Barkers Haugh Sewerage Treatment works.
- 39 For transport the first three Local Cycling and Walking Infrastructure Plans (LCWIPs) will be complete by January 2021. Further funding is being sought to develop LCWIPs for the remaining 9 main towns. The Park that Bike scheme to deliver 300 stands and 6 secure bike stores will commence in January 2021. Furthermore, a new private e-cargo service is now operating in Durham City in co-operation with the marketplace and various SME's.
- 40 The Durham City bus station is on track to be delivered, whilst the Real Time Passenger Information system will be replaced in a regional project by December 2021. Funding for A177 bus lanes has been secured, however Covid continues to be a major threat to the viability of services. Further work ongoing investigating land acquisition at Stonebridge and for an extension for Sniperley Park and Rides as well as an options appraisal for the deployment of electric busses.
- 41 Contract 2 of the superfast broadband programme is currently ongoing. Delivery under the contract, which includes coverage to other areas in the North East, is expected to be completed by Q1 21/22.
- 42 Much of the work in relation to carbon offsetting through improvements to the natural environment has continued unabated. The Councils work on tree planting is the subject of a separate report, but in summary includes the completion of the Urban Tree Challenge Fund (21,000 trees or whips over 70 sites), continued progress with the Woodland Renewal project (which aims to plant 60 hectares), as well as a bid submission to be part of the North East Community Forest.
- 43 Peatlands are a major carbon sink, and their international loss, represents a serious climate change concern. Working with the North Pennines Area of Outstanding Natural Beauty over 600 hectares of peatland in County Durham are being restored this winter, on sites ranging from Kilhope, Eggleston and Holwick moors. CERP Funding has been utilised at Valance Lodge Ridge for restoration, including the

reintroduction of sphagnum and cotton grass to seed the restored habitat.

- 44 The Council is working with the North Pennines AONB to identify sites and negotiate with landowners to undertake peatland code verification to create opportunities for carbon credit off-setting with businesses. The Raby Estate is undertaking a carbon auditing exercise of its land assets as a result of the discussions in this project so that when a suitable peatland site is made ready, investment will be sought from County Durham businesses wishing to off-set their residual CO2. Such a project would be the first of its kind in England.
- 45 A regional Blue Carbon/Marine Habitat Restoration Group has formed. Currently this includes Environment Agency, Natural England, the Tees Rivers Trust and the council, bringing together current activity and sharing knowledge, experience and skills. There are a small number of pilot projects underway.
- 46 Schools educational work through Eco2Smart Schools was curtailed in March 2020, with staff moving onto furlough. New arrangements for the new school year are in place and activities are progressing, together with new home energy awareness schemes. Children 4 Climate Change, in collaboration with Durham University and OASES are working with schools across County Durham to understand climate science and provide active citizenship opportunities to raise awareness in communities through interactive website.
- 47 The development of a specific website and branding for the Climate Emergency in County Durham will be developed over the next few months. In addition, there is a programme of communications and engagement activities being developed which will look at internal and external audiences.

Key Post-Covid Influences and New Iterations of the Plan

- 48 During the last year the Council has received a number of accolades for its work. This includes Climate Change Initiative of the Year through Association of Public Service Excellence (APSE) and Durham City being identified as UKs Greenest City by Solar Cities Campaign. The Council has also been commended by the national food growing charity Sustain, for having one of the only action plans in the UK that recognised food as a significant contributor to the challenges of carbon reduction. Clearly none of this should be a cause for complacency and there is a continued need to modify and adapt the plan.
- 49 Covid -19 may have given a short-term benefit for reduction in carbon emissions but there is a clear need to build on this and for sustainability to be built into the recovery. The UK president of COP26 and

Government Business Secretary Alok Sharma MP has called on governments around the world to submit enhanced climate action plans and to put clean technologies at the heart of their post-coronavirus economic recovery strategies. They suggested that more emphasis, and ambition is needed towards the following measures as part of the recovery:

- Green Deals;
- Green transition in industry;
- Investment in clean technologies and innovation;
- Raising ambition on renewable energy;
- Importance of nature-based solutions;
- Adaptation to avoid future shocks.

50 The briefing comes after the UK Committee on Climate Change¹ called for low carbon and resilient policies to be put in place to build a green and sustainable recovery. The UK CCC highlighted the following five core measures:

- Investments in low-carbon and climate-resilient infrastructure;
- Supporting reskilling, retraining and research for a net-zero, well-adapted economy;
- Upgrades to our homes ensuring they are fit for the future;
- Making it easy for people to walk, cycle, and work remotely;
- Tree planting, peatland restoration, green spaces and other green infrastructure.

51 Considering these and other national drivers, as well as local needs the priorities emerging going forward will therefore consider more emphasis on:

- *New Green Deal*; working with the business community in creating new carbon-based jobs market;
- *Adaptation*; Council responses needing more work (community resilience to extreme weather, align to initiatives by Health and Wellbeing board to assist the vulnerable in dealing with Covid);
- *More focus on the concept of achieving a Just Transition*; that climate change activity must support and not hinder people in moving forward in terms of accessing green energy, EV's and wider power sharing;

¹ <https://www.theccc.org.uk/wp-content/uploads/2020/05/CCC-to-Prime-Minister-Boris-Johnson-Covid-19-recovery-002.pdf>

- Carbon budgeting – exploring use of this to ensure all policy and practices achieve carbon savings through service delivery (making integrating carbon normal practice)
- *Governance*; embedding the mechanisms for stakeholder and community engagement as outlined to Cabinet at its February meeting. This also extends to fostering new partnerships, and continuing the awareness raising and collaborative work with our communities. A copy of that report can be found at **appendix 4**.

52 It is suggested that a new plan be written during 2021 and submitted for approval that will continue the progress made, and build in the above issues, as well as any others that emerge during the year.

Conclusion

- 53 Despite Covid, considerable progress has been made on implementation of the Climate Change Emergency Response Plan. Conversely, Covid has had a significant impact on temporarily magnifying the reduction in Council emissions, more than would normally be anticipated, and the same is anticipated for County figures when they become available.
- 54 There is opportunity now to build on this success and ensure a sustainable recovery, making full use of any national climate change initiatives, and continue to forge innovative partnerships in delivering for the communities of County Durham

Background papers

- Full Council 20 February 2019 Climate Change Emergency Declaration
- Full Council 17 July 2019 Climate Change Emergency Update Report
- Cabinet 12 February 2020 Climate Emergency Response Plan

Other useful documents

- County Durham Climate Change Strategy and Delivery Plan (2015-20)
- Durham County Council Carbon Management Plan (2015-20)
- Committee on Climate Change Net Zero: The UK's contribution to stopping global warming

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Appendix 1: Implications

Legal Implications

The Climate Change Act 2008 established a UK commitment to reduce greenhouse gas emissions by 80% by 2050 from 1990 levels and the Paris Agreement (to which the UK is a signatory) which aims to keep the increase in global average temperature to well below 2oC above preindustrial levels; and to limit the increase to 1.5o C to prevent dangerous climate change. On 12 June Government announced plans to legislate to revise the Climate Change Act and adopt a target of net zero carbon emissions by 2050 which is now in law.

Finance

A wide range of projects are described in this scheme. They fall broadly into a mix of overlapping categories:

- (a) invest to save projects where capital funding is available for schemes (such as LED lighting or more efficient boilers) and the cost is paid back over a period of time, not typically exceeding twelve years, however this report suggests that a more flexible approach (such as longer payback periods) should be considered;
- (b) partnership funded schemes, where external finance supports Council costs in delivery. Examples in this report includes European Regional Development Funding (supporting potential schemes at the Louisa Centre for Minewater and zero carbon plans at Morrison Busty Depot) or Heritage Lottery Fund that support the Woodland Revival Project; The Public Sector Decarbonisation scheme;
- (c) Core Council investment.

Consultation

Consultation on the CERP was undertaken in 2019.

Equality and Diversity / Public Sector Equality Duty

None identified.

Climate Change

This is a key issue addressed throughout the report.

Human Rights

None identified.

Crime and Disorder

None identified.

Staffing

Climate Change is now a key responsibility for all staff as its now included in Job Descriptions.

Accommodation

Considerable progress has been made in introducing renewable energy (solar panels) across Council buildings and depots as well as making offices more energy efficient.

Risk

Key risks to achieving the targets are identified in the Appendix 2 report and include Government support and policy, resources and the greater challenge posed for carbon reductions in rural areas such as County Durham.

Procurement

There are major opportunities through procurement to influence carbon reductions. This may be in public transport contracts or purchase of fleet and equipment. The role of procurement is detailed in the Appendix 2 report.

**Appendix 2: Climate Change Emergency Response
Action Plan 2020/1 and 2021/22**

Attached.

Appendix 3: Countywide Progress Table

Attached.