

Environment Sustainable Communities Overview and Scrutiny Committee

22 July 2022

Update on the Climate Emergency Response Plan 2022-24



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

Electoral division(s) affected:

All

Purpose of the Report

- 1 To provide the second and final annual update on progress of the Council's first Climate Emergency Response Plan (CERP1).
- 2 To present to Environment Overview and Scrutiny Committee the subsequent second Climate Emergency Response Plan for the period 2022-24 (CERP2 which can be found at appendix 2).
- 3 To note the introduction of new targets in CERP2, adopted recently at Cabinet:
 - (a) achieve net zero by 2030 by retaining the CERP1 80% actual carbon reduction target for Council emissions by 2030 whilst offsetting or further reducing remaining emissions;
 - (b) net zero by 2045 for countywide emissions (improved from 2050).

Executive summary

- 4 Following the declaration of a climate emergency, Cabinet required the production of a Climate Emergency Response Plan, which was adopted in February 2020. Also referred to as CERP1, this was a costed two year plan which set out over 100 projects that the Council, with partners, would need to take towards achieving ambitious targets of reducing Council CO₂ reductions of 80% by 2030 (2008/9 baseline) and for meeting the countywide target of being totally carbon neutral by 2050. It was developed from extensive consultation across Council staff, stakeholders, community groups, residents, and schools.

- 5 The declaration and subsequent Climate Emergency Response Plan (CERP1) required a report to be produced every year detailing the actions that are being undertaken to achieve our targets and setting at its expiry a further two-year programme of action.
- 6 Whilst the Covid pandemic had a key influence during the CERP1, significant progress was nevertheless made for instance with low carbon solutions to Abbey Leisure Centre and £8m Annfield Plain Zero Carbon Depot project commenced. Furthermore, countywide work with partners continued, for instance, the planting of 44,000 trees during 2021/22 and On Street Charging Initiative (SOSCI) project has installed 153 EV charge points sockets. Projects such as these have contributed to 58% Council reduction in tCO₂e from 2008/9 and countywide a 54% reduction (2019) in tCO₂e from 1990 levels.
- 7 This second Action Plan, CERP2, is for the period 2022-2024 is fully costed and funding identified for the agreed programmes of work, including external sources, where appropriate. MTFP12 made provision for investment in the Low Carbon Team, mainstreaming the funding of the team and significant capital investments in low carbon schemes. This, allied with earmarked reserves held, is sufficient to cover initiatives or provide match funding set out in the CERP2 Plan up to 2024.
- 8 To achieve the climate change targets set out in CERP2 in their entirety, it will require a combination of access to external funding and also advances in technology in some areas. Without these the Council will not be able to achieve its targets.
- 9 It is recognised that the actions outside of those contained in the CERP2 action plan and actions / interventions beyond 2024 will be heavily dependent on access to funding. Given national strategies aimed at achieving net zero by 2050, this is a reasonable assumption, however it cannot be guaranteed, especially from the perspective of the current financial climate.
- 10 In this climate of tight resources, it is essential that our work at both a Council level and as a countywide influencer, is targeted to those areas where the biggest impact can be had. Future work and investment to achieve our ambitions in this area will therefore be built in to established Council processes including the annual MTFP planning cycle where capital and revenue expenditure will be considered alongside the needs of other service projects and programmes. Resources will be allocated to maximise the benefits from the those available. Additionally, external funding will be sought wherever possible to supplement Council budgets. These opportunities will need to be subject to financial assessment, including the development of the appropriate business cases and affordability tests.

Recommendation(s)

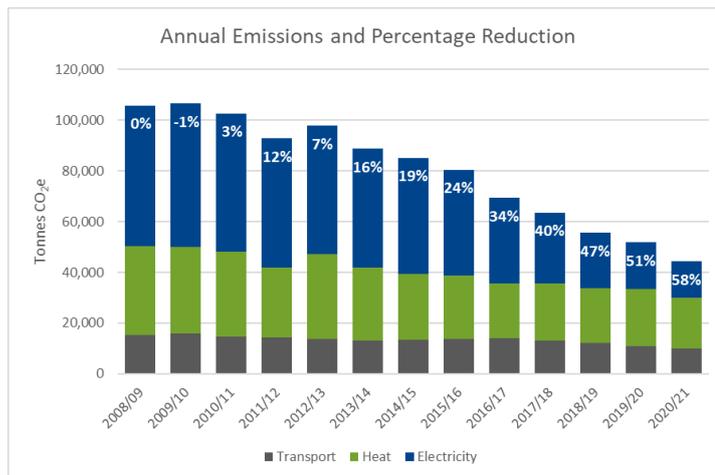
- 11 Environment and Sustainable Communities Overview and Scrutiny Committee is recommended to:
- (a) note progress against CERP1 projects which have helped to achieving 58% Council reduction in tCO₂e from 2008/9 and countywide a 54% reduction (2019) in tCO₂e from 1990 levels;
 - (b) Continue to monitor the delivery of the CERP2 action plan with further updates included in the 2022/2023 work programme.

BACKGROUND

CERP1 Update

Council Emissions

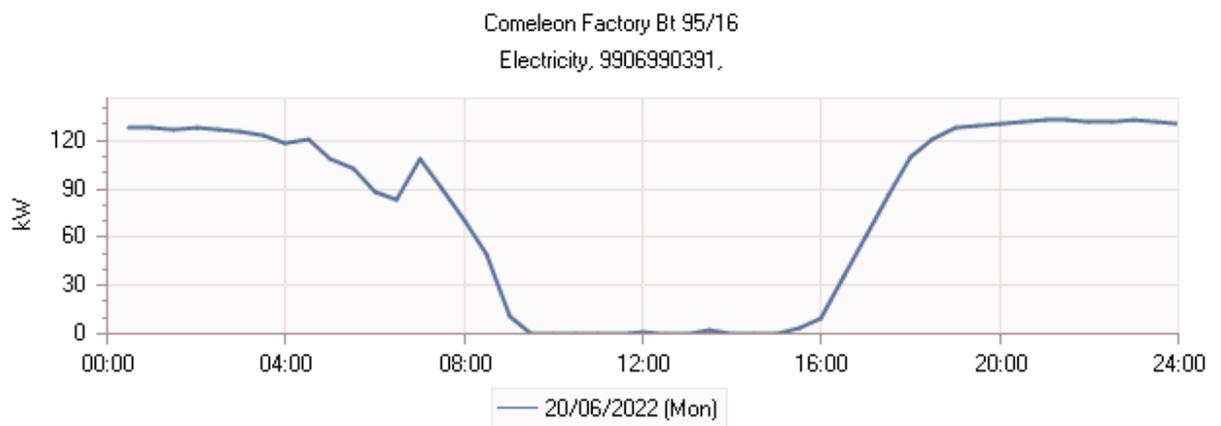
- 12 The Council's carbon emissions during 2020/21 were 44,319 tonnes of carbon dioxide equivalent (tCO_{2e}), marking a reduction of 58% compared with the baseline year of 2008/9. The graph below shows this as a year-on-year progression with the figures for each year being separated into the priority areas of electricity, heat, and transport.



Graph 1: Council Emissions for Period 2009 - 2021

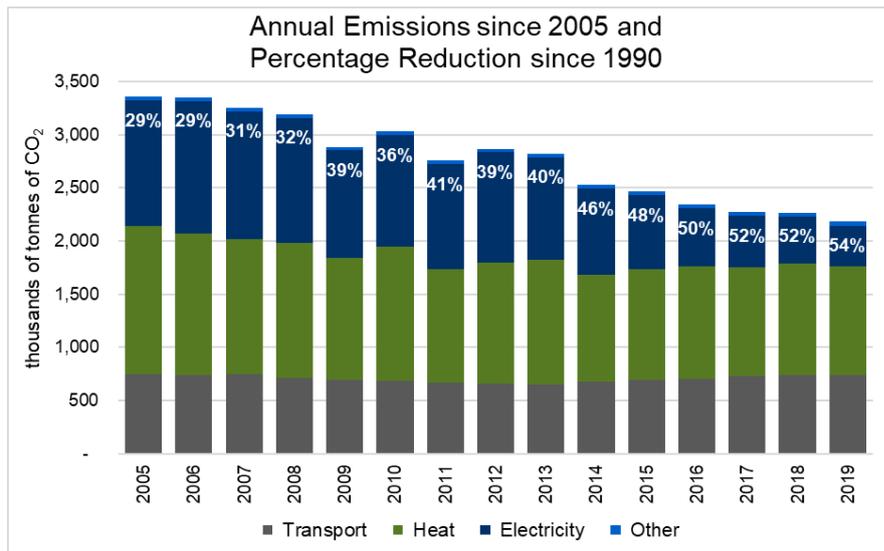
- 13 We are currently calculating emissions for 2021/22. We do envisage there being a slight increase in emissions compared to 2020/21. We are currently estimating about a 57% reduction compared to 2008/09, however these are just provisional figures. This 1% increase is in relation to a higher than usual reduction due to the national lockdown in 2020/21 and increased energy use in 2021/22 due to ventilation requirements. We are aiming for a 65% reduction by the 2022/23.
- 14 The Council continues to report Scope 1 & 2 emissions (Direct emissions from using gas, oil or petrol and indirect emissions from electricity). Some Scope 3 emissions we also calculate, like business travel, but much of this is beyond the control of the Local Authority. Further information can be found on the Council's website and in the first CERP, however we are actively investigating ways in which to more proactively measure Scope 3 emissions, through procurement and new software, which could give an estimation of the total carbon footprint of DCC.
- 15 We are currently unable to calculate emissions associated with staff journeys to work as this data is not currently available and the work to calculate this would be hugely significant.

- 16 Emissions associated with the data centre is also difficult to quantify. Our solar farm provides much of the power to the data centre but it does not power the whole building, particularly overnight and on overcast days.
- 17 After the solar farm came online the site used ~400,000 kWh less in a year, but still used ~970,000 kWh of electricity. Not all this will be data centre electricity demand but much of it will be.
- 18 The graph below shows the impact that the solar farm has had on electricity use and thus emissions will also be significantly reduced. There is however an opportunity to add further renewables and batteries to the site to further reduce demand from the grid.



Countywide Emissions

- 19 In relation to countywide emissions, the latest available carbon footprint figures are for the year 2019. The baseline year for these emissions is 1990, in keeping with the Government’s measurement period for national targets. The chart below shows how the county’s carbon footprint has been in decline since 2005 and gives the reduction in each year as a percentage from the 1990 baseline.



Graph 2: Countywide Emissions for period 2005 – 2019

- 20 In 2019, 47% of the county’s carbon footprint came from heat, 33% from transport, and 18% from electricity. The carbon footprint of the county as a whole is much larger than that of the Council as it incorporates everything that happens within the county with the exception of traffic passing through on the A1 motorway, trains on the East Coast Mainline and large industrial sites.
- 21 As we proceed towards a re-opening of services and buildings, after Covid, the continued implementation of the projects within the next iteration of the CERP and its newly identified projects, will be crucial if the momentum gained is to be sustained.
- 22 Because 2021 was a less windy year and because a number of nuclear power stations went offline, there is likely to be an increase in the carbon factor for national grid supplied electricity, which may slow improvement.
- 23 Some particular highlights against Council actions in CERP1 include:
- (a) decarbonisation scheme at Abbey Leisure Centre with replacement of gas with air source heat pumps and solar panels, funded in part through government grant;
 - (b) £492,000 secured to improve the energy efficiency of Meadowfield Depot;
 - (c) £114,000 secured to replace oil heating with an air source heat pump aligned to solar power at Woodland School, Teesdale;
 - (d) the £8 million Annfield Plain Zero Carbon Depot project is continuing at pace, and is due for completion in July 2022;

- (e) the procurement team is leading the way in embedding social value and wider environmental concerns into major procurements.

24 Some particular highlights against countywide targets include:

- (a) the Scaling On Street Charging Initiative (SOSCI) project has installed 153 EV charge points sockets, 10 of which are rapid charge, the other 143 being 7-22 kWh fast charging, in towns, libraries, leisure centres and community centres;
- (b) the County Durham fuel poverty partnership has enabled residents in County Durham to have the 4th highest uptake of energy efficiency grants nationally, working with landlords to improve quality and energy efficiency of buildings and supporting low carbon retrofit for off-gas homes;
- (c) Seaham Garden Village development proposals for using minewater heating are now being worked up at an inception phase.
- (d) the Low;Carbon Economy Team has supported over 400 SMEs with energy efficiency advice and grants since 2016 and continues to do so through its Business Energy Efficiency (BEEP) project;
- (e) the County Durham Food Partnership (Food Durham) has achieved national recognition with a bronze Sustainable Food Places award;
- (f) 16,000 hectares of blanket bog have been restored in County Durham, avoiding 192,000 tonnes of carbon from being emitted each year.

25 In 2020 the CERP1 won the national Association for Public Sector Excellence (APSE) award in its Best Climate Initiative category. It was also commended by the national sustainable food charity, SUSTAIN, for the inclusion of actions relating to food and agriculture and was a finalist in the 2021 LGC awards.

26 In 2022 the SOSCI project won the award for best EV project at the national MJ Awards

27 Whilst the actions in the CERP have provided real and substantial carbon reductions, public concern and pressure for climate action has increased against the background of extreme weather events and the UK presidency of COP26 in Glasgow in November focussed even more attention on climate change.

28 As part of its local contribution to the COP 26 event, the Council convened a County Durham meeting of Partners, held on 1 November and attended by nearly 70 chief execs and senior decision makers. Over 40 partner organisations signed a Partnership Agreement (below) with further signatories added since then. The Agreement aims to develop a stronger, cross sectoral net zero partnership for the County over the coming years. It states:

'We agree to work together as a partnership of organisations across County Durham to tackle climate change.'

29 The County Durham Environment and Climate Change Partnership is also assisting with the delivery of the CERP and has a Climate Emergency sub group which helps to focus on strategic issues and projects across partners.

CERP2 and Climate Change Strategy

30 As the successor to the original CERP, CERP2 (appended to the report at appendix 2) has further developed both Council and community-based actions to take forward the carbon reduction commitments over the period of 2022-25, including the production of a high-level strategy containing overarching themes in which to frame the actions. CERP2 reviews the progress made since 2020 and highlights current emissions against our stated targets. The emphasis is on actions that we, as a partnership of organisations, communities, and business, need to take going forward as presented under ten thematic areas within four overarching principles.

31 The four principles are:

- A Fair and Just Transition;
- Achieving a Green Recovery;
- Being Community and People Centred;
- Applying Nature Based Solutions.

32 In relation to 'Nature Based Solutions', it is recognised that the county's natural environment has a vital role to play in tackling climate change and key measures to help address the ecological emergency are included within the Natural Environment chapter.

33 The ten chapter themes of the document are:

- Heat Decarbonisation;

- New Development;
- Transport and Connectivity;
- Electricity;
- Business and Skills;
- Procurement and Waste;
- Land and Sustainable Food Production;
- Natural Environment;
- Adaptation;
- Engagement, Education and Behavioural Change.

- 34 Each chapter contains a summary page, which details the actions that the Council and other partners are planning or carrying out to help the county become carbon neutral by 2045. The chapters then include a section on how the Council is taking the issue forward, an Actions and Partnerships section which describes the actions and collaborations that are planned for this CERP period (2022 – 2024), and finally an ‘Ask of Government’ section, which summarises the actions that we need the government to drive forward. The document also includes a table of actions across all the themes.
- 35 The investment associated with the 127 climate change related actions, across the CERP2 period and with partners are estimated to be over £121 million. There is significant uncertainty in this figure as many of the projects are in design stage and some may not be developed. Full carbon emission reductions associated with actions are still being calculated and will be added into the CERP when known.
- 36 Some projects included within CERP2 (not in CERP1) include:
- (a) Heat Decarbonisation of DCC Buildings - £5 million over 2 years supported by significant bids for government grants;
 - (b) NetPark Phase 3 – Design includes no connection to gas network and consideration of solar PV farm;
 - (c) new DCC Council Housing – Being delivered to Future Homes Standard;
 - (d) improvement of EV infrastructure at Park and Ride sites and further roll out of EV charging County-wide;

- (e) development of a business case for solar car ports across the public sector estate;
- (f) embed sustainability into major procurement exercises through the Themes, Outcomes and Measures (TOMS) methodology;
- (g) explore the impact of school food waste, including those that have collections and those that don't. Through auditing, connect with the 'Lets Go Zero' 2030 campaign through existing school programmes;
- (h) elimination of peat-based tree/shrub compost through use of recycled soil conditioner, contributing towards reducing emissions from the destruction of peatlands;
- (i) the Community Sustainable Drainage (SuDS) Innovation Accelerator is a multi-partner project, led by Durham County Council, exploring how SuDS can be used as a mechanism to create more resilient, greener urban spaces which are shaped by their residents;
- (j) work with BEIS, Northern PowerGrid and the Regional Energy Hub on Heat Zoning and Local Area Energy Planning (LAEP). A LAEP can provide sound foundations for effective and sustained local action to cut carbon emissions. The resulting plan can potentially underpin specific proposals to upgrade local energy networks to enable decarbonisation plans, including for example increased EV charging, district heating or to accelerate the move away from gas/oil heating;
- (k) introduction of Climate Change training for all Council staff;
- (l) investigating the extension of minewater heating to Horden and other suitable locations;
- (m) work to integrate the newly declared Ecological Emergency into the CERP.

37 Although climate change mitigation is detailed throughout the CERP, adaptation to a changing climate is a new topic area in the Plan. Successful partnerships already exist in relation to flood mitigation and it is anticipated that these would continue and grow. The importance of ensuring resilient communities and infrastructure is vital, especially in the aftermath of Storm Arwen, when rural communities lost power for weeks.

38 Projects relating to both Council and countywide actions require significant resource investment across the Council, especially those

dealing with heat decarbonisation. There is now a growing acknowledgement that it is in everyone's interests and responsibility to achieve the agreed targets. Increased funding for teams/projects that deal with climate related projects, such as Housing Solutions, Transport, etc. as well the Low Carbon Team, is one practical way to help reach targets. Working together is also essential to avoid duplication and to ensure quick and easy wins.

- 39 The Council will also continue to prepare building feasibility reports to support funding applications and work with partners to pursue Government and other external funding opportunities. On-going progress reporting and member support will also come through the Environment Overview and Scrutiny Committee which plays an overarching review role in the CERP process.

Finance and resources

- 40 Whilst it is recognised that there are potentially significant costs involved in delivering upon objectives, DCC will take a proactive approach to financial planning to ensure that ambitions can be met along with other responsibilities of the Council. There are significant opportunities to create substantial cost savings from projects within the CERP, especially given energy price volatility seen over the past year, which is not expected to smooth out anytime soon. This demonstrates tackling carbon emissions is not just environmentally sound practice but that cost savings can be found from energy efficiency and energy generation projects.
- 41 The Council previously committed £3 million in funding over two years 2020 – 2022 and further commitments have now been confirmed:
- capital allocation for buildings decarbonisation (£2.5m a year and targeting government grants);
 - fleet replacement with EV alternatives;
 - retention of staff on temporary posts made permanent (£194k total cost);
 - £1 million revolving loan fund to enable on-going energy retrofits for SMEs;
 - £600,000 loan scheme for community and other public buildings;
 - additional £150,000 grant scheme for community buildings;

- increase in installation of solar on council buildings and land.
- 42 Net Zero is a priority from Central Government, following COP26 in Glasgow and it is recognised that Government and local government cannot achieve these ambitions alone. As such there are opportunities to benefit from Government funding, including for example Public Sector Decarbonisation Funding (PSDS), for which we have had four successful projects funded and delivered through the first two rounds. We have also been successful in applying for £5.6 million of funding from round 3 of PSDS for decarbonisation projects including five leisure centres following a huge increase in survey work and applications and are working up significant bids for future PSDS rounds as well as other funding and investment opportunities, such as the Shared Prosperity Fund and Levelling Up.

Background papers

Other useful documents

- DCC's Climate Emergency Response Plan.

Author(s)

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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 2°C above preindustrial levels; and to limit the increase to 1.5°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

Previous funding committed £3 million over two years and further new commitments have been agreed as part of the MTFP, including:

- Capital allocation for buildings decarbonisation (£5 million over two years);
- Feet replacement with EV alternatives;
- Retention of staff on temporary posts made permanent (£194k total cost);
- £1 million revolving loan fund for to enable on-going energy retrofits to SMEs;
- £600,000 revolving loan fund for community buildings and a £150,000 grant scheme.

The costs associated with climate change related actions across the CERP2 period and across partners are estimated to be over £121 million. There is some uncertainty in this figure as many of the projects are in design stage and some may not get developed at all. Future work and investment to achieve our ambitions in this area will be built in to established Council processes including the annual MTFP planning cycle where capital and revenue expenditure will be considered alongside the needs of other service projects and programmes.

Likewise detailed estimates of carbon emissions reduction associated with actions are yet to be calculated but will be added into the CERP when known.

It should be noted that with rising energy prices the business case to deploying renewable energy for direct supply to Council facilities gets stronger; and the intention is to utilise Invest to Save funds where criteria are met.

Consultation

This forms part of the Climate Emergency Response Plan, which was widely consulted on in 2019.

Equality and Diversity / Public Sector Equality Duty

Climate Change will disproportionately affect the poorest populations. This CERP2 seeks to address that through reducing DCC's carbon emissions and working with partners to tackle issues including fuel poverty.

Climate Change

This plan is an integral part of the Authority's Climate Emergency Response.

Human Rights

The right to life is threatened by Climate Change.

Crime and Disorder

No direct implications.

Staffing

The delivery of the CERP has implications for all staff not just those from the LCE team; for example CCS and Buildings & Facilities Management all have significant roles to play in making sure projects can get delivered.

Accommodation

Some projects will result in operational/plant down time, however this will be managed appropriately

Risk

The risk of adverse effects of not acting is expected to be greater than the risk of financial loss through immediate action.

Procurement

Contractors, which could include B&FM will need to be appointed through competitive tender to undertake the work

Appendix 2 Climate Emergency Response Plan -- under separate cover
