

Place and Resources Scrutiny Committee

14 November 2024

Natural Environment, Climate and Ecology: Progress Report – Autumn/Winter 2024

For Review and Consultation

Portfolio Holder: Cllr Nick Ireland, Leader, Cabinet Member for Governance, Performance, Communications, Environment, Climate Change and Safeguarding

Local Councillor(s): County Wide

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Report Status: Public

Brief Summary:

Delivery of our programme has continued to demonstrate our commitment to a net zero, nature positive and resilient Dorset. This report is the second of our biannual progress reports for 2024. It provides a quantitative overview of progress on our emissions trajectory and performance against our current emissions targets.

Recommendation:

To review progress made on the emissions targets of the natural environment, climate and ecology strategy during 2023/24.

Reason for Recommendation:

In line with the recommendation of the Scrutiny Committee on 12 May 2021 that the Committee would provide oversight against progress and delivery of the strategy and action plan via six monthly progress reports.

1. Background and context

- 1.1 Since refreshing our strategy in early 2023, delivery of our programme has continued to demonstrate our commitment to a net zero, nature positive and resilient Dorset.
- 1.2 To maintain transparency, we report biannually in two ways:
- Spring/Summer reporting: qualitative narrative on delivery within our operational and facilitation programmes – i.e. our interventions.
 - Autumn/Winter reporting: quantitative reporting on the consequent changes to our council and county emissions trajectory – i.e. on the outcomes.
- 1.3 This report is the second of our biannual reports for 2024. It provides a quantitative overview of our emissions trajectory and how it compares to our target trajectories, for both the council's emissions and Dorset's area-wide emissions. It does not provide a qualitative description of programme delivery, which is the subject of our July reporting.¹
- 1.4 **Carbon emissions** – Appendix A to this report provides further detail on the progress of our emissions trajectories, both as a council and for the wider county. Appendix B also provides a prototype dashboard which details some further qualitative indicators of progress related to the programme – which will be refined and finalised following feedback.
- 1.5 **Nature** – A broad overview of the state of nature for the county was provided in the previous report based on available County wide data. It was highlighted at the time that the development of a Dorset Local Nature Recovery Strategy (LNRS) would provide a more appropriate consideration of nature in Dorset. This work is currently underway and the local nature recovery strategy will include % cover of Dorset by some of the key semi-natural habitat types: woodland, grassland, heathland, wetland, and coastal. This data will come from a 2018 land cover map produced for Dorset using local data, expertise and some satellite imagery. A key part of the strategy will be the maps of areas where there is opportunity to deliver nature recovery. Further details will be provided in future reports.

¹ Previous progress reports are available here: [What's happened so far - Dorset Council](#).

- 1.6 It is hoped that public consultation on the LNRS will start in February 2025, following pre-consultation approvals by Dorset Council, BCP and Natural England. This will include consideration by Place and Resources Overview Committee on 30th January 2025.
- 1.7 The [Nature Recovery Dorset network](#) was launched in late August 2024. This already has 174 members from a wide variety of sectors, who are all helping make space for nature across the county. In addition (at the time of writing) 78 landowners who want to help deliver nature recovery in the county have put their land forward to be included in the [High Opportunity Nature Areas](#) map as part of the strategy.
- 1.8 Nature Based Solutions also have a critical role to play in both sequestering carbon emissions and managing the impacts of climate change. It is noted in the progress report, Appendix A, that the council is unlikely to be able to reduce all its operational carbon emissions to zero and will need to find ways to remove residual emissions to meet its net-zero targets. Facilitating nature-based solutions on our own assets is one way the council could sequester residual carbon emissions, while also supporting nature recovery. Currently, we do not know the scale of likely residual emissions or the opportunity for nature-based solutions on our estate. An exercise is currently underway which will establish a baseline and highlight potential opportunities. This is complemented by the utilisation of an innovative nature tool which can be used to identify a range of eco-system service benefits that could result from nature-based interventions on our estate. This would include for example the potential for carbon sequestration. Once established, this will be reported in future reports.
- 1.9 **Resilience** – Whilst this report foregrounds climate mitigation through action to tackle our greenhouse gas emissions, action on climate adaptation will attain an increasingly important role in our future programme. A Climate Resilience Officer has now been appointed to the team; and they are currently finalising an initial early-stage operational climate vulnerability assessment; working as part of a national Defra pilot on adaptation reporting; and developing templates and methods towards kickstarting engagement for a county-wide assessment and strategy. These are being supported by the recent launch by the Met Office of its new Local Authority Climate Service. Presently there is no meaningful quantitative reporting we can provide under the climate

resilience/adaptation strand as this work remains embryonic, but in future reporting we will aim to incorporate repeatable quantitative climate resilience reporting elements such as climate forecasts or updated risk analyses, for a single integrated climate mitigation and adaptation report.

2. 2023/24 carbon emissions reduction progress (Council Operational)

- 2.1. As noted, the council's operational programme covers the reduction of carbon emissions from six key areas: electricity and fossil fuels used in our buildings, electricity used by Dorset streetlights, fuel used by our fleet vehicles, staff travel from business and commuting, the Dorset Travel service, and highways materials.
- 2.2. Overall progress has been good in most areas and all show significant reductions since the base year of 2019/20. Most notably emissions from buildings have reduced by 42%, office waste by 66% and streetlighting by 37%. Although we expected many areas to bounce back after the steep reductions caused by the pandemic, emissions have risen more slowly than anticipated and none have returned to pre-COVID levels. This is due largely to changes in working patterns and the success of measures such as building retrofit.
- 2.3. Over the last year there has been little year on year improvement for total operational carbon emissions, which have only reduced slightly to 27% since the previous year. Comparatively, the council's direct emissions have seen a 32% saving compared to the baseline year; these are known as scope 1 and scope 2 emissions and consist of our fleet, buildings and streetlighting electricity usage. The council defined an emissions trajectory to achieve its first milestone target of 40% reduction by 2025, this anticipated a 32% reduction by this time. This represents a significant challenge, especially with indirect emissions, but also masks some changes which have had a marked effect on emissions this year these include –
 - Changes to the national conversion factors related to electricity which have increased electricity emissions by 5% for streetlighting and buildings. This has resulted in streetlighting emission being up 3% since 2023.
 - Staff travel both for business (up 7.1%) and commuting (up 19.9%). These likely reflect an increase in staff travel as staff continue to return to offices and increased in-person meeting. These figures are also affected by improvements in measurement and recording. A workplace travel plan is currently in development, which looks to address this growth by encouraging modal shift and the use of less emitting vehicles, such as the electric pool fleet.

- Highways materials emissions are the largest area of increase (up 23.6%). This is directly related to a significant increase in road maintenance activity funded through DfT in 2023/24. This increase is outside the council's control, has a knock-on effect on fleet emissions and masks the work which is underway to reduce emissions in this area through activities such as innovative hot box, low embedded emission materials, waste reduction and materials re-use. Additional metrics are being investigated to offer a more granular view of progress.
- 2.4 It should be noted that all the areas directly under the council's control have seen emissions decrease in line with the anticipated trajectory.

3. 2022 carbon emissions reduction progress (County-wide/Facilitation)

- 3.1. As noted, the council's facilitation programme covers the reduction of greenhouse gas emissions for the wider Dorset Council administrative area towards meeting our county-wide targets. We monitor this using government's data for a nationally consistent and comparable dataset, covering carbon dioxide, nitrous oxide and methane. Owing to a two-year lag in this data, the latest available year of data is 2022.
- 3.2. Emissions in the year to 2022 reduced by just over 5% nationally, despite a continuing increase in post-lockdown transport emissions. This is believed to be linked to warmer temperatures in 2022 reducing heating demand, as well as potentially the impact of energy price inflation near the end of the year. In the year to 2022, Dorset's area-wide emissions reduced by 5.55% (from 2,365 to 2,233 ktCO_{2e}). This compares to a 5.51% reduction in England and 4.9% in the South West.
- 3.3. As detailed further in Appendix A, Dorset's area-wide net emissions footprint in 2022 is therefore now 2,233.8 ktCO_{2e}. For comparison, Dorset's per capita emissions in 2022 were 5.8 tCO_{2e} (which compares to 5.1 in England and 5.2 in the South West) or 0.9 ktCO_{2e} per km² (which compares to 2.2 in England and 1.2 in the South West).
- 3.4. Our county footprint is comprised of agriculture (33.3%), transport (29.2%), homes (20.4%), commercial and industrial buildings (11.7%), waste (3.5%) and public sector buildings (1.9%). Additionally, around 7.5% of our gross emissions are sequestered by nature. Most sources saw reductions over the year to 2022 – with the largest in the commercial and domestic sectors. Two (industrial and public sector) increased locally,

but as both are at relatively much lower levels than other sectors locally, this did little to counteract the aggregate downward trend.

- 3.5. Over the medium-term, compared to our 2017 baseline, Dorset's area-wide emissions had reduced by 13.2% by 2022 (from 2,575 to 2,233 ktCO_{2e}). This compares to a 14.7% reduction in England and 14.4% in the South West. As such, our county-wide reductions slightly lag the regional and national averages over the medium and long-term, but as noted above they exceeded regional and national performance over the year to 2022.
- 3.6. Following the post-COVID rebound in 2021, we remain off our target trajectory. Positively, in 2022 our actual emissions trajectory began going back in the right direction, and fell to levels below that seen in lockdown. It does, however, still need to accelerate to get back on course for our 2025 target to be hit. We project that if emissions continued to reduce on the current trajectory out to 2025 that they would have reduced by 28.5% by that date (relative to our baseline year), thereby falling short of our 36% target.
- 3.7. We have achieved much over the year, however as we proceed our trajectory will likely get more difficult – and it will take significant effort to get our trajectories back on target. Achieving this will require (a) increasing the pace and scale of our activity; (b) delivering 'smarter' by giving greater definition to our pathways and targets; and (c) strengthening our facilitation work by working more closely with our communities.
- 3.8. Previous scrutiny meetings have noted that whilst narrative commentary is welcome, there is difficulty in appraising progress with only quantitative emissions data and a more granular view of emission areas would be helpful. Accordingly, appended (Appendix B) is a prototype dashboard of other quantitative indicators which aim to complement the high-level emissions data. We welcome the committee's feedback on this before it is finalised.
- 3.9. Over the course of the year, we have undertaken several operational deep dives with internal teams to develop a more detailed programme to meet our interim operational targets for 2030. This has highlighted several areas for further exploration, development and costing and a number of detailed studies are currently underway to identify opportunities, these include development of heat decarbonisation plans for over 150 buildings and solar studies for another 49 potential installations on our buildings. Once a

more detailed programme of work is finalised this will be included in future reports. Areas being explored include -

- Transition of additional fleet vehicles to EV
- Use of alternative fuels for larger fleet vehicles while technology transitions
- Additional electric pool cars to reduce business travel emissions
- Additional EV infrastructure on council sites to support fleet transition
- LED programme for all remain buildings with older lighting
- Switching any remaining oil heated buildings to electric heat pumps
- Expand programme of building energy efficiency retrofit
- Install additional Solar PV on council buildings
- Nature-based solutions to sequester residual emissions

3.10. At a county wide scale, several of our emerging new strategies and plans will be critical to defining emissions reduction pathways and nature recovery for Dorset. For this reason, the next few years of the programme will benefit considerably from the development of our Strategic Asset Management Plan, council Travel Plan, new Local Plan, Local Transport Plan, Local Nature Recovery Strategy, Economy Strategy, Housing Strategy and Local Area Energy Plan.

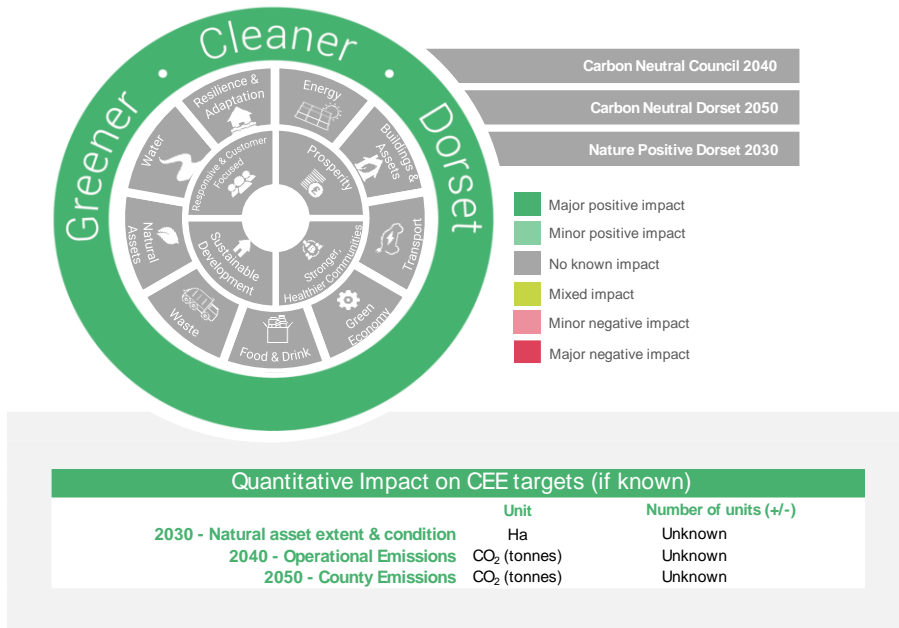
4. Financial Implications

4.1. This report itself has no financial implications. The council supports progress across the various workstreams through a £10 million five-year capital programme, running from 2022/23 to 2026/27. So far, £3.5 million has been spent on emission reducing projects, £4 million has already been allocated for this year, and over £2.5 million is planned to be spent to support programmes by 2026/27. This has been supplemented by over £24m of external funding.

4.2. As noted above, work is underway to develop a detailed work programme to deliver the next interim target of 70% reduction in carbon emissions by 2030. Once defined, a costed programme will be included in future reports.

4.3. It will be crucial that we continue our success in accessing further resources from a variety of external sources through competitive grant funding and partnership working – and we need to ensure we are opportunity-ready with the evidence and resources to win funding competitions.

5. Natural Environment, Climate & Ecology Implications



6. Well-being and Health Implications

6.1. There are no specific health and wellbeing implications of this report. However, from a strategic perspective, implementation of the strategy and action plan has significant co-benefits for health and wellbeing, and climate change impacts include significant socio-economic and health and wellbeing risks. Our emerging work on adaptation is considering how to mitigate the impacts of now unavoidable warming.

7. Other implications

7.1. There are no other specific implications contained in this report. As previously noted, the strategy and action plan itself has wide ranging implications, opportunities, and benefits for the way the council delivers services and works with others across the county.

8. Risk Assessment

8.1. Having considered the risks associated with this decision; the level of risk has been identified as:

Current Risk: High
Residual Risk: Medium

8.2. Due to the known high level of public interest in climate change and the previous commitment to provide a bi-annual progress report, to not do should be considered a high reputational risk to Dorset Council.

- 8.3. The publication of this report is in line with commitments made and shows a significant level of progress; but notes that there remains a need for increased urgency and further progress.
- 8.4. In addition, the impacts of climate change pose a significant risk to council services and budgets and the wider Dorset area in the medium and long-term. Failure to effectively address the climate and ecological emergency and resilience will increase the risks associated with climate change.

9. Equalities Impact Assessment

- 9.1. The IPCC and Climate Change Committee have highlighted the disproportionate impact of climate change on vulnerable people. These impacts are still being investigated at an international and national level, but a more Dorset-specific scoping exercise is being undertaken to highlight localised impacts that need to be considered.

10. Sign-off

This report has been through the internal report clearance process and has been signed off by the Director for Legal and Democratic (Monitoring Officer), the Executive Director for Corporate Development (Section 151 Officer) and the appropriate Portfolio Holder(s).

11. Appendices

- Appendix A – Progress Report – Autumn/Winter 2024
- Appendix B – Prototype dashboard