

Place and Resources Scrutiny Committee

9 November 2023

Natural Environment, Climate and Ecology Progress Report, Autumn/Winter 2023

For Review and Consultation

Portfolio Holder: Cllr R Bryan, Highways, Travel and Environment

Local Councillor(s): n/a

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Report Status: Public

Brief Summary:

- 1.1 Dorset Council's first climate and ecology strategy and action plan were adopted by Full Council on 15 July 2021. '*Protecting our natural environment, climate and ecology*' has since been included as a priority within the Council Plan, and in March this year we also refreshed our strategy and action plan for phase 2 of our programme.¹
- 1.2 Upon the adoption of the first strategy in 2021, it was agreed that we would produce biannual progress reports, to be presented to this committee. This progress reporting² takes two forms:
 - Spring/Summer reporting: qualitative narrative on delivery within our operational and facilitation programmes – i.e., on our interventions we undertake.

¹ <https://www.dorsetcouncil.gov.uk/our-plan>

² <https://www.dorsetcouncil.gov.uk/progress-so-far>

- Autumn/Winter reporting: quantitative reporting on the consequent changes to our council and county emissions trajectory – i.e., on the outcomes.

1.3 Following our qualitative report presented in July this year, this paper provides an update on our emissions trajectory using the latest data.

Recommendation:

To review progress made in reducing our emissions as a county and a council, in order to stay on our emissions trajectory to net zero.

Reason for Recommendation:

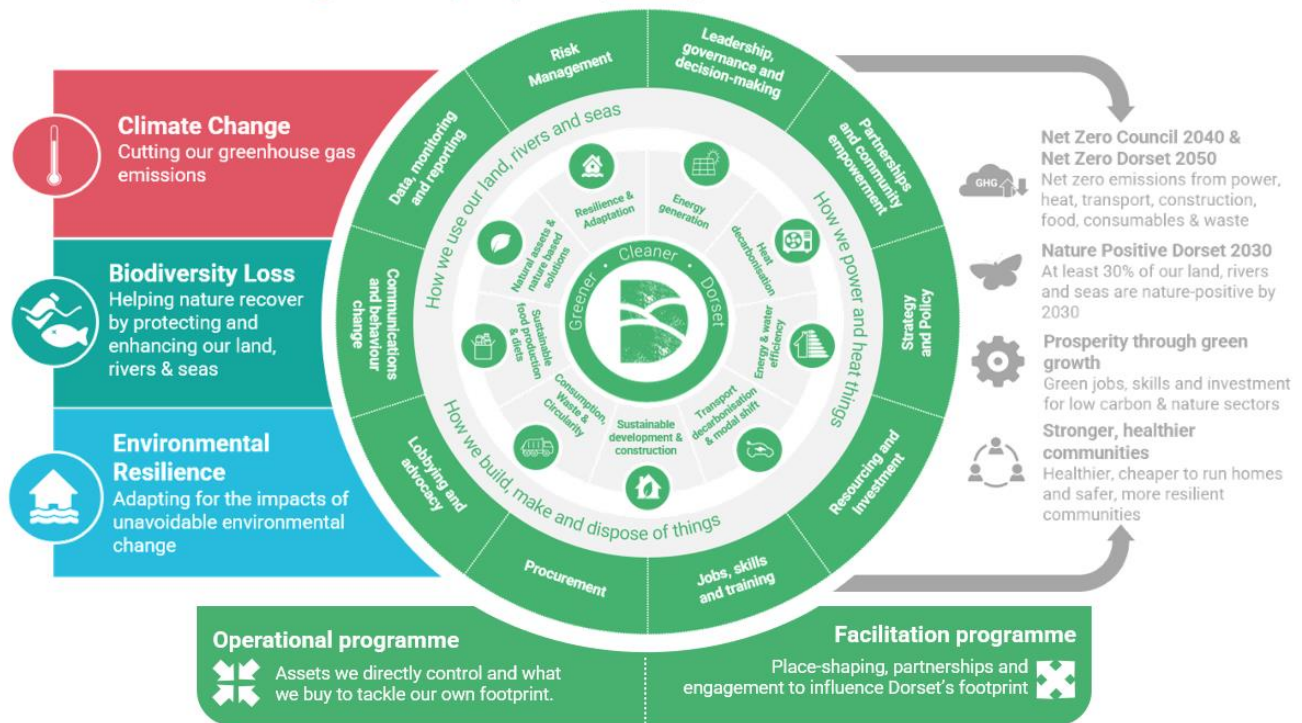
In line with the recommendation of the scrutiny committee on 12 May 2021 that the committee would provide oversight on progress against the strategy via bi-annual progress reports.

2. Background

2.1 Dorset Council's first climate and ecology strategy and action plan was adopted by Full Council on 15 July 2021, setting clear targets towards a carbon neutral council by 2040 and a carbon neutral county by 2050. Projects were then set into motion, officers recruited (including a new corporate director), governance established, and significant capital resource dedicated to delivery. As part of the Dorset Council Plan, the council also made '*Protecting our natural environment, climate and ecology*' one of our five council priorities. In March this year we also refreshed our strategy and action plan for phase 2 of our programme, tweaking our vision for a net zero, nature positive and resilient council and county.³

³ <https://www.dorsetcouncil.gov.uk/our-plan>

Our vision is for a **carbon neutral, nature positive and resilient Dorset** achieved through a **clean, green and fair transition** and that generates prosperous, stronger and healthier communities.



2.2 Upon the adoption of the first strategy in 2021, it was agreed that we would produce biannual progress reports, to be presented to this committee. This progress reporting⁴ takes two forms:

- Spring/Summer reporting: qualitative narrative on delivery within our operational and facilitation programmes – i.e., on our interventions we undertake.
- Autumn/Winter reporting: quantitative reporting on the consequent changes to our council and county emissions trajectory – i.e., on the outcomes.

Distinguishing the reporting in this way allows us to both monitor our effort and then aggregate the effectiveness of our actions. This also means that we can both acknowledge the significant levels of delivery being undertaken, whilst also measuring the extent to which that activity is sufficient for keeping us within our carbon budget.

2.3 This paper provides an update on our emissions trajectory using the latest data. As such, it does not provide a comprehensive or detailed narrative of

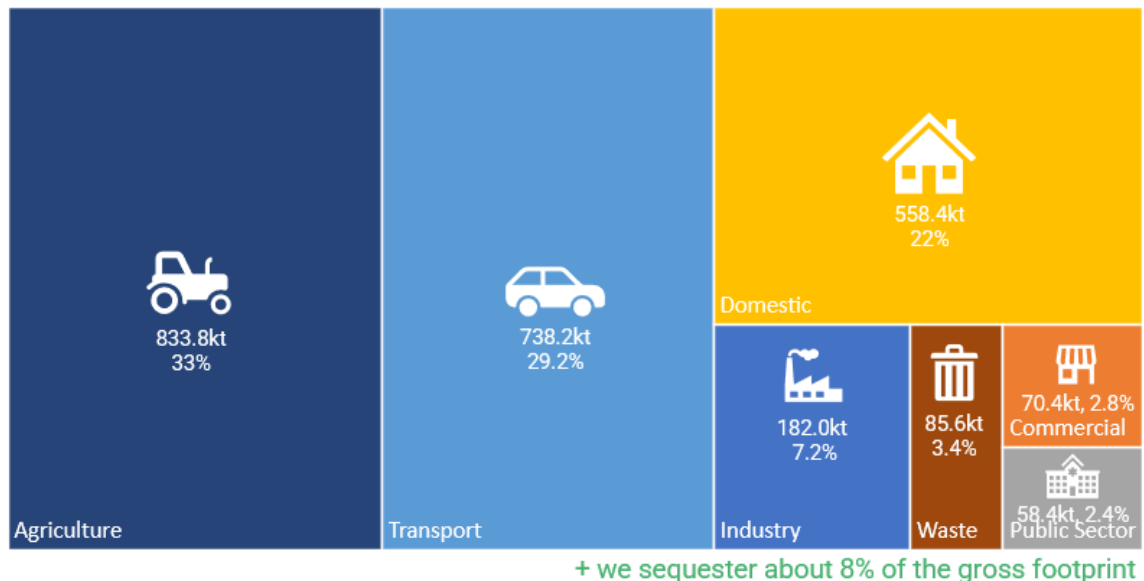
⁴ <https://www.dorsetcouncil.gov.uk/progress-so-far>

programme delivery, which was the subject of our earlier qualitative report on programme delivery presented in July.

3. Summary of performance against carbon target Autumn 2023

Helping Dorset to become carbon neutral by 2050 (facilitation)

- 3.1 Dorset Council can influence emissions across Dorset through the range of services it provides (statutory and non-statutory), its partnership work with a range of organisations and its influence on national policy agenda. To this end it has a key enabling and facilitation role, to help residents and organisation to transition to net-zero by 2050.
- 3.2 Dorset emissions are split approximately a third each to agriculture, travel and buildings', (waste also makes a small contribution); this split is similar for any rural county. The latest nationally available carbon statistics indicate that **Dorset wide carbon emissions have reduced by approximately 10%** since the Council Declared a climate emergency in 2019.



Source: Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy

- 3.3 These statistics are provided by the government's Department for Energy Security and Net Zero and are two years in arrears. Last year we reported a significant reduction in emissions reflecting the covid pandemic. This year emissions have risen by approximately 6% as patterns of travel and economic activity begin to return post pandemic. This is a significant deviation from the emission profile we would need to follow for Dorset's share towards the national and international targets of maintaining global temperature rise to below 1.5 degree C.

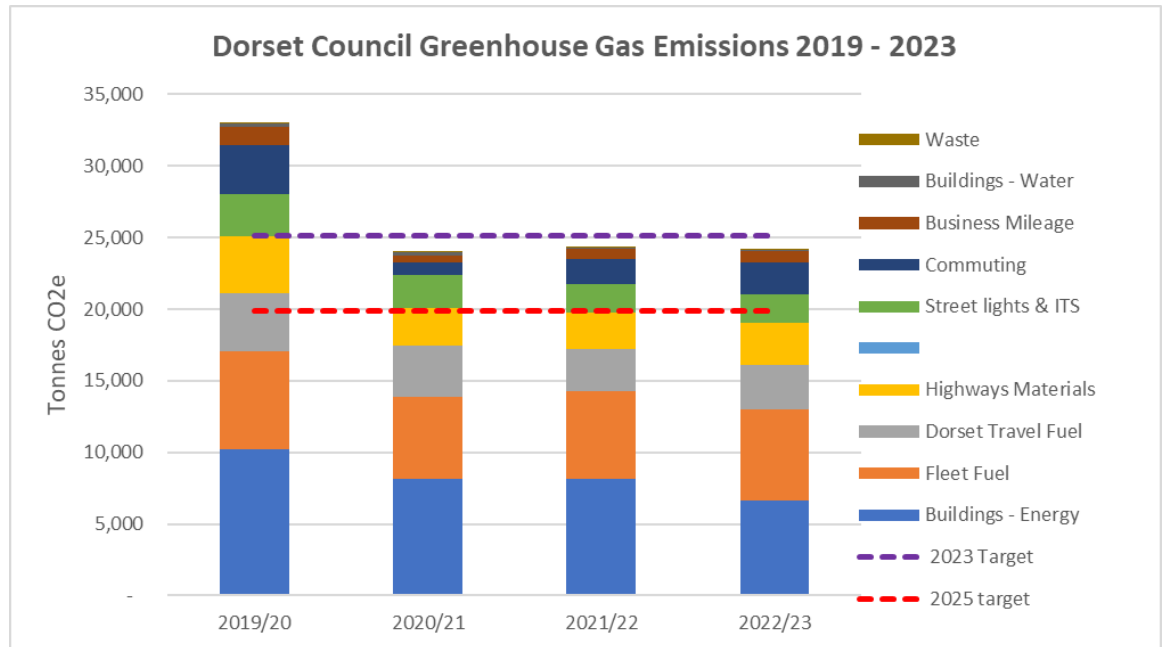
- 3.4 Similar rises in emissions are seen across the country and it is too early to determine how far this trend will go. However, it highlights the significant challenge ahead in reducing carbon emissions at a county-wide level, both in terms of stopping emissions bouncing back to pre-pandemic levels and to make the large gains necessary to move towards a net zero county by 2050.
- 3.5 It will be critical for the council's place setting and policy shaping to fully embrace net zero aims over the next few years to reset this pathway and develop a net zero future for Dorset. Important strategies such as the local plan, local transport plan, economic development, and housing, will have key roles in this journey.
- 3.6 In addition, our wider facilitation role is critical, and we will need to strengthen our efforts to work with partners to support both organisations and individual.
- 3.7 Work is underway to develop a more responsive annual data set that can both complement the national statistics but also enable more immediate tracking of progress at a county level.
- 3.8 The report (appendix A) reiterates the decline we have seen in biodiversity over the past century across Dorset and the wider UK. A major strand of work is underway to develop a Local Nature Recovery Strategy for Dorset. This work will draw together partners across both the Dorset and BCP areas to gather and review baseline ecological data and develop plans and programmes to restore nature. The initial stages of this work are underway and can be reported further in future reports.
- 3.9 Our strategy also commits to an ambition that at least 30% of Dorset's land, rivers and seas need to be nature-positive by 2030. As this report notes, over the last century there has been a major loss and degradation in our natural assets. There are now 2,930 terrestrial and freshwater species and 157 marine species that are of conservation concern locally, and land cover has changed dramatically over the last century.
- 3.10 Our latest available figures from 2020 provide a snapshot of the extent and condition of Dorset's ecological network. Almost 22% of our land area is currently within our ecological network, comprising Sites of Special Scientific Interest (SSSI), Sites of Nature Conservation Interest (SNCI), Local reserves, ancient woodland, and other undesignated areas of ecological interest. However, less than a third of that is known to be in good

or fair condition, with a fifth known to be in poor condition and uncertainty about around half of the network.

- 3.11 There are signs that things are moving in a positive direction, with the proportion of county SSSIs and SNCIs in favourable or good/improving condition slowly increasing in the six years to 2020, and major progress through projects on nutrient and heathland mitigation. Whilst this is positive, the pace needs to be increased. The recently launched process to create a Local Nature Recovery Strategy provides a strong opportunity for us to create a strong evidence-led and co-developed vision for nature recovery, and to act as a foundation for stronger partnerships to deliver.
- 3.12 The third challenge to be addressed through the Natural Environment, Climate and Ecology strategy is how to support communities and organisations and our natural environment to adapt to the effects of climate change. The Met Office provides the climate modelling and impact scenarios at a Dorset level, highlighting that we are likely to see hotter drier summers, warmer wetter winters and more severe weather patterns as a result of climate change. Understanding the likely impacts of these changes and how best to adapt to them across Dorset will also require a partnership approach across Dorset. This work has yet to begin.

Making Dorset Council carbon neutral by 2040 (operational)

- 3.13 Dorset Council established a baseline for its core carbon emissions from its own operations in 2019, to include emissions from our buildings, travel, highways and streetlighting. The council has direct control over these emission sources, and it is critical that Dorset Council shows leadership in this area. This has been a key focus of our activities to date.
- 3.14 **Dorset Council carbon emissions have reduced by approximately 27% from our baseline year of 2019 to 24,250 tCO₂e.** This is a good step in working towards our 2025 target of a 40% reduction in operational carbon emissions and is within our anticipated emissions reduction profile for 2023.



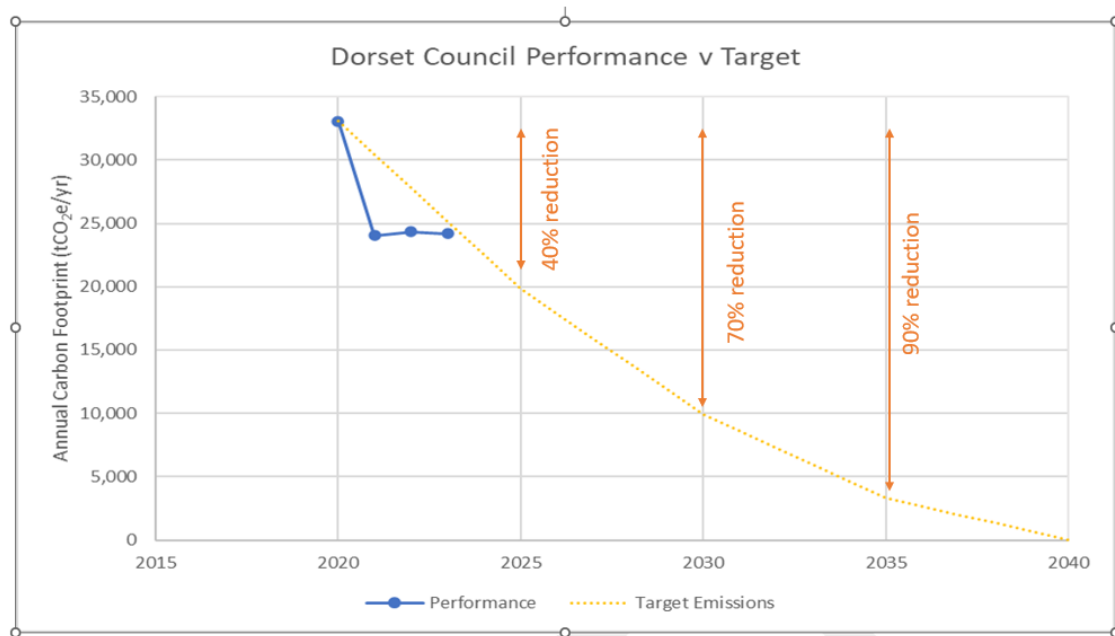
3.15 However, this represents only a very small decrease in emissions from the previous year. In 2020/21 we saw a significant drop in emissions as a result of the pandemic, particularly from travel and buildings. Emissions in some of these areas have begun to increase significantly in recent years but are still below pre-pandemic levels.

3.16 Most significantly our emissions from buildings have reduced by over 20% in just one year. This is a direct result of the £19m investment in low carbon technologies across our estate from the government's Public Sector Decarbonisation Scheme (PSDS). This programme has seen the installation of over 350 projects across more than 240 buildings, including heat pumps, building management systems, LED lighting, control upgrades, insulation and over 5 mega-watts (MW) of solar panels. This programme has largely completed but there are several projects still to come online which will help to reduce our emissions further in future years, including two very large innovative heat pump projects at leisure centres. Overall, this means emissions from buildings have reduced by 38% since 2019. Further capital investment planned for 2024 to 2027 will continue our estates decarbonisation journey towards net zero by 2040.

3.17 Baselines and monitoring do not yet exist for Ecology and Resilience of the council's operations. These are currently being developed.

4. Key observations & challenges

- 4.1 Overall progress had been good, and the council's operational emissions remain below the level anticipated for 2023. Compared to our baseline year, emissions have reduced from all sources, with the vast majority seeing reductions in excess of 25%. However, emission reduction in 22/23 was just 1% overall on the previous year, and we will need to strengthen our work this coming year in some key areas to ensure we can align our direction of travel with our target trajectory for emission reduction.



- 4.2 This year we have seen major reductions in building emissions because of the low carbon technologies installed across our estate through the public sector decarbonisation scheme. These have reduced building emissions by at least a 5th and are estimated to reduce energy costs by about £1.2 million a year. Despite these large gains we have also seen an increase in several areas this year, particularly those related to travel.
- 4.3 In 2020/21 we saw major reductions in travel emissions as a result of the pandemic, but as travel patterns have changed our emissions have begun to rise from business travel, commuting and fleet. Our behaviours to limit unnecessary travel and maximise use of digital technology and enabling home working, has kept these emissions below pre-pandemic levels. However, a concerted effort is required to limit these rises and we will need to focus on:

- (a) Continued electrification of our small fleet, considering ways to reduce fleet size overall and explore alternative fuel options for large vehicles.
- (b) Working across services to reduce business mileage or to switch business travel to cleaner travel options, such as maximising use of electric vehicle pool fleet or greater use of digital technology.
- (c) Support and encourage staff to reduce commuter emission through working at home, car sharing or alternative modes of travel.

4.4 Some key workstreams are in place to support delivery of these goals but we will need a concerted effort to ensure we lock in the right behaviours to correct the direction of travel and keep us on track for our 2025 40% reduction target. The development and effective implementation of the Dorset Council travel plan will be critical in this regard.

4.5 Data collection and availability remains an issue to enable robust carbon monitoring in certain areas. Solutions are being explored as part of the programme management approach to the operational programme.

4.6 It is recognised that reducing all emission sources to zero will not be possible, and to achieve our net-zero ambitions there will be a requirement for a significant increase in renewable energy production to match Dorset Council's consumption. We will achieve some of this through deployment of technologies such as solar PV on our buildings but will also have to look at larger scale investment opportunities. The capacity of the grid in Dorset is a potential constraint and risk to being able to achieve this and our overall net zero ambitions.

4.7 Similarly, programmes of work focused on nature-based solutions too will not only help us to address the ecological decline in Dorset but can be used to offset/ inset residual carbon emissions. This will need to be aligned with the council's work around biodiversity net gain and nature recovery.

5. **Looking forward**

5.1 An operational group has been established of key directors and senior officers to provide robust governance to the delivery of the council's net zero ambition by 2040. They have oversight of the overall programme and individual heads of service with roles for delivery of each aspect of the operational programme are part of the group.

5.2 An overall programme management approach has been implemented with support from the transformation team. This draws together and further

develops work programmes for key areas of work, establishing delivery timescales, key milestones, benefits and interdependencies. Several work streams are already underway or planned which will contribute to the ongoing emissions reduction and be reflected in future years' carbon emission figures. The programme is supported by a £10m capital fund to 2027, which is anticipated to see a further 5-6% carbon saving over the next 5 years. Work programmes include:

- 5.3 Estate carbon reduction – currently completing the £19m Public Sector Decarbonisation Scheme (PSDS), due to complete in December 2023. This has delivered over 350 projects across 240 buildings and already realise significant carbon and financial savings. A further £4.5 million investment programme will be developed to 2027, to include £1 million for solar panels across the estate, bringing our 'on building' capacity to around 7MW.
- 5.4 An additional £2.5 million to switched 9000 streetlights to low energy LEDs.
- 5.5 Expansion of EV charging infrastructure on Dorset Council estate is underway (and has been delivered at several sites) to facilitate the transition to EVs, through an allocation of £800k from the capital programme. This is being planned specifically around sites to support electrification of our small fleet. It will be complemented by further investment in Dorset county's public charging infrastructure through national Local Electric Vehicle Infrastructure (LEVI) funding.
- 5.6 Further £500k investment to top up our existing vehicle replacement funding enabling purchase of small electric vehicles, either replacing diesel or petrol fleet vehicles at end of life or purchase of new electric vehicles for use as pool cars, supporting reduction of business travel emissions.
- 5.7 Develop initiatives and policies to introduce further low carbon highway maintenance processes, as well as monitoring and measuring emissions more accurately.
- 5.8 From the capital programme £350k has been allocated to support the highly successful Low Carbon Dorset (LCD) programme. Together with £500k from the Rural England Prosperity fund, this will enable LCD to support organisations across Dorset to implement low carbon solutions, supporting local businesses, town and parish councils and community organisations.
- 5.9 The climate decision wheel has now been embedded in the committee process and has become mandatory for all committee papers. This will be of fundamental importance to ensure that the council is fully cognisant of

the impact of decisions that it is taking from a climate and ecological perspective.

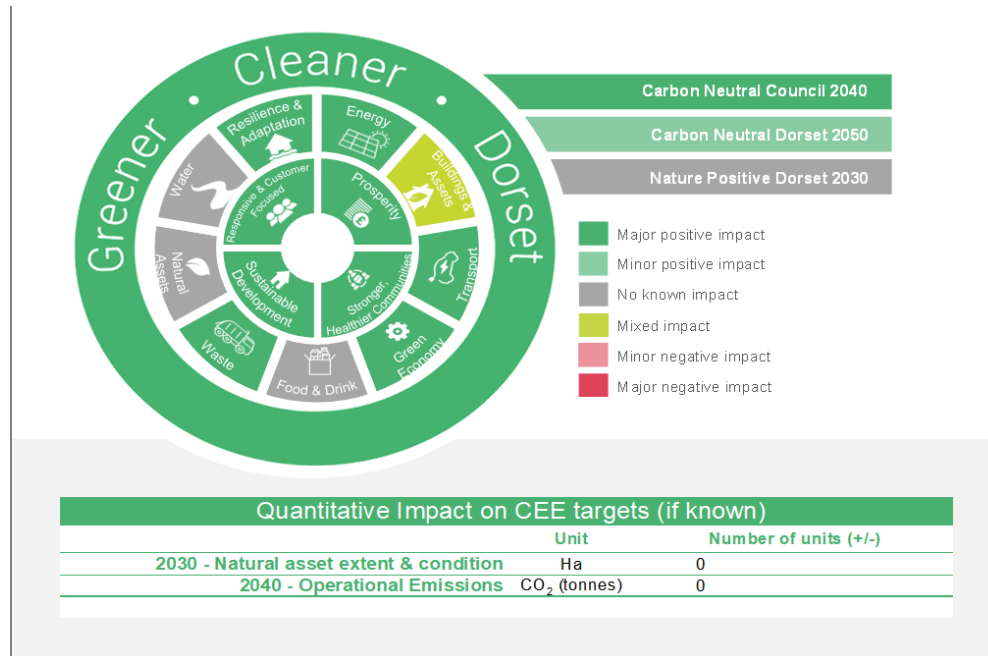
- 5.10 Work with partners also continues to develop both with major public sector organisations and town and parish councils, and the council has led on the formation of a public sector decarbonisation and ecology group. Further work is required to develop a comprehensive engagement approach to ensure that communities, individuals, and businesses are engaged and provided with signposting and the tools required to start to affect change.
- 5.11 A baseline for ecology is being collated both across the council's own estate and more widely across Dorset as part of the council's work to identify opportunities for Biodiversity Net Gain (BNG) and develop a Local Nature Recovery Strategy for Dorset.
- 5.12 As resources allow, our approach to resilience will also develop. This has initially started with a vulnerability assessment across all services to identify key service areas at risk from the impacts of climate change. Once analysed this will facilitate a more detailed exploration of risk to these services and adaptation options. A Dorset-wide approach will follow.

6. Financial Implications

- 6.1 A costed action plan presented to cabinet on 6 October 2020, highlighted that significant additional revenue and capital would be required to deliver the council's ambitions and strategy over its lifetime to ensure action continues with urgency and at the scale required.
- 6.2 Dorset Council allocated £10 million capital over 5 years in the 2022/23 Dorset Council budget to strengthen work underway to reduce its operation carbon footprint in key areas such as building retrofit, electrification of the fleet, and electric vehicle charging infrastructure. Potentially enabling a further 5-6% reduction in emissions by 2027 and realise revenue benefits. Additional external funding will help to accelerate this.
- 6.3 The scale of the challenge is significant, and a programme of the scale required to ensure the council's ambitions will require access to additional resources from a variety of sources. Drawing on opportunities for external funding and partnership working will be key and the council will need to ensure it is 'opportunity ready'. This will require the right evidence and resources to draw in funds for both the operational and county-wide areas of focus, all of which will be through competitive processes. Additionally,

there will be a requirement to re-align existing operations and resources to accelerate the actions required to deliver against the ambitions of the strategy.

7. Natural Environment, Climate & Ecology Implications



- 7.1 It is important to note the significant positive impacts highlighted in this wheel will require a concerted effort to deliver the work outlined in this report.
- 7.2 Failure to deliver however will lead to our inability to meet our commitments, resulting in negative impacts and risks highlighted below.

8. Well-being and Health Implications

- 8.1 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.

9. Other Implications

- 9.1 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 co-benefits for the way the council delivers services and works with others across the county.

10. **Risk Assessment**

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

Current Risk: High

Residual Risk: Medium

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

10.3 The publication of this Autumn report is in line with commitments made and shows a significant level of progress taking forward the strategy and action plan; but notes that there remains a need for increased urgency and further progress in several areas.

10.4 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.

10.5 The significant work required to transition the operational programme will require services to re-focus some of their priorities. This will be a significant challenge when there are already significant pressures to deliver against a wide range of priorities and against a backdrop of limited resources.

11. **Equalities Impact Assessment**

A scoping exercise is currently being undertaken to highlight any specific impacts that need to be considered through the delivery of the strategy and action plan.

12. **Appendices**

Appendix A – Natural Environment, Climate and Ecology Progress Report Autumn/Winter 2023

Appendix B – Accessible text version of climate wheel and recommendations

13. **Background Papers**

- Place & Resources Scrutiny Committee 04/07/23 (item 16): Natural Environment, Climate and Ecology Progress Report Summer 2023 ([Cover report](#) | [Appendix \(progress report\)](#))
- [Natural Environment, Climate and Ecology Strategy and Action Plan \(2023 refresh\)](#)