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| REPORT TO: | ENVIRONMENTAL AND DEVELOPMENT SERVICES COMMITTEE | AGENDA ITEM: 8 |
| DATE OF MEETING: | 21 SEPTEMBER 2023 | CATEGORY: RECOMMENDED |
| REPORT FROM: | STRATEGIC DIRECTOR (SERVICE DELIVERY) | OPEN |
| MEMBERS' CONTACT POINT: | MATT HOLFORD, HEAD OF ENVIRONMENTAL SERVICES, matthew.holford@southderbyshire.gov.uk | DOC: |
| SUBJECT: | ANNUAL REVIEW OF THE COUNCIL'S CLIMATE AND ENVIRONMENT ACTION PLAN (2021-30) | |
| WARD(S) AFFECTED: | ALL | TERMS OF REFERENCE: EDS01 |

1 Recommendations

- 1.1 That the Committee notes the current progress made in reducing carbon emissions as described in the SDDC Annual Carbon Reduction Progress Report 2022/23 (attached as Appendix 1).
- 1.2 That the Committee approves the recommendations set out in the Annual Climate and Environmental Action Plan Review 2023 (attached as Appendix 2).
- 1.3 That the Committee approves the proposed amendments to the Climate and Environment Action Plan attached as Appendix 3.
- 1.4 That the Committee recognises that to achieve the Climate Emergency declaration to "Strive to make South Derbyshire District Council carbon neutral by 2030" that the transformation actions T1 to T6 will need to be included in the future Council Plan.
- 1.5 That the current SDDC In-house Carbon Emission Roadmap will need to be revised to reflect the current realities of delivering net zero emissions.
- 1.6 That the Committee approves a revised Environment Policy.

2 Purpose of the Report

- 2.1 To inform Committee of the carbon emissions caused by Council activities during 2022/23 and the reduction in carbon emissions compared to a 2018/19 baseline.
- 2.2 To provide the Committee with a structured annual review of the progress of the Climate & Environmental Action Plan and its 57 actions as approved by the Committee in August 2022.
- 2.3 To obtain Committee approval to revise the existing Climate & Environmental Action Plan.

- 2.4 To emphasise the importance of including the transformation actions contained in the C&EAP as the key priorities of the Council over the life of the next Council Plan.
- 2.5 To acknowledge that the SDDC In-house Carbon Emission Roadmap is an evolving piece of work and that it will need to be revised after the approval of a new Council Plan and periodically thereafter.
- 2.6 To obtain Committee approval of proposed changes to the Corporate Environment Policy.

3 Background detail to this Annual Review

- 3.1 As part of the Council's commitment to its carbon neutral targets, the Climate and Environment Action Plan (C&EAP) 2021-30 details 57 actions required to reduce the Council's carbon footprint of its in-house services and to support the reduction of the District-wide carbon emissions. These 57 actions are categorised as:
 - Transformation actions (eight) that will reduce the carbon emissions from the largest Council emission sources (e.g. public buildings, fleet and council housing)
 - In-house actions (30) for individual Council Services that will reduce carbon emissions of those emission sources aligned to services (e.g. transitioning grounds maintenance equipment from petrol to battery powered)
 - District-wide actions (19) for individual Council services that will reduce emissions across the whole of South Derbyshire (e.g. embedding carbon emission reduction in the new SDDC Local Plan).
- 3.2 The successful delivery of these 57 actions will achieve the reduction of carbon emissions in line with the Council commitments of becoming a carbon neutral Council by 2030 and supporting South Derbyshire to become carbon neutral by 2050.
- 3.3 The action to review the Council's C&E Action Plan on an annual basis was agreed by this Committee in July 2021.
- 3.4 The review is based on,
 - The results, analysis and comparisons of both in-house and District-wide carbon emissions contained in the SDDC Annual Carbon Reduction Progress Report 2022/23 (attached as Appendix 1).
 - The results and feedback from quarterly meetings with Heads of Service from across the Council that details the progress of the individual Service actions throughout 2022/23.
 - The outcomes of any external audits over the course of the past year.
- 3.5 The review has been published as an Annual Climate and Environment Action Plan Review, and this report is attached as Appendix 2.

4 Key Findings from the SDDC Annual Carbon Reduction Progress Report 2022/23

4.1 SDDC in-house annual carbon emissions (Scope 1 and 2) are summarised in Table 1 below.

Table 1 – Scope 1 and 2 Emissions

| Year | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---|---------|---------|---------|---------|---------|
| SDDC In-house carbon emissions (tCO ₂ e) | 2,494 | 2,154 | 1,982 | 2,066 | 2,074 |

4.2 The figures illustrate that SDDC In-house carbon emissions have reduced as a direct result of the action that the Council has and is taking. However, progress with reducing carbon emissions over the last two years has stalled.

4.3 The most significant sources of carbon emissions from Council activity are illustrated at Figure 2 (page 6) of the Progress report and Figure 3 (page 7) of the Progress Report.

4.4 Figure 2 of the Progress Report shows that diesel and petrol emissions were the biggest source of carbon emissions in 2022/23 (828 tCO₂e), followed by emissions from the use of natural gas for heating (629 tCO₂e), then the use of refrigerants for air conditioning (359 tCO₂e), then the consumption of electricity (258 tCO₂e).

4.5 Figure 3 of the Progress Report shows that by location, the biggest source of carbon emissions was Greenbank leisure centre, followed by other public buildings, followed by Civic way offices. Emissions from the transport fleet or mobile plant are not included in this data.

4.6 The Progress Report also includes a calculation of Scope 3 emissions. Scope 3 emissions are what is estimated to be produced by other suppliers working on behalf of the Council. The Scope 3 emissions calculations are reproduced in Table 2 below.

Table 2 – Scope 3 Emissions

| Scope 3 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Supply Chain carbon emissions | 6,362 tCO ₂ e | 6,316 tCO ₂ e | 8,223 tCO ₂ e | 8,243 tCO ₂ e | 8,449 tCO ₂ e |

4.7 Scope 3 emissions are over four times higher than direct emissions from Council activity. This highlights the importance of Action ref ISP23 relating to working with our supply chain to help them decarbonise.

4.8 Table 2 above illustrates how Scope 3 emissions have increased over the past five years.

4.9 This data conceals a positive story, in that the increase in Scope 3 emissions is primarily as a result of the extensive work commissioned by the Council to decarbonise both public sector and private sector housing over the last three years.

4.10 The 'cost' in carbon emissions from the construction activities to deliver this work will be repaid many times over in future years from the reduction in carbon emissions from the properties which have been improved.

4.11 Table 3 below reproduces the most up to date available estimated change in carbon emissions across all of South Derbyshire.

Table 3 – District-wide Carbon Emissions

| Sector carbon emissions (kt CO2) | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|
| Industry | 136 | 120 | 112 | 97 |
| Agriculture | 23 | 25 | 25 | 24 |
| Commercial | 31 | 30 | 28 | 25 |
| Public Sector | 15 | 15 | 14 | 13 |
| Domestic | 152 | 151 | 149 | 146 |
| Transport | 313 | 309 | 310 | 248 |
| Net emissions (forestry, crops, grass) | -10 | -10 | -11 | -10 |
| Total | 660 | 649 | 628 | 542 |
| SDDC Emissions/head tCO2e | 6.4 | 6.2 | 5.9 | 4.9 |

4.12 The data illustrates that there have been meaningful reductions in carbon emissions in all sectors in recent years.

5 Key Findings from the Annual Climate and Environment Action Plan Review 2023

5.1 Of the 57 actions contained in the C&EAP, the Council had started or completed 88% of these in 2022/23 and 12% have not been started.

5.2 Achieving net zero is extremely challenging, therefore it is important to celebrate and reflect on successes. The Review has identified and highlighted actions which have delivered carbon reductions, and these are reproduced in Table 4 below.

Table 4 – Successful Actions in 2022/23

| Actions | Success |
|--|---|
| Transport | |
| DSP5 – Public EV Infrastructure expansion | SDDC now have installed 42 EV charge points in six car parks across South Derbyshire, displacing 51.7 tCO2e per year. Funding has also been sourced to install 3 EV charge points at the Boardman Depot (D2N2 Shared charge points) and potential for additional public EV charge points at a further 6 SDDC owned car parks from the DCC LEVI scheme. |
| DSP7 – Review of Hydrogen supply & infrastructure for transport. | Innovation project funding sourced for reviewing hydrogen supply, storage & refuelling infrastructure at the Boardman Depot for the Council's refuse waste collection trucks. |
| Buildings and Heating | |
| T7 – Social Housing decarbonisation scheme | SHDF Wave 1 & 2 funding has been sourced to retrofit over 200 SDDC social houses to improve their EPC ratings to C or above and reduce tenants' energy bills. This programme, when complete is estimated to reduce carbon emissions by 450 tCO2e per year |
| DSP4 – programme to improve energy efficiency of private and | In 2022/23, 44 privately owned properties have had measures to increase their energy efficiency installed |

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| tenanted houses | which are estimated to reduce carbon emissions by 92.4 tCO ₂ e per year. Funding has been secured to continue decarbonising private houses to 2025. |
| DSP1 - Healthy homes assistance funding programme for private housing energy efficiency measures and supporting fuel poverty reduction | In 2022/23 SDDC have co-ordinated 56 fuel poverty interventions utilising the Healthy Homes Assistance Fund. A further £314k of private sector funding has been delivered to private sector housing energy improvements under the ECO4 Flex eligibility routes. |
| Biodiversity | |
| ISP26 – Mapping of all the SDDC owned green spaces | In 2022/23 SDDC has GIS mapped the 862 ha of green spaces owned by it for the purposes of Biodiversity Net Gain programmes and carbon sequestration estimates. |
| DSP8 – Utilise all tree planting schemes | In 2022/23, SDDC have co-ordinated the planting of 1,777 trees, planted by community groups, residents, and schools. Since 2018/19 over 8,500 trees have been planted, which has the potential to sequester 85 tCO ₂ e per year as they mature. |
| Partnership/Communication | |
| ISP19 – Engage with local businesses to support carbon emission reduction | In 2022/23 SDDC have engaged with 35 small businesses through South Derbyshire providing decarbonisation expertise. Through the Shared Prosperity Funding the Council has been supporting small business to decarbonise and promote their green economy expertise. |
| DSP13 – Promoting sustainable travel plans to support job creation | Bus route subsidy for Swadlincote /East Midlands business park, Swadlincote to Mercia Park & Uttoxeter to Dove Valley connections established to support residents, job seekers and sustainable travel. |
| DSP 19 - Developing a forum for energy consumption reduction advice for South Derbyshire residents | Created a bespoke designated external web page for easy access to continually updates energy consumption reduction advice and tips. |
| Governance and Finance | |
| ISP22 – Ongoing identification of carbon reduction funding | Over the last 3 years SDDC has successfully bid for just under £8 million of funding for private sector housing decarbonisation, social housing stock decarbonisation, electric vehicle charge points and innovation funding to support hydrogen low carbon fuels. |
| Planning and Land Use | |
| ISP3 - Embedding climate, environment & decarbonisation in the new SDDC Local Plan. | The issues and options consultations included a significant section on climate change and decarbonisation. |
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- 5.3 The review has identified that five (5) actions have been completed and can be removed from the C&EAP.
- 5.4 From the ongoing quarterly progress reviews with Heads of Service a further ten (10) actions have been identified which will directly or indirectly deliver carbon reductions.
- 5.5 The Review proposes that the five completed action are removed, and the ten newly identified actions are included, in a new iteration of the C&EAP for 2023.

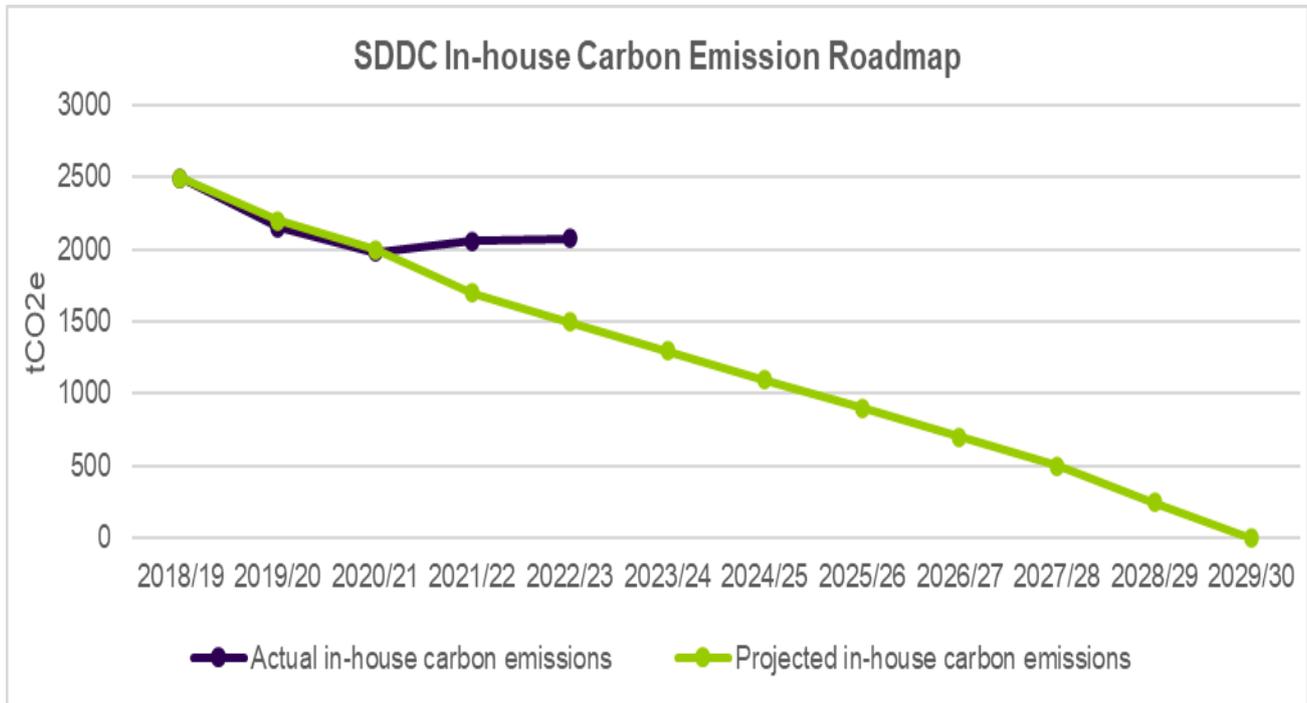
6 Transformation Actions and the Council Plan

- 6.1 The content of both the SDDC Annual Carbon Reduction Progress Report and the Annual Climate and Environmental Action Plan review, highlight the critical importance of six Transformation Actions to the Council achieving net zero by 2030.
- 6.2 The six Transformation Actions are:
- Decarbonising Civic Way offices,
 - Decarbonising Greenbank leisure centre,
 - Decarbonising Etwall leisure centre,
 - Decarbonising the Councils transport fleet,
 - Decarbonising Boardman Road depot,
 - Decarbonising Rosliston Forestry centre,
- 6.3 Achieving these six transformation actions will reduce in-house carbon emissions by an estimated 80%.
- 6.4 None of these actions are currently budgeted.
- 6.5 The developing Council Plan will create the priorities for the Council over the course of the next five years. Therefore the inclusion of these transformation actions into the Council Plan considerations is critical if the net zero ambition is to have a realistic chance of delivery.

7 Reprofile the Roadmap to Net Zero

- 7.1 A profile of the roadmap to net zero was produced in the first C&EAP published in 2020. This profile was produced at a time when the Council had generated the first calculation of its carbon emissions and it was based on an assumption that carbon emissions could be reduced at a consistent rate year on year from 2020 to 2030.
- 7.2 The profile of the roadmap to net zero is therefore a linear downward trend. Figure 1 below illustrates the linear profiled roadmap to net zero along with the actual emissions profile achieved over the last five years taken from the data in Table 1 earlier in this report.

Figure 1 – SDDC In-House Carbon Emission Roadmap



- 7.3 As has been described in section 6 of this report, the most significant future carbon emissions reductions will come from the six transformation actions contained in the C&EAP.
- 7.4 All of these transformation actions require large capital spend and when delivered will result in step changes in carbon emissions, rather than the progressive linear reductions assumed in the existing roadmap.
- 7.5 The existing roadmap does not therefore provide an accurate portrayal of the journey which the Council will take to net zero.
- 7.6 Officers propose to revise the roadmap. Given the current uncertainty over the delivery of the six transformation actions it is not possible to accurately reprofile the roadmap. More certainty is expected once the new Council Plan is agreed and approved.
- 7.7 It is therefore proposed to reprofile the roadmap once the Council Plan is complete and to publish it in the Annual Climate and Environment Action Plan Review 2024.

8 Corporate Environmental Policy

- 8.1 South Derbyshire District Council has an accredited Environmental Management System since 2008 and has been certified to the ISO14001 Environmental Management Standard since 2010.
- 8.2 In 2016 the Council became one of the first public bodies in the world to achieve certification to the new ISO14001:2015 version which gave more focus on the improvement of environmental performance rather than the improvement of the management system itself. This version also aimed at making environmental management more comprehensive and relevant to the supply chain. One of the main updates required the Council to consider environmental impact during the entire life cycle. Additionally, the commitments of top management and the methods of evaluating compliance have also been strengthened.
- 8.3 In order to maintain certification, the Council is subject to an annual external audit. The next external surveillance audit is programmed for November 2023.

- 8.4 A central requirement of the ISO14001 standard is that the Council has an Environment Policy. The purpose of the Policy is to demonstrate an organisational commitment to strive to improve environmental performance and provide a framework for doing so that is “*appropriate to the purpose and context of the organisation*” in line with its Environmental Management System.
- 8.5 The Policy was last reviewed in 2021 to reflect the priorities in the 2020-24 Corporate Plan. The format of the Policy was also made consistent with a corporate template.
- 8.6 A recommendation of a recent external audit was that the format of the existing Environment Policy is too ‘busy’ and that it needed to be simplified to fit onto a single page of A4.
- 8.7 The Policy format has therefore been updated to simply it in response to the audit recommendation. The detailed content of the Policy remains largely unchanged.
- 8.8 The 2023 version of the Environment Policy is contained as Appendix 4 to this report.

9 Financial Implications

- 9.1 The financial implications of the existing commitments in the C&E Action Plan remain significant.
- 9.2 The total cost of all Transformation Actions (excluding improvements to SDDC housing stock) is estimated to be in the range **£10 – 15 million over the course of the next six years**.
- 9.3 However, the maintenance and improvement of all these assets, irrespective of achieving carbon neutrality, carry embedded costs and therefore an estimate of the additional costs of decarbonisation for each option has been sought.
- 9.4 The total additional cost of including decarbonisation of all the Transformation Actions is estimated to be in the range **£5.6 to 6.8million**. This figure is included in the £10 - £15 million estimate above. These estimates relate to capital costs alone and do not factor in the anticipated long-term reduction in revenue costs associated with reduced fuel use, etc.
- 9.5 There are some existing capital expenditure commitments from reserves which relate to the transformation actions.
- 9.6 Officers involved in the implementation of the C&EAP and those involved in the implementation of existing capital expenditure commitments will collaborate to ensure that the delivery of the existing commitments can be aligned as closely as possible with the carbon neutral aspirations.
- 9.7 The estimated total cost of the non-transformation actions in the C&EAP to reduce in-house carbon emissions is £743k, with an estimated requirement of 4,730 employee hours.
- 9.8 Currently £315k and 3,350 employee hours to deliver these actions are uncommitted. This estimate does not include the cost of replacing existing fluorinated gases in air conditioning and heat pump plant for which an accurate figure is not yet available. Fluorinated gases are powerful greenhouse gases, with a global warming effect much greater than carbon dioxide.

- 9.9 The estimated cost of the of the non-transformation actions in the C&EAP to continue the decarbonisation of South Derbyshire as a District is £1,346,000, along with an estimated requirement of 6,000 employee hours.
- 9.10 Currently £43k and 2,000 employee hours to deliver these actions are uncommitted.
- 9.11 The additional actions proposed to be included if this report is approved will cost an estimated £100,000 and 5,500 employee hours.
- 9.12 All of the proposed new actions included in the revised C&E Action Plan have been agreed with the respective Heads of Service and appropriate funding has been secured and resources have been allocated.
- 9.13 The co-benefit of the large investment required to deliver these Transformation actions is that they all result in significant reductions in energy consumption and consequential reductions in operating costs.

10 Corporate Implications

Employment Implications

None

Legal Implications

None

Corporate Plan Implications

The C&E Action Plan 2021-30 and the recommendations of this Committee Report meet the Corporate Plan key aims of:

- Striving to make South Derbyshire District Council carbon neutral by 2050
- Working with residents, business, and partners to reduce their carbon footprint.
- Encourage and support business development and new investment in the District.

Risk Impact

The recommendations will have a beneficial mitigating action against the corporate risk of 'Managing the environmental impact of incidents across the District'.

11 Community Impact

Consultation

None

Equality and Diversity Impact

One of the recommendations of the C&EAP is that a full Equality, Diversity and Inclusion Impact study should be completed in 2023/24 to understand and act on the impact of climate and environment change.

Social Value Impact

Beneficial

12 Conclusions

As the Council's current Climate Change strategy, aspirations and commitments are aligned to reducing emissions from the Councils own activity to carbon neutral by 2030 and supporting partners to reduce the districts carbon emission to carbon neutral by 2050, it is recommended that the council endorses the changes to the C&E Action Plan 2021-30 for the 2023/24 period.

13 Background Papers

Appendix 1 – Annual Carbon Reduction Progress report (2021/22)

Appendix 2 – Climate and Environment Action Plan Review 2022

Appendix 3 – Proposed revision to the Climate and Environmental Action Plan 2021-30

Appendix 4 – 2023 Environment Policy.

[Climate and Environment Strategy 2020](#)

[Climate and Environment Action Plan 2021 -2030](#)