Climate Impact Assessment, Appendix 7, Climate Emergency Annual Report

| Will the decision/proposal impact… | Impact | If an impact or potential impacts are identified: | | | |
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| | | Describe impacts or potential impacts on emissions from the Council and its contractors. | Describe impact or potential impacts on emissions across the Borough as a whole. | Describe any measures to mitigate emission impacts | Outline any monitoring of emission impacts that will be carried out |
| Emissions from non-domestic buildings? | Decrease | Actions identified in the forward plan of this report will directly reduce the carbon emissions associated with the Council's corporate estate by approximately 183.2 $tCO_2e$, as a result of works to be completed in 2026/27. Total carbon savings from the full corporate decarbonisation programme as presented in Appendix 3 are 1,042 $tCO_2e$ by 2030, based on the present carbon intensity of mains electricity: there will be further carbon savings from low carbon heating, as the UK electricity system is further decarbonised. | There will also be impacts on the Borough's emissions through delivery of this programme, enabling Rotherham Markets traders to access cheaper, lower carbon electricity. | Not applicable. | The Council's greenhouse gas emissions are reported annually as per Appendix 4 to the Cabinet report. |
| Emissions from transport? | Decrease | It should also be noted that the delivery of the decarbonisation programme will require travel across the Borough | The Council's EV Infrastructure programme will provide increased access to EV charging, encouraging the uptake | Emissions management and reporting will be included within contracts associated with the | Fleet emissions and usage of the Council's EVI are reviewed annually. |

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| | | which may increase emissions associated with the Council's scope 3 emissions, but planned reductions to the Council's fleet emissions will outweigh this change. | of EV's Borough wide. It is therefore expected that this programme will reduce emissions from transport. | actions identified in the forward plan. | |
| Emissions from waste, or the quantity of waste itself? | Unknown | It is likely that some waste will be produced as part of the Council's decarbonisation programme through replacement equipment and build outs | N/A | Utilisation of the waste hierarchy will be included as part of contracts relating to this report. | Greenhouse gas conversion factors for waste are determined from the amount of fuel used to transport it: to avoid double counting, the carbon impact of waste collected from Council premises by Rotherham Business Waste is included with the carbon impact from fuel use in refuse collection vehicles, within 'vehicles, plant and tools'. Waste produced by contractors is factored into spend-based conversion factors, used to estimate the Council's consumption-based scope 3 emissions (see Appendix 4). See also para. 12.27-29, pp.125-126, *Methodology Paper for Conversion Factors Final Report* (DESNZ, 2025) |

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| Emissions from housing and domestic buildings? | Decrease | | Emissions associated with the social housing stock to be decarbonised from 2026 will decrease through energy efficiency measures installed. Warm Homes match funding awarded to the Council for retrofit works to 996 properties will deliver an estimated carbon saving of 1,169 $tCO_2e$ per annum. | N/A | Housing stock efficiency is monitored annually using EPC data. The Council cannot control how tenants utilise their energy in their homes and has no access to energy billing information but can improve properties' energy efficiency. |
| Emissions from construction and/or development? | Increase | An increase in emissions is to be expected due to construction works in the EVI and property decarbonisation programmes: in the longer term, carbon savings outweigh the initial, embodied carbon intensity of materials and components. | N/A | Emissions reporting and reduction will be specified in contracts relating to the heat decarbonisation programme. An existing contract for EVI installation is managed by Barnsley Council on behalf of the four South Yorkshire local authorities. | The climate change team will work with contractors under to improve the Council's understanding of carbon emissions from construction. Construction, buildings and related services were the biggest source of consumption-based emissions throughout all the Council's procurement and commissioning activity at 23.4%, according to a spend-based estimate. |
| Carbon capture (e.g. through trees)? | Decrease | The Council's tree planting programme will reduce emissions through carbon capture as trees planted mature. To the end of November 2025, 1,948 trees have been planted. | This programme will also benefit the Borough's emissions, as 45 hectares of new woodland are created from 2021 to 2031. | N/A | This programme is currently monitored by the Tree Service and numbers of trees planted are presented annually. |

Identify any emissions impacts associated with this decision which have not been covered by the above fields:

Large scale deployment of heat pumps to Council properties may increase fugitive emissions from RACHP (Refrigeration, Air Conditioning and *Heat Pump*) plant/equipment. A 2014 analysis cited in the Climate Change Committee's Sixth Carbon Budget report on F-gases (Box M11.2, 2020) estimated that for every '1 $tCO_2e$ of additional HFC emissions from refrigerant leakage in heat pumps, there [*will be*] 161 $tCO_2e$ of $CO_2$ savings due to avoided emissions from gas boilers and efficiency improvements'. Any increase in fugitive emissions is likely to be outweighed by the carbon saving from heat decarbonisation, by orders of magnitude. Timely repair and maintenance will mitigate fugitive emissions.

Will the proposal affect Council services' resilience to climate change, or the capacity of people living in the Borough to adapt to climate change?

The climate in Rotherham is already changing, with visible impacts throughout the Borough. Hotter summers are increasing the risk of extreme temperatures such as those experienced in July 2022, as wetter winters and more intense rainfall are increasing the risk of floods such as those in 2007, 2019 and 2023. Activity in the Climate Emergency Annual Report reflect this, with adaptation a key theme for Council services which residents rely on.

Building resilience is considered as part of the corporate decarbonisation programme. A better insulated, energy efficient property portfolio will enable the Council to better manage the future impacts of climate change. The same applies to the social housing stock also undergoing similar works. The report also details action to reduce the impact of flooding on the Borough. Overall, the report's content contribute both to mitigation of climate change and adaptation of Council services to expected impacts.

Provide a summary of all impacts and mitigation/monitoring measures:

In summary the actions included within the 2026/27 forward plan will reduce the Council's emissions and ensure the Council is prepared for the impacts of climate change. It is expected that measures proposed will reduce emissions by 183 $tCO_2e$ from Council properties. As an approach to fleet decarbonisation has yet to be agreed, no potential carbon saving can be provided with this impact assessment.

| Supporting information: | |
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| Climate Impact Assessment Author | Louise Preston<br>Climate Change Manager<br>Property & Facilities Services<br>Finance and Customer Services |
| Please outline any research, data or information used to complete this Climate Impact Assessment. | Data taken from the Corporate Decarbonisation Programme as outlined in Appendix 3 and information from surveys relating to the solar installations proposed in Appendix 2. Appendix 4 provides a summary of the Council's emissions. |

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| | • Climate Change Committee. 2020. *The Sixth Carbon Budget Report: F-gases*. [Online]. [Accessed 15 December 2025]. Available from: https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-F-gases.pdf.<br><br>• Department for Energy Security and Net Zero. 2025. *2025 Government Greenhouse Gas Conversion Factors for Company Reporting: Methodology Paper for Conversion Factors Final Report*. [Online]. [Accessed 15 December 2025]. Available from: https://assets.publishing.service.gov.uk/media/6846b0870392ed9b784c0187/2025-GHG-CF-methodology-paper.pdf.<br><br>• Rotherham Metropolitan Borough Council. 2024. *Tree Planting Plan 2021 - 2031.* [Online]. [Accessed 15 December 2025]. Available from: https://moderngov.rotherham.gov.uk/documents/s146325/Appendix%201%20-%20Tree%20planting%20plan%202021%20-%202031.pdf.<br><br>• Rotherham Metropolitan Borough Council. 2025. *HRA Business Plan, Rent Setting and Service Charges 2026-27.* Cabinet 15 December 2025. [Online]. [Accessed 15 December 2025]. Available from: https://moderngov.rotherham.gov.uk/ieListDocuments.aspx?CId=1103&MId=16412&Ver=4. |
| If quantities of emissions are relevant to and have been used in this form please identify which conversion factors have been used to quantify impacts. | See Appendix 5 and references therein (p9). |
| Validation | Tracking Reference: CIA 573<br><br>Arthur King<br>Principal Climate Change Officer |