



Monday, 7 October 2024

Report of Councillor Rhys Baker,
Cabinet Member for Environment and
Waste

Update on Carbon Emissions in respect of Council Operations

Report Author

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Purpose of Report

The climate and carbon dashboard provides an overview of South Kesteven District Council's operational carbon emissions for the 2023/24 period, including progress against the Council's carbon reduction targets of at least 30% by 2030.

Recommendations

That the Committee:

1. Notes the reported carbon emissions for the 2023/24 period which cover operations from South Kesteven District Council buildings and vehicles.

Decision Information

Does the report contain any exempt or confidential information not for publication?

No

What are the relevant corporate priorities?

Sustainable South Kesteven
Effective council

Which wards are impacted?

All wards

1. Implications

Taking into consideration implications relating to finance and procurement, legal and governance, risk and mitigation, health and safety, diversity and inclusion, safeguarding, staffing, community safety, mental health and wellbeing and the impact on the Council's declaration of a climate change emergency, the following implications have been identified:

Finance and Procurement

- 1.1 There are no direct finance or procurement implications from the report. A specific climate change reserve has been approved by Council that can be utilised to fund specific carbon and energy reduction initiatives. Any projects and initiatives to reduce carbon emissions and seek financial support are considered on a case by case basis.

Completed by: Richard Wyles, Deputy Chief Executive and s151 Officer

Legal and Governance

- 1.2 To demonstrate good governance and leadership on climate related issues in South Kesteven, it is important that Members are updated on the council's carbon emissions and on progress towards the declared carbon reduction target for council operations.

Completed by: Mandy Braithwaite, Legal Executive

Climate Change

- 1.3 The climate and carbon dashboard sets out the emissions reductions seen in the 2023/24 financial year. There is an overall reported reduction in the year of 25.27% against the baseline.

Completed by: Louise Case, Sustainability Project Support Officer

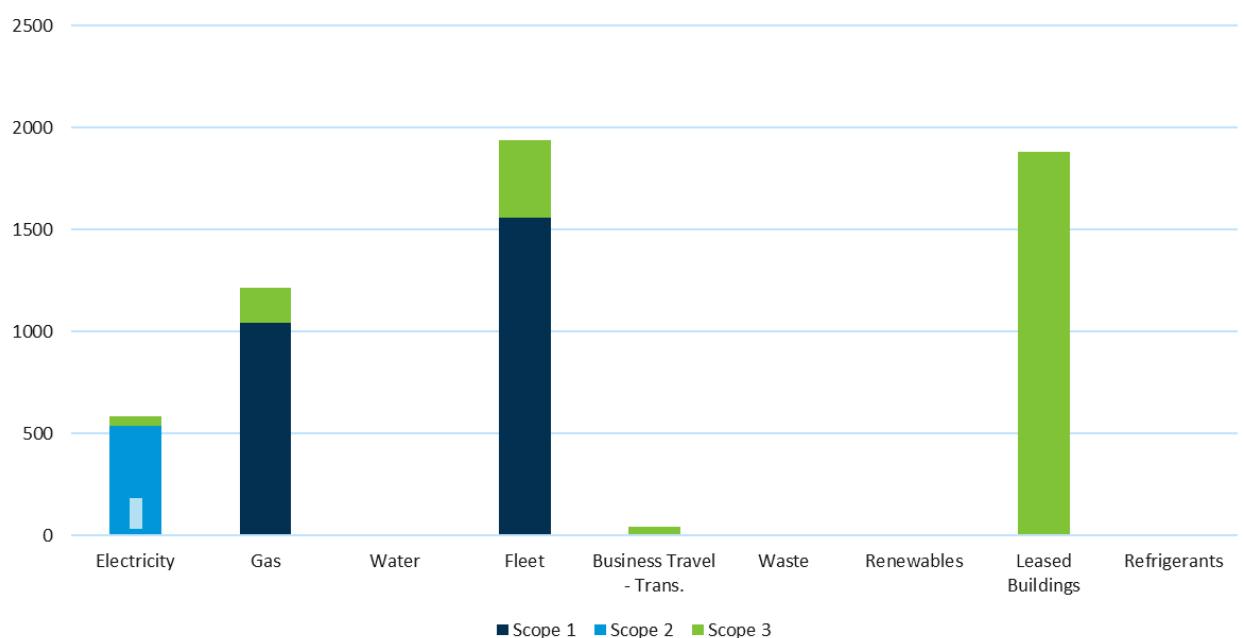
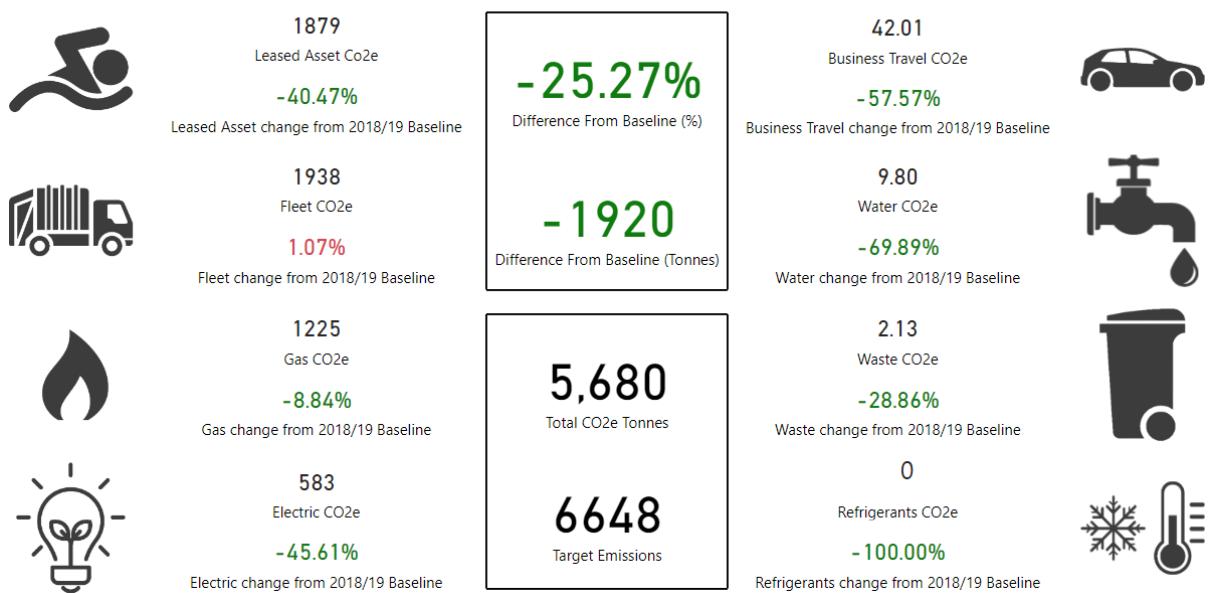
2. Background to the Report

- 2.1. South Kesteven District Council made a formal declaration of a climate emergency on 26 September 2019 with cross party support. Alongside this, the Council confirmed the political ambition to reduce the organisation's carbon footprint by at least 30% by 2030, and to endeavour to become net-zero as soon as viable before 2050.

2.2. In order to monitor and manage the Council's carbon footprint, it is recommended to publish an (at least annual) update on reported carbon emissions. This carbon dashboard includes the full scope of South Kesteven District Council's carbon emissions for the 2023/24 financial year, against the Council's baseline year of 2018/19.

2.3. The 2023/24 financial year saw a decrease in carbon emissions of 25.27%, or an overall reduction of 1920 tonnes of carbon compared to the 2018/19 baseline. A breakdown of 2023/24 emissions can be seen below:

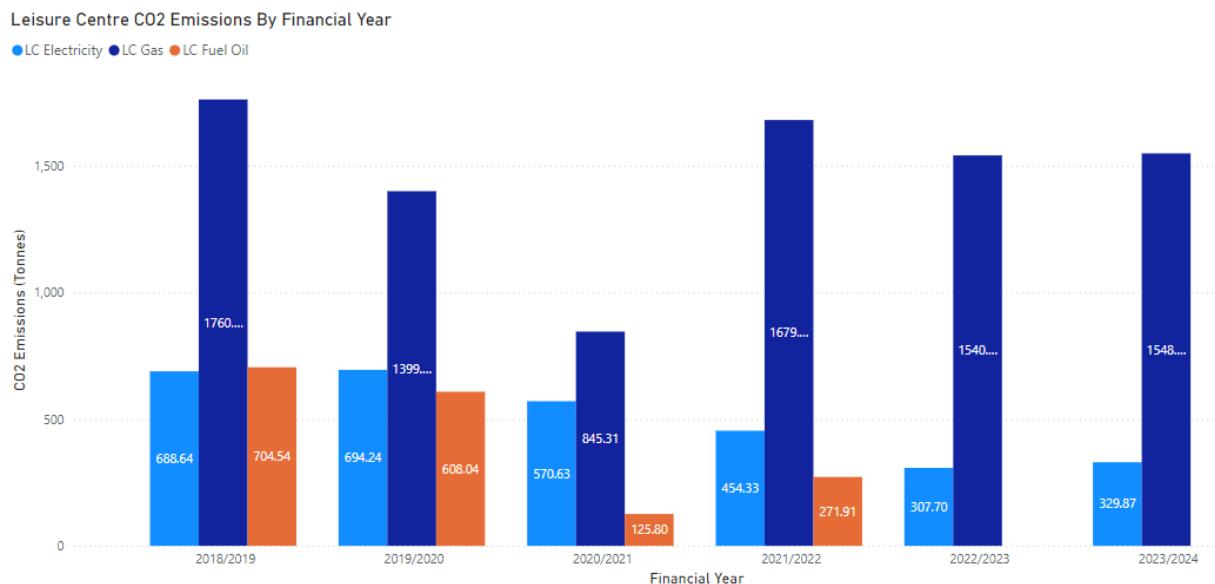
South Kesteven District Council Emissions 2023/2024



2.4. Scope 1 covers the direct emissions from sources that the Council owns or controls. For example, the emissions resulting from fuel use in the fleet are covered under scope 1. Scope 2 are the emissions that the Council indirectly cause, resulting from the production of the energy we purchase and use. The emissions resulting from the generation of the electricity that we use in our buildings would fall into this category. Scope 3 emissions include all sources not within the scope 1 and 2 boundaries. Scope 3 encompasses emissions that are not produced by the Council itself and are not the result of activities from Council owned or controlled assets. Instead, Scope 3 emissions occur throughout the lifetime of a product or process.

Leisure Centres

2.5. Leisure centres were responsible for 41% of carbon emissions in the Council's baseline. This has reduced to 33% for the 2023/24 reporting year as a result of the Deepings Leisure Centre returning to Lincolnshire County Council in July 2021. Since that time the Council has seen a sustained annual reduction in carbon emissions reported, as seen in the below graph:



2.6. Whilst the collective gas and electric consumption of the leisure centres has risen slightly since the last reporting year, marginal fluctuations are to be expected due to the operational nature of the facilities.

2.7. Several projects are underway to further decarbonise South Kesteven's leisure facilities. These changes include the installation of new pool covers to all pools in Grantham Meres, Stamford and Bourne Leisure Centres. The Council's own Climate Change Reserve facilitated the upgrade of the 3G pitch floodlighting to LED at the Grantham Meres Leisure Centre. Further to this, an upgrade of the lighting to LED in the small and large sports halls at Grantham Meres Leisure

Centre is set to further reduce the amount of carbon emitted for the upcoming 2024/25 financial year.

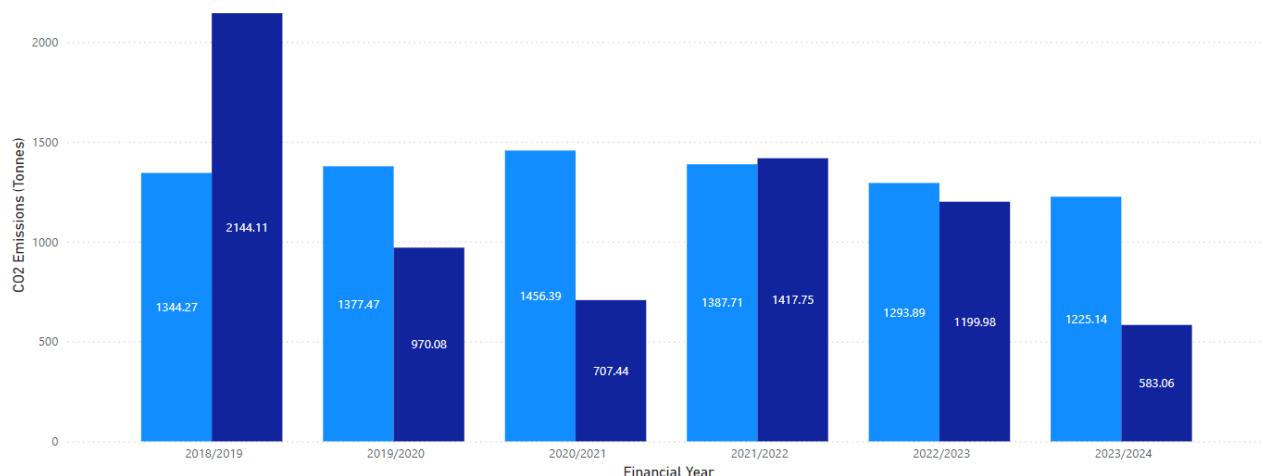
- 2.8. Funding was allocated via the Swimming Pool Support Fund (phase II capital), to purchase new pool covers at Grantham Meres Leisure Centre and will also see additional solar PV installed in late 2024.
- 2.9. An additional grant funding award via the Public Sector Decarbonisation Scheme phase 3c has allocated a budget of £4,080,000 to upgrade the existing heating system at Grantham Meres Leisure Centre to a new low-carbon system, which will dramatically reduce carbon emissions by a predicted 550 tonnes once complete.

Electricity Use

- 2.10. A significant reduction of over 45% from the baseline has been seen in the carbon emissions associated with electricity use in the Council's buildings. This can be attributed to both a reduction in total kilowatt hours (kWh) of energy consumed, as well as the national supply of electricity continuing to decarbonise as more renewable sources of energy contribute.
- 2.11. It is important to note that the 2023 generation emissions factor for grid electricity has increased from the 2022 figure. Despite this, the Council has seen an overall decrease of 129 tCO2e, or 18.12% in the overall tonnes of carbon emitted, since the previous 2022/23 reporting year.
- 2.12. Key changes include:
 - Deployment of energy efficient LED lanterns across the Council's Streetlights as part of an ongoing commitment to reduce energy consumption.
 - Upgrade of lighting in Guildhall Arts Centre to energy efficient LEDs
 - Upgrade of lighting in Wharf Road car park to energy efficient LEDs
- 2.13. The Council has a current contract for green electricity. This means that the electricity the Council receives is generated by either wind, wave or solar generation sources. These renewable forms of energy generation lead to lower greenhouse gas emissions than non-renewable fuel sources like natural gas.

SK Gas & Electric CO2 Emissions By Financial Year

● Gas ● Electricity



Gas Use

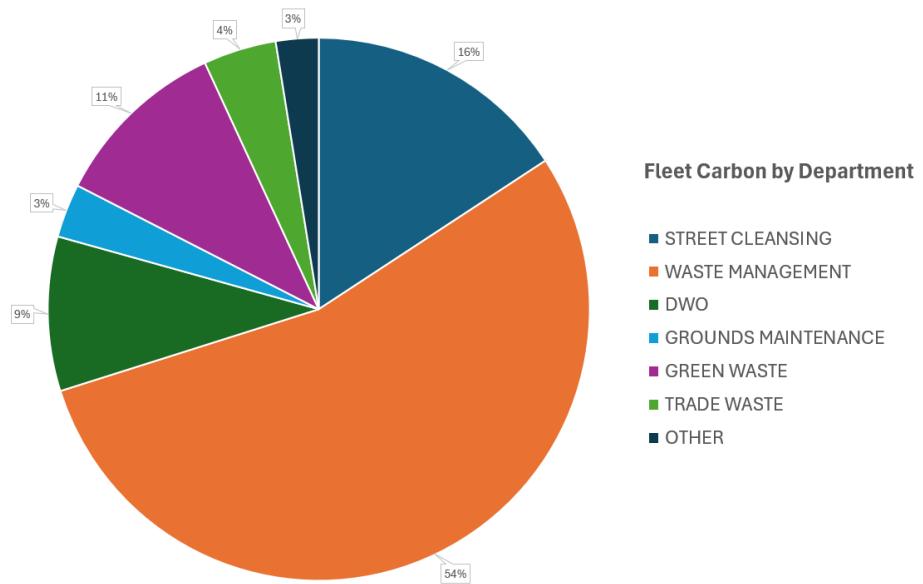
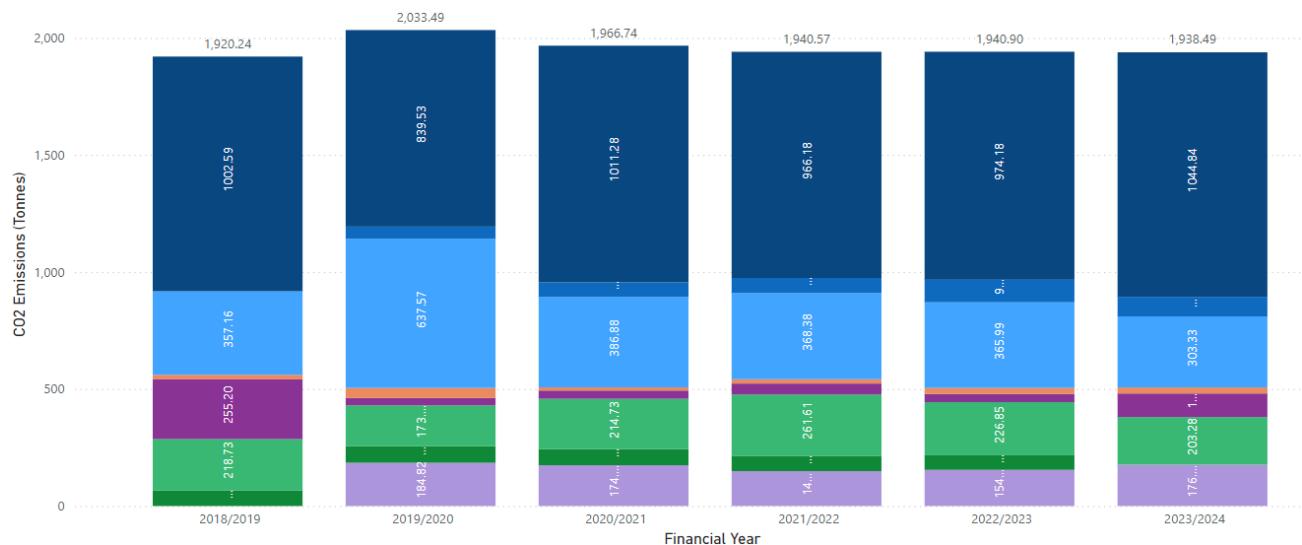
- 2.14. A reduction is also reported for gas used in Council buildings. Over the past year alone, the amount of carbon associated with gas consumption decreased by 85 tonnes since 2022/23, factoring an 8.84% reduction from the 2018/19 baseline.
- 2.15. Several key changes will continue to decrease gas consumption:
 - Relocation of the Council main offices to a significantly smaller, electrically heated facility at the start of 2023
 - Upgraded boilers installed at Guildhall Arts Centre
 - Completion of roof works at Stamford Arts Centre, improving efficiency of heating the building

Vehicle fleet

- 2.16. The carbon emissions from the operation of the Council's vehicle fleet remains consistently high, showing little change from the 2018/19 baseline. The fleet is now the largest contributor to the Council's carbon emissions, responsible for 34% of emitted carbon during the 2023/24 financial year.
- 2.17. Reporting includes a breakdown of Council department the vehicle is used within, with waste management and street cleaning responsible for most of the fuel consumption. Following the move of EnvironmentSK and its associated services to in house, these duties now sit under the provision of StreetScene. As a result of the partial restructure of the fleet, there has been a minor shift in the distribution of carbon emissions. An expected increase in fuel use over the past year can also be attributed to the greater distance covered during waste collection of the newly implemented purple bins.

Fleet CO2 Emissions By Financial Year

Department: DWO, EnvironmentSK, Green Waste, Other, Pool Cars, Street Cleaning, Trade Waste, Waste Management



Business travel

- 2.18. Business travel associated with staff and councillor movement in own vehicles has seen a significant reduction on the previous reporting year. The same pattern has been witnessed for staff travel via national rail. This downward trend is a direct result of the change of meetings and conferences to an online format. Not only has this had positive implications on the Council's carbon emissions but staff have also experienced greater connectivity with external stakeholders and the wider public sector.
- 2.19. Combined business travel accounted for 0.74% of the total carbon emissions for 2023/24. Collectively, this has resulted in a 57.57% reduction from the baseline.

Other categories

2.20. Refrigerants contribute to carbon emissions if they are seen to leak out of equipment or pipe work into the atmosphere. The Council can confirm that there has been no escape of refrigerants from internal systems in the 2023/24 reporting period. Therefore, there has been no carbon emissions reported for this category.

2.21. 2.13 tonnes of carbon was attributed to the waste category over the 2023/24 reporting period, demonstrating a 28.86% reduction from the baseline and a decrease of 0.9 tonnes since the last reporting year.

Moving forward

2.22. Through this update to its carbon emissions reporting, South Kesteven District Council has demonstrated its ongoing commitment to addressing the challenges posed by climate change, highlighting areas where improvement can still be made. Whilst some important reductions in carbon emissions have been seen in select categories, the Council should continue to look for further decarbonisation opportunities to ensure a downward trajectory towards the declared carbon reduction target of at least 30% by 2030.

2.23. With a further 4.73% reduction required to reach the Council's 2030 emissions target, upcoming decarbonisation and energy efficiency projects such as those at Grantham Meres Leisure Centre will contribute to significant carbon savings for the Council. Where streetlights were responsible for 4% of the carbon baseline, the ongoing Streetlights programme will also account towards the future change.

2.24. A summary of predicted carbon savings resulting from current or planned capital works can be seen below. On this basis, it is expected that South Kesteven District Council will exceed its 2030 carbon reduction target by the end of the 2026/27 financial year.

Energy project	Site/ building	Projected carbon saving*	Projected percentage reduction from baseline	Impacted reporting year
Streetlights upgrade to energy efficient LED units	SKDC operated streetlights	148 tonnes	1.95%	2025/26
Solar panel installation	Grantham Meres Leisure Centre	40 tonnes	0.53%	2025/26
Installation of an Air Source Heat Pump	Grantham Meres Leisure Centre	550 tonnes	7.24%	2026/27

2.25. *Additional upgrades will have a further impact on the carbon output of Council buildings. However, no accurate figure can be provided for the carbon savings associated with these measures. An update will follow for the 2024/25 reporting year.

- In Summer 2023, improvements at the South Kesteven Stadium Main Stand Plant Room saw two gas boilers upgraded alongside a Gas Fired Water heater. BMS Controls, pumps and new zoning of the heating system was installed on two circuits. This will increase boiler efficiency levels and help reduce power output in periods where heat is in low demand.
- In January 2024, upgrades were completed on three Gas Boilers and BMS Controls at the Bourne Leisure Centre Wet Side Plant Room. Similarly, an update to four boilers, pumps, BMS Controls and hot water calorifier was completed in March 2024 at the South Kesteven Community Access Point & Library.
- Upgrade of lighting to energy efficient LEDs at Wharf Road Car Park.
- Upgrade of lighting to energy efficient LEDs and boiler upgrade at the Guildhall Arts Centre.
- Completion of roof works to improve energy efficiency at Stamford Arts Centre.

2.26. Other projects that sit outside of the scope of the Council's annual carbon report, further demonstrate its commitment to reducing the district's wider environmental impact:

- Under the current Social Housing Decarbonisation Fund (SHDF) Programme, the Council has upgraded many of its Housing Revenue Account (HRA) dwellings with energy efficiency measures. These include upgrades such as the installation of solar PV arrays, cavity wall extractions and re-fills, loft insulation upgrades and ventilation measures. Whilst the majority of HRA properties are excluded from the Council's carbon reporting, as the Council is not directly responsible for the consumption of energy in tenanted dwellings, the completion of the SHDF Programme will have a significant impact on the energy efficiency of the Council's housing stock. By targeting the lowest performing properties, the energy and carbon savings from upgrades will be significant and help to address issues of fuel poverty for tenants.
- The Home Energy Upgrade Scheme, comprised of two funding streams, offers a range of fully funded energy efficient retrofit home improvements to eligible homeowners in South Kesteven. The Home Energy Upgrade Scheme is from a consortium of councils which include City of Lincoln Council, North Kesteven District Council, South Kesteven District Council and West Lindsey District Council. The scheme helps residents living in homes with poor energy efficiency ratings of EPC band D or below who also have a low income of under £30,000 or receive means tested benefits. The scheme will deliver external wall insulation,

cavity wall insulation, loft insulation, solar panels and high heat retention electric storage heaters for properties that are suitable and fit the criteria.

3. Key Considerations

- 3.1. The report is provided for information rather than decision. Members are asked to take note of the reported emissions and associated emission categories.

4. Other Options Considered

- 1.1 There is no statutory obligation to monitor or report on carbon emissions which arise from Council operations, nor to set or adhere to a reduction in carbon emissions. Nevertheless, regular review of carbon emissions is considered good practice to monitor progress against the Council's declared target to reduce carbon emissions.

5. Reasons for the Recommendations

- 5.1. The report is provided for information to track progress towards the Council's carbon reduction target.

6. Appendices

- 6.1 Appendix 1: Climate and carbon dashboard for 2023/24