

Report to:	Climate and Environment Advisory Committee 13/07/2021
Lead Cabinet Member:	Cllr Bridget Smith
Lead Officer:	Head of Shared Waste Services and Environment

Greenhouse Gas Emissions Accounts for the Council's Estate and Operations, 2020-21

Executive Summary

This report provides the Committee with Greenhouse Gas (GHG) emissions accounts for the Council's estate and operations for 2020-21. It is provided to the committee for information.

Key Decision

1. No

Details

2. Annual GHG emissions accounts for 2020-21 for the Council's estate and operations are provided in **Appendix A**. This is the third set of annual GHG emissions accounts produced for the Council. As with the previous years', they have been drawn up according to principles and procedures as outlined in the latest Environmental Reporting Guidelines issued by the Government's Departments for Environment, Farming and Rural Affairs, (DEFRA), and Business Energy and Industrial Strategy (BEIS). As such, they aim to be relevant, quantitative, accurate (insofar as this is practical), complete (with any exclusions specified, disclosed and justified), consistent, comparable and transparent.
3. In line with the Guidelines, the accounts include emissions from the estate and operations owned and controlled by the Council. Full details of inclusions and exclusions are included in the report, but the following are highlighted:
4. Emissions from the Council's housing stock are excluded because the Council does not control energy use from these properties, (nor does it have access to this data).
5. Emissions from around 1800 street lights owned by the Council, and defined as 'footway lighting', are included in these accounts, on the grounds that they are

owned and controlled by the Council, (although energy costs for these are paid for by parish councils).

6. An external assurance statement on the accounts was completed by the Council's internal auditors in June 2021. This statement noted that all figures used in calculating the tCO₂ reflected the data presented to (the service), and all formulas used were appropriate. It is recommended that a dialogue is opened with the Council's electricity provider in order to gain access to more recent readings, however this has no bearing on the longitudinal accuracy of the reporting.
7. The baseline year used in these accounts is 1 April 2018- 31st March 2019. All reductions in emissions are based on this reporting period. For the same period in 2020-21 there has been an overall 8.8% decrease in emissions for the Council's Scope 1 (direct emissions), scope 2 (indirect energy emissions) and scope 3 (other indirect emissions). For the same period in 2019-20, there has been an overall 10.7% decrease in emissions.
8. **Scope 3 emissions** are defined as the result of activities from assets not owned and/or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain. The reporting of scope 3 emissions is relatively new, and methodologies are still emerging to allow for measurement in many areas. Our current approach is to include what data which is available to us.
9. During 2020-21 the Council's small sites also switched to a green electricity tariff. Electricity data from two traveller sites- at Whaddon and Blackwell have also been added to the list of small sites. Waterbeach's depot completed a full year's worth of electricity generation from solar PV panels. (The solar PV panels installed on the roof of South Cambs Hall belong to Cambourne Parish Council. For this reason, GHG emissions avoided due to electricity exported from these to the grid is not included in SCDC's GHG emissions accounts.)
10. In line with standard reporting procedures, GHG emissions avoided are included as an offset in the 2020-21 accounts. These amount to 246 tCO₂e (244 tCO₂e for the green electricity tariffs and 2 tCO₂e for the electricity generated from the solar PV panels). Using this offset data, the Council's total net emissions compared to the baseline year, show a reduction of 29.8%.
11. In contrast to last year, the GHG emission accounts for 2020-21 include 50% (instead of 100% as previously reported) of electricity consumed at the Depot, on the grounds that we are a Shared Service, and similarly, 50% of the offset due to the solar PV panels. This is in line with City's approach. We have made a baseline recalculation to provide consistency with our previous accounts.
12. For further accuracy for this year (and subsequent years) it has been decided to amend the conversion factor used for business mileage. In previous years the figure used fuel type as 'diesel' but for 2020-21 fuel type will be classed as 'unknown' to account for the mixture in fuel types one would expect for a large organisation. The baseline figure has also been re-calculated to account for this change.

13. Five miles of motorbike fuel was used for business purposes in 2020-21. Motorbike fuel uses a slightly different conversion factor to car fuel; due to the small amount of carbon emissions produced (0.0009 tCO₂), we have not included this figure in the spreadsheet as it would not have any significant impact on the overall data.

14. Progress towards reduction target

From the data (without including the offset data), compared to the baseline year the 2019-20 emissions are lower for all scopes:

- scope 1- (0.7% decrease in tCO₂e)
- scope 2- (21.4% decrease in tCO₂e)
- scope 3 (other indirect emissions)- (54.1% decrease in tCO₂e)

15. Scope 1 emissions have remained roughly the same*

This is despite an increase in diesel consumption by fleet vehicles due to the increased number of new housing developments. Without the introduction of an extra electric bin lorry in November 2020, this number would have increased.

16. Scope 2 emission decreases could be due to several factors.

- 37.8 % of the decrease in scope 2 emissions is due to the footway LED lighting upgrade. At the end of March 2021 around 84% of lights had been upgraded. The figures for 2020-21 reflect the fact that this upgrade took place throughout the year, therefore the full impact of this work will not show up until the year following completion of works.
- 40.3% of the decrease in scope 2 emissions is due to a reduction in electricity usage at South Cambs Hall due to changes in building usage since the Covid-19 pandemic*

17. Scope 3 emission decreases will be due to:

- A decrease in staff mileage (-55.3% on the previous year) due to an increase in home working due to the Covid-19 pandemic.

18. Avoided electricity figures have increased since 2019-20 which shows a positive impact on the Council's total 'net' carbon emissions. Included this year are avoided figures from a green tariff introduced in all of the small sites owned by the Council, plus a full year of data from South Cambs Hall (last year only 6 months of electricity was supplied on a green tariff).

19. At the time of writing the report, the Council, along with Cambridgeshire City Council are investigating the possibility of including a share of the carbon emissions produced by the 3C ICT servers located at both Pathfinder House (Huntingdon) and Sand Martin House (Peterborough). If agreed, this figure will be included as an additional scope 3 category in next year's report along with a baseline recalculation.

20. In order to reach the Council's target of a 75% reduction by 2030, a reduction of at least 6.25% in emissions of the baseline is needed per annum. With a reduction of 8.8% in emissions since 2018-19 we are currently not on track to reach our target. However the completion of the Greening of South Cambs Hall and purchase of new electric fleet vehicles will have a significant impact on our future figures

*Please note that since March 2020 the building has remained open for the NHS contact centre staff (sometimes open 7 days a week during pandemic peaks) and for the required skeleton staff (caretakers, post, printing, and key workers) needed for the building to remain fully open and compliant with H&S requirements.

21. Plans for the future

- As can be seen, the biggest producer of carbon emissions is from our fleet which runs on diesel as a fuel. We will achieve a more marked decrease in emissions as more electric vehicles are introduced into the fleet; the current 8 year plan being to introduce electric or hydrogen vehicles when the existing vehicles come to the end of their working lives.
- Gas consumption is expected to decrease by at least 80% following the installation of a ground source heat pump at South Cambs Hall, helping to heat the building and produce hot water.
- Electricity consumption will also drop as the remaining ornate footway lights are converted to LED lights.
- A solar car port will generate 20% of the electricity used by the building. This is in tandem with 20 electric vehicle charging points encouraging staff and visitors to travel cleaner will subsequently help to achieve a reduction in scope 3 emissions.
- The setup of three electric vehicle charging points at Waterbeach Depot has also now been completed and launched.
- The replacement of all lights to LED lights will soon be completed at South Cambs Hall.
- More work taking place at South Cambs Hall comprises of a building energy management system upgrade, air handling unit fan upgrades, and chiller modifications and enhancements
- Working from home (which has increased since the Covid-19 pandemic) will further reduce scope 3 emissions, if continued.

Implications

22. In the writing of this report, taking into account financial, legal, staffing, risk, equality and diversity, climate change, and any other key issues, the following implications have been considered:-

Risks/Opportunities

23. Prior to 2020, there were no existing risks on the Corporate Risk register in respect to a reduction in carbon emissions. A new risk, 'Failure to meet carbon emission reduction target' was added by Internal Audit in November 2020 following the actions highlighted from the Internal audit Carbon Management report.

Appendices

Appendix A: GHG Emissions accounts for the Council's estate and operations 2020-21

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