

3 November 2020

REPORT TO: Climate and Environment Advisory Committee

LEAD MEMBER: Cllr Bridget Smith

LEAD OFFICER: Head of Shared Waste Services and Environment

Greenhouse Gas Emissions Accounts for the Council's Estate and Operations, 2019-20

Executive Summary

1. This report provides the Committee with Greenhouse Gas (GHG) emissions accounts for the Council's estate and operations for 2019-20. It is provided to the committee for information.

Recommendations

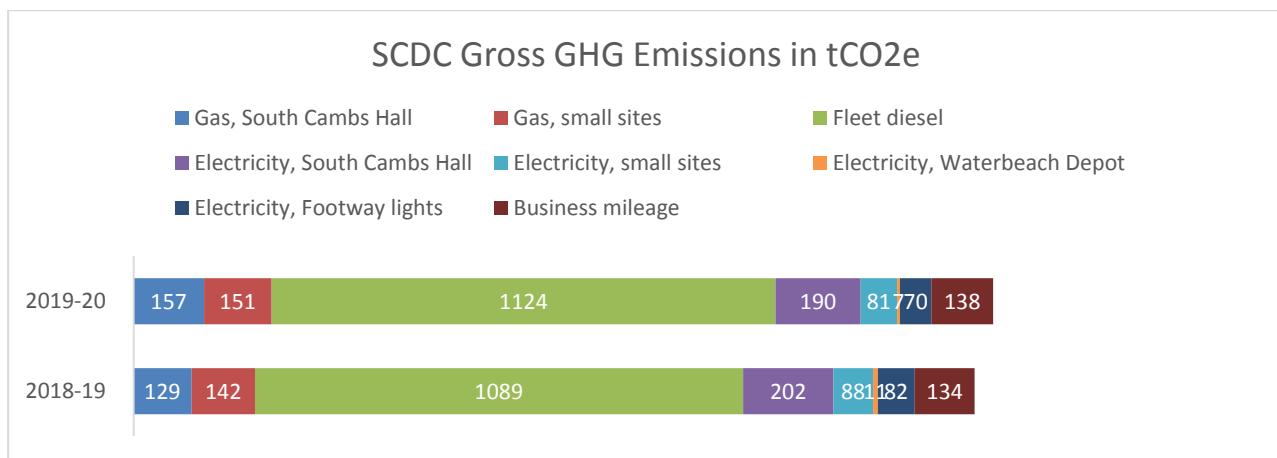
2. The committee is recommended to note:
 - a. the GHG emissions accounts for 2019-20, including the modest reduction of 2.9% in net emissions relative to the previous year
 - b. that projects which are currently being planned or delivered are expected to result in much larger reductions to emissions in the current and future years.

Details

3. Annual GHG emissions accounts for 2019-20 for the Council's estate and operations are provided in Appendix A. This is the second set of annual GHG emissions accounts produced for the Council. As with the previous set, 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.

4. 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:
5. 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).
6. 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).
7. An external assurance statement on the accounts was completed by the Council's internal auditors in October 2020. This statement noted that some of the gas consumption and electricity usage figures, (footway lighting and 'small sites', ie mainly communal rooms in sheltered housing), are not calculated with meter readings; instead estimates were used based on supplier quotations. For this reason, Internal Audit was able to provide limited assurance over the accuracy of the data, calculations and reported emissions figures in the documents provided.
8. The baseline year used in these accounts is 1 April 2018- 31st March 2019. All changes in emissions are based on this reporting period. Relative to this period, in 2019-20 there has been an overall 2.3% increase in emissions for the Council's Scope 1 (direct emissions), scope 2 (indirect energy emissions) and scope 3 (other indirect emissions).
9. During 2019-20 the Council switched to a green electricity tariff, and electricity generated from solar pv panels installed at the Depot in Waterbeach was exported to the grid for the first time. (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 as a result are included in the 2019-20 accounts and contribute to the total net emissions figure. These amount to 98 tCO2e (96 tCO2e for the green electricity tariff and 2 tCO2e for the electricity exported to the grid from the solar pv panels). Using this offset data, the Council's total net emissions compared to the baseline year, show a reduction of 2.9%
11. Following discussions with Cambridge City Council, and to prevent double-counting of emissions, GHG emissions from electricity consumed by the Shared Waste Service at the Waterbeach Depot have been split evenly between the two Councils. This is a change from the accounts originally published for 2018-9, which accounted for 100% of electricity consumed at the Depot. A base recalculation has been provided to enable meaningful comparison between years. GHG emissions offset due to electricity exported to the grid from the solar PV panels have also been split evenly with Cambridge City Council.

Reasons for changes to GHG emissions



12. The chart above shows the breakdown in gross GHG emissions.
13. Compared to the baseline year the 2019-20 scope 1 emissions (gas for heating and fleet diesel) have increased by 5.3%; scope 2 emissions (electricity) have reduced by 9.1% and scope 3 emissions (other indirect emissions) have increased by 4.5%.
14. Scope 1 emission increases could be due to a number of factors. The increase in combustion of gas for space and water heating increased by 14%. Possible explanations are:
 - Weather dependent with a greater requirement for heating
 - Renovation work at South Cambs Hall introducing more cold air into the building from outside
 - An increase in staff working from South Cambs Hall

The increase in diesel fuel consumption (+11%) could be linked to:

 - the increase in housing developments which would subsequently increase the total miles travelled by the fleet vehicles.

15. Scope 2 emission decreases are due in part to decarbonisation of the electricity grid and in part to reduced need for grid electricity at the depot in Waterbeach due to solar PV panels.
16. Scope 3 emission increases could be due to:
 - An increase in staff mileage due to business requirements.

Plans for the future

17. Gas consumption is expected to decrease by at least 80% following the installation of a ground source heat pump at South Cambridgeshire Hall which will heat the building and produce hot water. Electricity consumption will also drop as the remaining footway lights are converted to LED lights while 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. Working from home (which has increased since the Covid-19 pandemic) will further reduce scope 3 emissions, if continued. As can be seen, the biggest producer of carbon emissions is from our fleet which run on diesel as a fuel. We will achieve some reduction in the impact of the current diesel fleet by improved routing and driver behaviours. More substantial reduction will result from a changed procurement strategy for new fleet to an electric based solution, including the cleaner energy capture options.

Appendices

Appendix A: GHG Emissions accounts for the Council's estate and operations 2019-20

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