



Glasgow City Council

Environment, Sustainability & Carbon Reduction City Policy Committee

Report by Executive Director of Neighbourhoods and Sustainability

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CARBON MANAGEMENT PLAN PERFORMANCE UPDATE

Purpose of Report:

The purpose of this report is to update Committee on the Council's performance in relation to its targets set out in the Carbon Management Plan.

Recommendations:

The Committee is asked to note the contents of the report.

Ward No(s):

Citywide:

Local member(s) advised: Yes No consulted: Yes No

1 Introduction

- 1.1 The Committee has previously considered update reports on how the Council is progressing its Carbon Management Plan (CMP). This sets out the actions for the Council to take as a distinct organisation in order to meet Glasgow's carbon emissions reduction ambitions.
- 1.2 The city has a 30% reduction target for the year 2020 (based on a 2005/06 baseline), however this report focuses on the role of the Council and its family services in reducing their own carbon emissions. It shows how the Council is playing its part in contributing to lower emissions for Glasgow and thereby seeking to be an exemplar organisation. In addition, it illustrates how savings from reduced energy usage are being realised and thereby supporting the Council's wider budgetary processes.
- 1.3 In light of the Council's commitment to make the City Carbon Neutral by 2030, a revised CMP will be required with a target(s) to reflect this ambition for the Council estate. This will be developed over the course of 2021 allowing a consultation with elected members towards the end of the year.

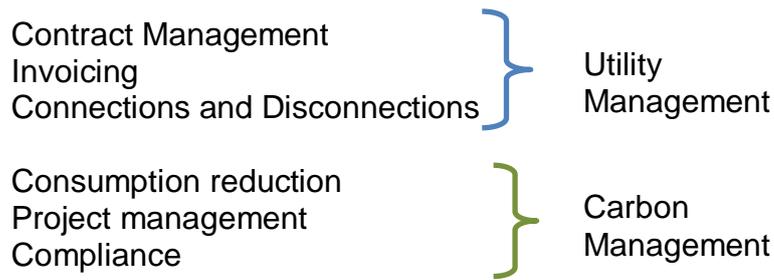
2. Managing the Council's carbon emissions

- 2.1 The CMP describes a strategy and sets out actions for the Council to reduce its emissions. A revised version was approved in 2014 and can be accessed using the link below.

www.glasgow.gov.uk/index.aspx?articleid=17181

- 2.2 The Council employs a Carbon Management Team (CMT) in order to support progress towards this plan. It provides a 'one-stop' utility service to all services and to the wider Council family. This includes everything from arranging connections through to reducing consumption. The team is housed within Neighbourhoods and Sustainability and provides support to all services of the Council and its family.
- 2.3 The overarching aim of the CMT is to reduce the Council's carbon emissions by 30% by 2020. This is based on a 2005/06 baseline and equates to a reduction of approximately 60,000 tonnes of carbon dioxide from that year's emissions (tCO₂).
- 2.4 The work of the CMT can broadly be split into two distinct responsibilities, as presented in figure 1 below.

Figure 1: CMT Responsibilities



2.5 Utility management involves the management of the electricity, gas and water supply contracts for Council premises. It also relates to the associated metering arrangements, monitoring contracts and invoicing. Carbon management involves reducing the impact of the Council and its family services in relation to carbon dioxide emissions.

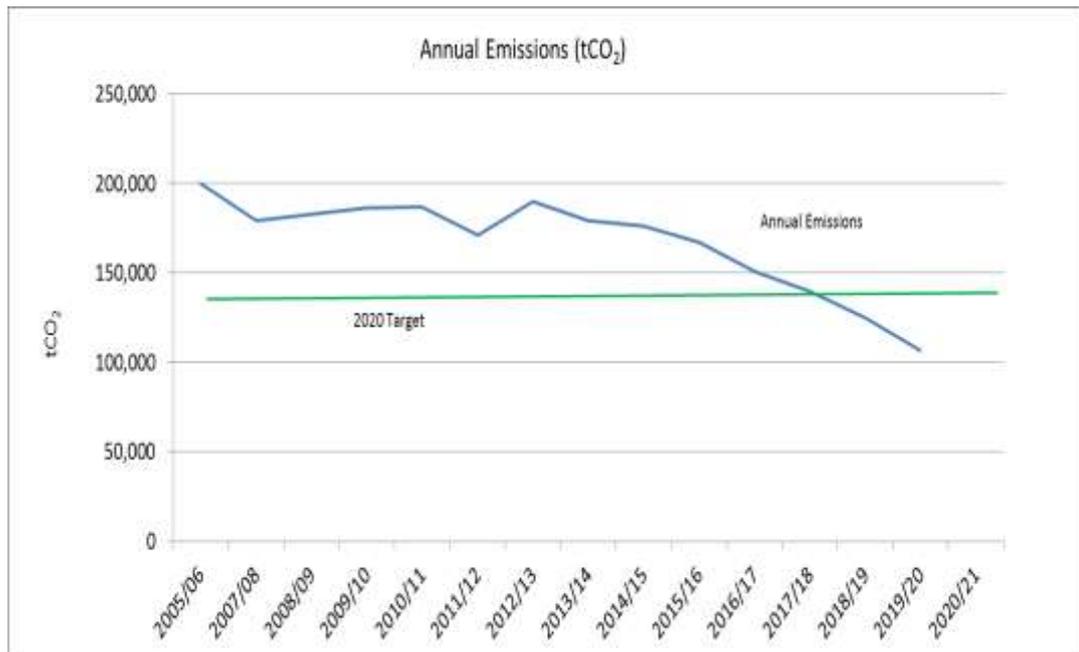
2.6 In this light, the CMT is currently working on a variety of projects which seek to reduce the consumption and/or cost of gas, electricity, heating oil, petrol and diesel for the Council. In addition, a number of city-wide programmes are managed by the team - for example, the electric vehicle charge point network and a range of renewable energy projects.

3 CMP – performance in 2019/20

3.1 The scope of the CMP involves all building related energy consumption. It also covers street and stair lighting, together with the primary use of oil, petrol and diesel fuels, as well as calculated emissions from business travel.

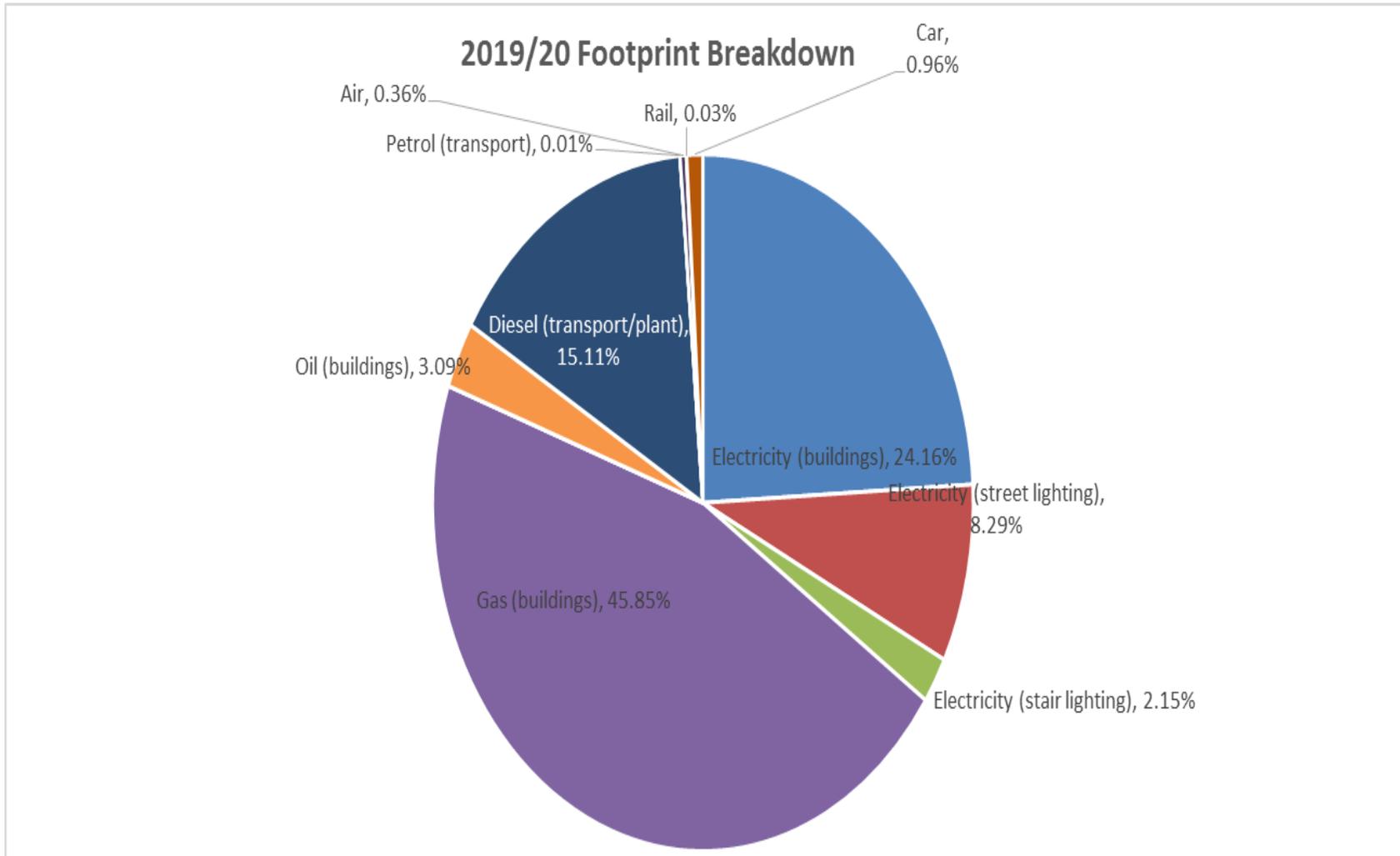
3.2 Significant progress has been made against the 2005/06 baseline. The Council family has reduced its emissions by an absolute proportion of 46.65% through the 2019/20 reporting year. Figure 2 below illustrates the trend line from the baseline year, 2005/06.

Figure 2: Annual Emissions against 2020 Reduction Target



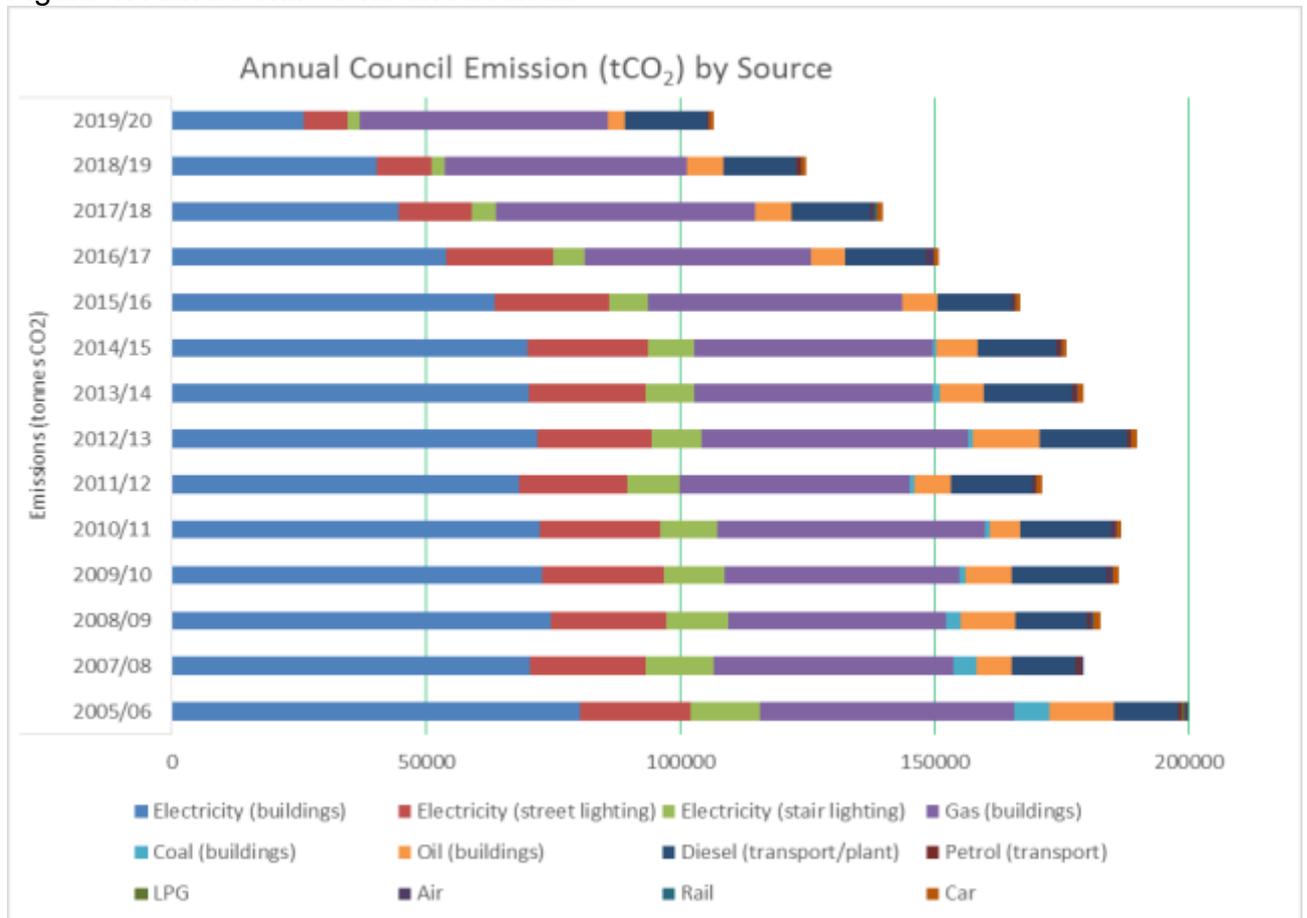
- 3.3 As can be seen above, the Council has exceeded its 2020 reduction target by over 16% and 33,000 tCO₂.
- 3.4 The Council family has therefore continued the trend from 2013/14 and has continued to exceed its emissions reduction target, which it first achieved in 2017/18, two years ahead of schedule. This is good news and shows how a consistent focus on driving down emissions can produce positive results. There is, of course, no room for complacency and further work needs to be undertaken in order to maintain the downward trend in emissions, particularly with a view to setting carbon neutral targets.
- 3.5 The Council's activities in the year 2019/20 resulted in a 9% reduction in emissions against its 2018/19 total. Figure 3 and the data presented in Appendix 1 gives a breakdown of emissions by source from different aspects of the Council family's activities for 2019/20.

Figure 3: 2019/20 Carbon Footprint Breakdown.



- 3.6 Building related consumption represents just over 73% of the Council's total carbon footprint, with diesel consumption responsible for 15% of emissions and street and stair lighting a further 10%
- 3.7 Figure 4 below presents the breakdown of the annual footprints by emission source for the Council and its family since baseline year. A tabular version is provided in Appendix 1.

Figure 4: Annual emissions and sources



- 3.8 In terms of savings against 2005/06, the greatest reductions have been made in electricity consumption. This is largely due to LED lighting installations and retrofits in buildings, street lighting and stair lighting.
- 3.9 The Council's footprint has also benefitted from the decarbonisation of electricity nationally and the reduction in the resultant carbon conversion factor.
- 3.10 Coal consumption has almost been eradicated, with only very small volumes being consumed at one primary school in the coldest weather. Although it should be noted that the biomass boiler located there is being upgraded to supply all heating and hot water for the site.
- 3.11 Apart from two sources, the results from 2019/20 show reductions across the Council's footprint. Gas consumption has increased by just over 2.8% and diesel related emissions by 12% compared to 2018/19.
- 3.12 The electrification of the Council's fleet will begin mitigating diesel consumption and with approximately 300 cars and light vans being replaced in November 2020, a positive impact will be seen in 2020/21 figures.
- 3.13 The rise in gas consumption within a general trend of reduction, combined with the fact it constitutes over 45% of the Council's footprint is of some concern. This highlights the difficulty of decarbonising heat and illustrates the need for significant investment in zero and low carbon heat technologies.
- 3.14 However, the ongoing programme of building management system (BMS) installation has had a positive impact on the gas consumption at individual sites. It ensures that heating is only delivered when required by either weather conditions or building occupancy rather than relying on timeclocks. Detailed consumption data allow the CMT to interrogate the use of energy in specific premises and at specific times in order to ensure optimal energy usage.

4. Next Steps

- 4.1 The Council has now met its 2020 carbon emissions reduction target. This gives some room for confidence in its capacity to continue driving down emissions and to look at even more challenging future targets. As stated earlier in this report, there is no room at all for complacency and the CMT will continue to push Council and family services to do all they can to keep reducing their emissions and thereby realise savings for the Council.
- 4.2 The CMT continues to work with Property and Land Services (PLS) to improve the efficiency of the Council's operational building assets and Project Management and Design (PM&D) on new build and major refurbishment projects.

- 4.3 In addition, work is ongoing with colleagues in relation to the fleet replacement programme and the installation of charge points for Council vehicles.
- 4.4 The recent Council commitment for Glasgow to become carbon neutral, will require the Council's CMP to be updated. This will ensure that the Council continues to contribute to carbon reductions, both locally and nationally.
- 4.5 The publication of the Climate Emergency Recommendations and the ongoing consultation on the resultant Climate Emergency Implementation Plan (CEIP) will help frame this document. This will ensure the Council plan compliments and aligns with the plan for the City.
- 4.6 Work has commenced on the drafting this document and a process of engagement with services and other relevant stakeholders will shortly commence.
- 4.7 In order for the Council to benefit from the opportunities that low carbon actions present, the continued roll-out of existing programmes of work, combined with the pursuit of more innovative solutions like district heating or renewable energy, require resource, capital investment and support from leadership and elected members.

5. Policy and Resource Implications

Resource Implications:

- Financial:* The more it can reduce its consumption, the less the Council pays for energy. By not meeting reduction targets the Council will miss opportunities to reduce spend. In addition, the Council, under the Carbon Reduction Commitment, is mandated to buy allowances for the carbon emissions for which it is responsible.
- Legal:* There is no legal risk from not meeting targets although there is a reputational risk from not doing so.
- Personnel:* Officers from the CMT are core Council employees. The development and implementation of the next phase of the CMP will require additional resources.
- Procurement:* Individual carbon management projects have procurement requirements, which are managed on a case-by-case basis.
- Council Strategic Plan:** This work supports the key aims of the Sustainable and Low Carbon City theme of the

Council Strategic Plan and particularly commitment 67.

Equality and Socio-Economic Impacts:

Does the proposal support the Council's Equality Outcomes 2017-22

Not directly. However reducing the Council's utility costs and liability will free up financial resources that could be focused on the Council's equality objectives.

What are the potential equality impacts as a result of this report?

No significant impact – an EQIA screening has been undertaken.

Please highlight if the policy/proposal will help address socio economic disadvantage.

Not directly.

Sustainability Impacts:

Environmental:

This work delivers a significant positive environmental impact. Reducing utility consumption directly reduces the Council's environmental impact through the avoidance of CO₂ emissions.

Social, including opportunities under Article 20 of the European Public Procurement Directive:

Savings from reduced energy usage potentially help to fund the Council's broader social objectives.

Economic:

The Council's actions to reduce its carbon footprint form part of a broader agenda to promote the city as a hub for local carbon business development.

Privacy and Data Protection impacts:

No data protection or privacy impacts.

6. Recommendations

The Committee is asked to note the contents of the report.

Appendix 1: Annual Emissions by Source

Energy Usage	Emissions (tonnes CO ₂)		
	2005/06	2019/20	2019/20 % of total
Electricity (buildings)	80,190	25,768	24.16%
Electricity (street lighting)	21,816	8,838	8.29%
Electricity (stair lighting)	13,623	2,292	2.15%
Gas (buildings)	50,197	48,904	45.85%
Coal (buildings)	6,752	0	0.00%
Oil (buildings)	12,767	3,291	3.09%
Diesel (transport/plant)	12,797	16,112	15.11%
Petrol (transport)	656	10	0.01%
LPG	338	0	0.00%
Air	782	389	0.36%
Rail		28	0.03%
Car		1,024	0.96%
TOTAL	199,919	106,655	100.00%