Agenda Item

Report

Report to:	**Climate Change and Sustainability Committee**
Date of Meeting:	**15 May 2024**
Report by:	**Executive Director (Community and Enterprise Resources)**

Subject:	**Carbon Management Interim Update 2023 – 2024**

1. Purpose of Report

1.1. The purpose of the report is to:-

- update the Committee on the mid-year position with respect to South Lanarkshire Council's carbon emissions for 2023-2024

2. Recommendation(s)

2.1. The Committee is asked to approve the following recommendation(s):-

(1) note the mid-year position with respect to the Council's carbon emissions for the year 2023-24 as outlined in paragraph 5.2.

3. Background

3.1. The Scottish Government had set climate targets within legislation to reduce all greenhouse gas emissions Scotland-wide by 75% by 2030, 90% by 2040 and a total reduction from the 1990 baseline by 2045 (i.e. net zero emissions).

3.2. Public bodies, like South Lanarkshire Council, are expected to contribute to the above national targets, with the statutory framework for their climate action and reporting outlined in the Climate Change (Scotland) Act: which states that a public body must, in exercising its functions, act:

- in the way best calculated to contribute to the delivery of Scotland's national emissions reduction targets.
- in the way best calculated to help deliver Scotland's statutory climate change adaptation programme; and
- in a way that it considers is most sustainable.

3.3. To measure the Council's success in exercising the above functions and contributing to the above national targets, the Council's carbon footprint has been measured and reported annually since 2005-06. The parameters of the footprint were set following advice from The Carbon Trust as part of the Council's participation in the Carbon Trust's Local Authority Carbon Management Programme and its signing of the Scottish Climate Change Declaration in 2006. The scope of the Council's carbon footprint currently includes emissions from:

- Buildings energy
- Fleet

- Employee travel
- Household waste
- Street lighting

3.4. Each year, the Council agrees a short-term carbon reduction target for the year ahead. Last year it was agreed at the Corporate Management Team meeting on 20 April 2023 that a defined carbon percentage reduction target could not be set for 2023-24, and instead the Council should aim to reduce as much as possible compared with previous years.

3.5. The Council has, however, committed to a zero direct emissions target by 2038. This target is in line with the ambitious public sector targets detailed in Scotland's Climate Change Plan and Scotland's Heat in Buildings Strategy (this is a statutory target for public organisations such as local authorities to achieve zero emissions heat from their public sector buildings by 2038, i.e. remove fossil fuels from the Council estate).

3.6. On 20 March 2024, Scotland's Climate Change Committee (CCC), the independent statutory body established under the Climate Change Act 2008, published its annual report Progress in reducing emissions in Scotland 2023 Report to Parliament. This report highlighted that the Climate Change Committee believed that the Scottish Government would not meet its statutory 2030 goal to reduce emissions by 75%. The carbon reduction figure for Scotland is currently sitting at 49.2% (Scotland would need to reduce by another 25% over the next 6 years to meet the 75% target). The report stated the following:-

> '(The Scottish Government's) action and policies "continue to fall far short" of what was needed. Most sectors, such as housing, transport and farming, remained so far behind their interim targets "the acceleration required [to] meet the 2030 target is now beyond what is credible".'

3.7. Following this report, on 18 April 2024 the Scottish Government announced that the 2030 target and annual carbon targets would be replaced with a system measuring emissions every five years. It was confirmed that new legislation would be expedited to address the matters raised by the CCC, and ensure the legislative framework better reflected the reality of long-term climate policymaking.

4. Carbon Management Reporting

4.1. To align the Council's carbon management reporting with the Public Sector Climate Change Duties Compliance report, going forward all Council carbon management related reports will categorise the Council's corporate emissions as Scope 1, 2 or 3 emissions. This is the standard for carbon reporting as per the Greenhouse Gas Protocol Corporate Standard (the world's most widely used greenhouse gas accounting standards). Categorising the emissions in this way highlights the direct emissions that a company generates while performing its business activities (scope 1), whereas scope 2 covers indirect emissions from purchased energy, and scope 3 covers indirect emissions created elsewhere in the value chain.

- Scope 1 (direct emissions): greenhouse gas emissions from fossil fuel related activities controlled by an organisation. Examples might be emissions from gas boilers in Council leisure centres and emissions from the Council's own petrol and diesel vehicles

- Scope 2 (energy indirect): emissions associated with the consumption of purchased electricity, heat, steam, and cooling. Examples might be emissions

from lighting in the Council's primary schools and offices, and from charging Council's EV fleet vehicles

- Scope 3 (other indirect emissions): emissions arising from the procurement of goods and services from a third party/contractor. Examples might be emissions from: business travel associated with staff-owned vehicles; household waste; and from the Council's procurement of goods and services

4.2. Figure 1 below provides an overview of the scope of the Council's carbon footprint and which category these align with:

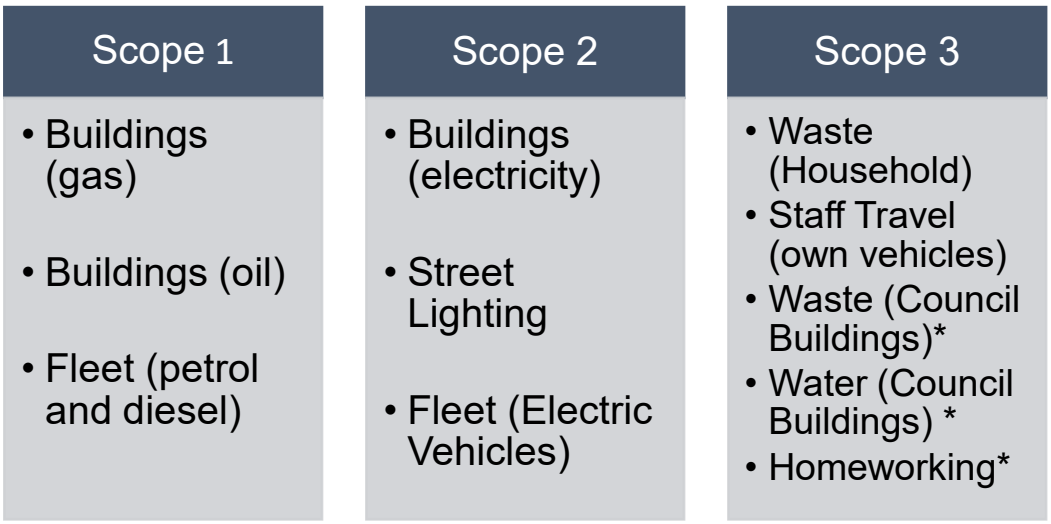


Figure 1: South Lanarkshire Council's Carbon Footprint (* indicates additions for 2024/25 reporting)

4.3. Waste (Council buildings), water (Council buildings) and homeworking emissions have not been historically included in the Council's carbon footprint. However, as data is now being actively collected for these areas by the Council, they will now be added to the carbon reporting from financial year 2024-25. This is consistent with the reporting requirements within the Council's Public Sector Climate Change Duties Compliance report. This will lead to an increase in our recorded carbon footprint but will constitute more accurate reporting and will result in a new baseline. As noted in previous reports on this topic, carbon management reporting will continue to evolve as more data becomes available.

5. Council's Carbon Emissions 2023-24 Interim Update

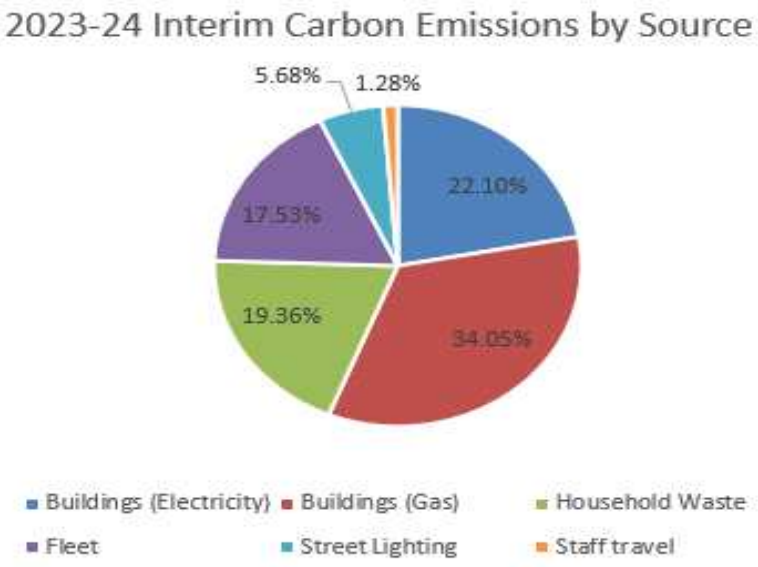
5.1. As reported to the Committee on 29 November 2023, the Council's total carbon footprint has reduced by 65.7% between 2005 and March 2023. This has been achieved through introduction of numerous energy efficiency measures including behaviour changes related to reducing energy use, use of renewable technology such as solar PVs, boiler upgrades, introduction of EV vehicles as part of the Council's fleet, reduction of household waste going to landfill, and increased use of Energy from Waste (EfW) facility, as well as through the decarbonisation of the grid.

5.2. The Council's interim 2023-24 carbon emissions (from April – September 2023) are detailed in the table below and are compared with the same corresponding period for 2022-23:

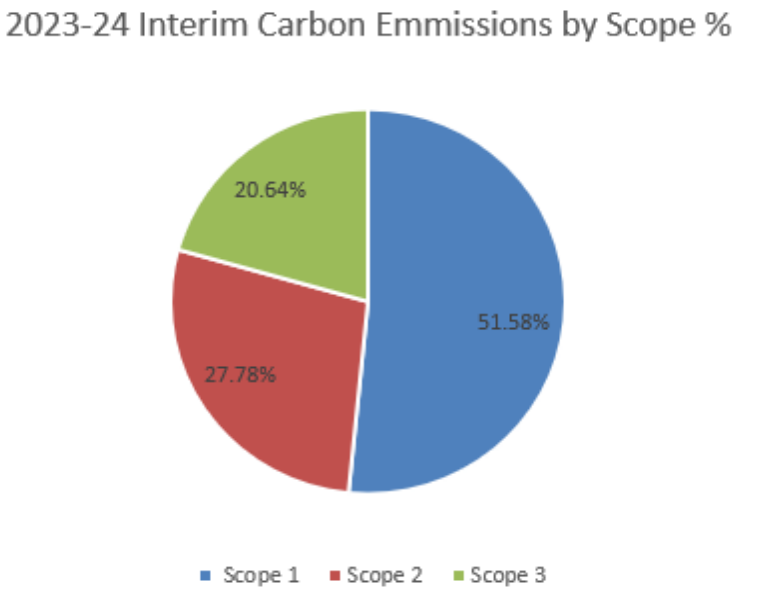
Emissions Source	Timeframe	2022-23 (CO2te)	2023 -24 (CO2te)	2023-24 % by source	Variance	Variance %
Buildings (Gas) (Scope 1)	Apr – Sept	7,779	6,910	34.0%	-869	-11.17%
Fleet (Scope 1)	Apr - Sept	3,609	3,558	17.5%	-51	-1.43%
Buildings (Electricity) (Scope 2)	Apr - Sept	4,397	4,486	22.1%	89	2.02%
Street Lighting (Scope 2)	Apr - Dec	1,079	1,153	5.7%	74	6.84%
Household Waste (Scope 3)	Jan - June	4,125	3,929	19.4%	-195	-4.74%
Staff travel (Scope 3)	Apr - Sept	261	260	1.3%	-1	-0.34%
Totals (CO2te)		21,250	20,296	100%	-954	-4.49%

5.3. The carbon figures are calculated using the Greenhouse Gas Conversion Factors for Company Reporting[1] for electricity, gas and waste. These factors are subject to change due to updated data, shifts in energy sources and advancements in methodologies. As a result, the factors can vary from year to year, which can impact the Council's carbon footprints.

5.4. The charts below show the proportion of the Council's Interim 2023-24 carbon footprint allocated to each source and scope:



[1] The GHG Conversion Factors for Company Reporting are published each year by UK Government's Department for Energy Security and Net Zero



5.5. These figures demonstrate that an overall reduction of 4.49% has been achieved so far for 2023-24 scope 1-3 emissions and 8.08% has been achieved for scope 1 emissions. The likely reasons for these reductions are listed below (paragraph 5.7) for each source.

5.6. Based on 2022/23 carbon emissions (53,553 tCO2e), an annual reduction of roughly 2,550 tCO2e per year, or 4.76% per year, would be required to bring total Council operational emissions down to net zero by 2045 (the target date for total emissions reduction from 1990 baseline). Based on 2022/23 for Scope 1 emissions (32,869 tCO2e), an annual reduction of roughly 2,347 tCO2e per year, or 7.14% would be required to bring Council Scope 1 emissions down to zero by 2038, the date for zero direct emission committed to in line with the Scotland's Heat in Buildings strategy (see paragraph 3.5). These figures are based on 2022/23 figures and therefore do not account for the proposed changes in Council carbon emissions reporting (paragraph 4.3) which would increase the Council's carbon footprint. There is also potential for other emissions sources to be added or removed from the Council's emissions reporting in future years as reporting requirements change; this would alter the figures detailed above.

5.7. <u>Buildings</u>

5.7.1. Gas consumption in Council buildings for April - September 2023 (scope 1 emissions) decreased by 11.36% compared to the same period in 2022, resulting in a carbon emission decrease of 11.17%. This decrease is in part due to the Council Headquarters being shut in July for two weeks, a later start date for the school heating switch-on, and a relaxing of Covid ventilation measures.

5.7.2. Electricity consumption (scope 2 emissions) in Council buildings for April - September 2023 decreased by 4.72% compared with the same period in 2022. However, a 7% increase in the carbon conversion factor for electricity has resulted in an increase in emissions from electricity use in buildings of 2.02%.

5.7.3. Oil for heating in Council buildings (scope 1 emissions) is not included in the interim report figures. These figures are calculated at the end of the financial year and will be included in the end of year carbon management report.

5.8. Household Waste

5.8.1. The emissions attributed to household waste collection (scope 3 emissions) from January – June 2023 have reduced by 4.74% compared with the same period in 2022.

5.8.2. The overall amount of waste collected from households increased slightly by 2.78% over this period compared to 2022. Although the amount of waste collected increased from last year, emissions attributable to household waste decreased due to a higher percentage of the Council's non-recyclable waste being sent to the EfW facility and a smaller percentage being landfilled (carbon associated with waste processed at EfW facilities is much less than if the waste had been landfilled). An increase in the household recycling rate of 1% in 2023 compared to the same period in 2022 also contributed to the overall reduction emissions attributable to household waste.

5.8.3. Work is continuing to increase recycling facilities for households and reduce recycling contamination rates where possible to further reduce emissions.

5.9. Fleet and Staff Travel

5.9.1. An emissions reduction of 1.43% was achieved from fleet vehicles (scope 1) between April and September 2023 compared with the same period in 2022. A reduction in the amount of petrol and gas oil consumed by SLC fleet vehicles has contributed to this decrease in emissions.

5.9.2. A further emissions reduction of 0.34% was achieved from staff travel in the same period; this covers electric pool car usage (scope 2), and staff travel claims (scope 3). The reductions are attributable to increased use of staff's own low emissions vehicles, the increase in home and agile working and the use of information technologies such as MS Teams. Staff mileage claimed has increased this year compared to years 2020/21 and 2021/22, however is below pre-pandemic levels.

5.10. Street Lighting

5.10.1. Electricity consumption from street lighting (scope 2) during the period April – December 2023 decreased slightly by 0.23%, however carbon emissions increased by 6.84%. This is due to the 7% increase in the carbon conversion factors for electricity as reported in 5.7.2.

6. 2024-25 Carbon Emissions Target Setting

6.1. To establish achievable carbon reduction targets for 2024-25, meetings have been held with Resources and Services and a summary of discussions for each source of emissions is detailed below. These discussions provide context for setting carbon emission reduction targets.

6.2. Buildings

6.2.1. The Council has committed to a zero Scope 1 (direct emissions) target by 2038. This aligns with Scotland's Climate Change Plan and Scotland's Heat in Buildings Strategy which both detail 2038 as the date for decarbonising public buildings. The expectation is that 2038 is the backstop date for only the most difficult buildings, such as hospitals, to be decarbonised.

6.2.2. As outlined in paragraph 4.2., Scope 1 emissions includes the gas and oil used in Council buildings. To date in 2023/24, gas (oil reported at Q4) in our Council buildings accounts for 34% of all Council carbon emissions. Representing over a third of total emissions, any decarbonisation measures within Council buildings stand to have a substantial impact on the Council's overall carbon reduction performance.

6.2.3. The Council currently has 258 non housing properties heated by gas or gas hybrid systems and a further 29 heated by oil or oil hybrid systems. Assuming all these buildings are to be retained for future service delivery, to achieve zero direct emissions as per the Heat in Buildings Strategy and the Council's own scope 1 emissions carbon reduction target, all these buildings would require heating system replacements and fabric upgrade works by 2038 – this equates to approximately 20 buildings per year.

6.2.4. Further to scope 1 emissions detailed above, 22.1% of the Council's emissions come from electricity used in Council buildings (scope 2). It is anticipated that emissions attributable to electricity in Council buildings will primarily reduce as a result of the decarbonisation of the national grid. Practical measures to reduce electricity demand in Council buildings could also help to reduce emissions associated with this source and could be considered when setting emission reduction targets.

6.2.5. To progress this work, feasibility studies have been commissioned on four primary schools and three wet leisure facilities. This information will form the basis of the initial route map to decarbonise the Council buildings estate. A report on the findings of the net zero feasibilities and the actions already taken to date to reduce building energy demand is being submitted to the Climate Change and Sustainability Committee on 15 May 2024.

6.2.6. Until the above preliminary work is complete, a more detailed route map for the building's estate cannot be progressed. It is clear, however, that an associated financial strategy will be required for the above as reduction targets cannot be met within current budgets.

6.3. Household Waste

6.3.1. 19.36% of Council emissions come from household waste. The emissions from waste have reduced by almost 85.9% since 2005. This is due to increased recycling opportunities for most households, greater segregation of waste type and the new residual waste contract which sees non-recyclable waste treated at an Energy from Waste facility rather than sent to landfill.

6.3.2. The kerbside collection service is currently undergoing a review to consider frequency and capacity of kerbside collections. The aim of the review is to maximise recycling opportunities and encourage positive behaviour change and it is hoped that this will have a beneficial impact on the Council's carbon footprint. A report will be presented later in the year on the findings of this review.

6.3.3. Currently, no suggested reduction target can be offered on this source as no further reductions are expected for the coming year. The outcome of the review mentioned above will inform future target setting around emissions from household waste.

6.4. Fleet and Staff Travel

6.4.1. 18.8% of Council emissions come from fleet and staff travel. The emissions from fleet and staff travel have reduced by 25% and 82% respectively since 2005. This is due to many activities such as downsizing the size of vehicles, the introduction of the pool car system, driver fuel efficiency training, route planning, installation of fuel-efficient technologies and the move from fossil fuel to electric for around 35% of fleet cars.

6.4.2. South Lanarkshire Council no longer procures new petrol and diesel cars and is committed to phasing out petrol and diesel cars by 2030 as per the Scottish Government's Programme for Government 2019-20 target. Further carbon reduction would be possible by replacing the remaining 65% of fossil fuelled cars with electric equivalents and installing the charging infrastructure as appropriate. We continue to

review the vehicle requirements across the Council in discussions with Services; these discussions will formulate the basis of a fleet modernisation programme which will in turn inform future target setting around emissions for fleet vehicles.

6.4.3. Staff travel will continue to be monitored and staff are encouraged to use MS Teams for meetings and EV pools cars for business journeys when possible.

6.4.4. Street Lighting

5.7% of Council emissions come from street lighting. The ambitious LED replacement programme which completed in 2019 achieved a 68% emissions reduction from street lighting between 2014 and 2019. It is anticipated that emissions from street lighting will increase in the future as there continues to be an increase in the number of streetlights within newly adopted housing developments. For this reason, a carbon reduction target cannot be set for street lighting for 2024-25.

7. Next steps

7.1. Based on the above information, it is proposed that a percentage reduction target is not set for financial year 2024-25 and instead the Council should continue to aim to reduce as much as possible compared with the previous year, without a set target.

7.2. As noted at paragraph 3.5, whilst the Council has a zero direct emissions (scope 1) target by 2038, it does not have a route-map in place to achieve this target. This route map is being developed as part of the Council's longer-term Net Zero strategy and will require collaboration with all Resources. Over the next 18 months, a series of reports will be produced which will form the basis of the Council's net zero route map. These include:-

- Carbon Management Year End Report 2023-24
- Public Sector Climate Change Public Duties Report 2023 -24
- Fleet Modernisation Plan
- South Lanarkshire Local Heat and Energy Efficiency Strategy
- Carbon Future Targets Report

7.3. In addition, it is expected that the new Climate Intelligence Service (CIS) will provide a joint approach to councils meeting Scotland's national commitment to net zero by 2045. The CIS is being jointly funded by Scottish Government and local government to help councils deliver their own net zero targets and for the development of area-wide programmes of emissions reduction. The CIS aims to:-

- procure a platform for all 32 local authorities populated with area wide data to collate and report action.
- support local authorities and partners to identify and enter current and future actions into the platform.
- provide a service to local authorities to support decision making through access to data, sharing best practice and solutions.

7.4. The CIS is in the initial stages, with user groups being set up with local authorities to establish the key requirements of the service. The Council's Sustainable Development Officers are attending these preliminary sessions and will continue to engage with the CIS on behalf of South Lanarkshire Council.

7.5. Furthermore, the Enterprise and Sustainable Development Service is looking to undertake a feasibility study on energy and income generating opportunities for the Council through renewable technologies. This exercise will add value to the information in this report as there is potential for any future renewable energy project to provide low or zero carbon energy for Council owned premises, or to generate

income for the Council which could be reinvested in projects to achieve Net Zero ambitions.

8. Employee Implications

8.1. All Resources are required to contribute to the implementation of the Sustainable Development and Climate Change strategy to ensure that actions and targets, including carbon reduction actions and targets, are met. The Council's Sustainable Development Officers monitor and report the Council's progress.

9. Financial Implications

9.1. The amended order for the Climate Change (Scotland) Act 2009 introduced a Statutory Instrument highlighting the need to report how we align spending plans and use of resources to contribute to meeting our carbon emission reduction targets. This was introduced from 2020-21 onwards and is required to be included in the annual climate change report due to be submitted in November 2024.

9.2. As previously reported, carbon reduction up to now has been achieved within current budgets and from ad hoc capital funds, however, without significant financial investment (whether through direct government funding or via innovative new funding models), the Council will be unable to meet the challenging national net zero carbon targets.

10. Climate Change, Sustainability and Environmental Implications

10.1. The carbon management process demonstrates the Council's commitment to contribute to national targets and to the global sustainable development goals.

11. Other Implications

11.1. 'Failure to meet sustainable development and climate change objectives' is one of the top risks for the Council. Without a plan in place and a financial plan to support it, then this risk will continue to be one of the Council's top risks.

12. Equality Impact Assessment and Consultation Arrangements

12.1. Consultation has been undertaken with all relevant Council Resources in the preparation of this report.

12.2 This report does not introduce a new policy, function or strategy or recommend a change to an existing policy, function or strategy and, therefore, no equality impact assessment is required.

David Booth
Executive Director (Community and Enterprise Resources)

24 April 2024

Link(s) to Council Values/Priorities/Outcomes

Values

- Fair, open and sustainable

Priorities

- We will work towards a sustainable future in sustainable places
- We will work to recover, progress and improve

Outcomes

- Good quality, suitable and sustainable places to live
- Caring, connected, sustainable communities

Previous References

- Climate Change and Sustainability Committee report, 29 November 2023, Public Bodies Climate Change Duties Annual Report 2022-23

List of Background Papers

- The Climate Change (Scotland) Act 2009
- Sustainable Development and Climate Change Strategy 2022-2027
- UN's Sustainable Development Goals

Contact for Further Information

If you would like to inspect the background papers or want further information, please contact: -

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