

Policy and Sustainability Committee

10.00am, Tuesday, 24 October 2023

Council Emissions Reduction Plan – Annual Progress Report

Executive/routine
Wards
Council Commitments

1. Recommendations

- 1.1 It is recommended that Committee:
 - 1.1.1 Agrees the second annual progress report against the Council Emissions Reduction Plan (CERP);
 - 1.1.2 Agrees to change targets in relation to fleet and waste actions proposed in paragraphs 4.27 to 4.28;
 - 1.1.3 Notes that there will be a report to Committee in November 2024 following an exercise to review and prioritise actions based on three years of learning since the CERP was agreed;
 - 1.1.4 Notes that the Council's organisational emissions are updated annually and reported to the Scottish Government through the Public Bodies Climate Change Duty Reporting (PBCCD), which is the subject of a separate report on the Committee agenda; and
 - 1.1.5 Notes that this annual progress report focuses on Council emissions only. An update on the city-wide emissions and progress on the Climate Strategy will be brought to Policy and Sustainability Committee in January 2024.

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Council Emissions Reduction Plan – Annual Progress Report

2. Executive Summary

- 2.1 This report is the second annual update on the Council Emissions Reduction Plan (CERP). This performance report sets out progress against each of the 73 actions and 53 Key Performance Indicators of the CERP. In doing so, the report also updates on how the Council is delivering against its Climate Compact commitments which were signed in December 2020.

3. Background

- 3.1 The CERP was approved by the Policy and Sustainability Committee on [30 November 2021](#) and this report is the second annual update. It sets out progress to deliver the key actions required to reduce Council carbon emissions to net zero by 2030.
- 3.2 While the objective of becoming a net zero organisation by 2030 is an ambitious target, it has helped to mobilise activity across the Council and embedded a sense of urgency in how we work. However, achieving 2030 will depend on many internal and external factors, in particular the securing of additional budget to fund the level of change required.
- 3.3 The annual progress update is structured around the most recent emissions data and delivery against the Council's actions and key performance indicators (KPI) which were agreed as part of the CERP.
- 3.4 Since 2014/15, the Council has completed an annual statutory return on climate action through the Public Bodies Climate Change Duty Reporting (PBCCD).
- 3.5 A further report will be brought to the Policy and Sustainability Committee in January 2024 covering city-wide activity. As such, there are no reference to projects underway which have an impact on city-wide emissions, such as the City Mobility Plan, the Active Travel Investment Programme or the domestic housing retrofit programme.

4. Main report

Progress on emissions reduction

- 4.1 As set out in the annual progress report, total Council emissions amounted to 61,051 tCO_{2e} in 2022/23. This represents a 7% decrease from the previous year, which is encouraging given that a post-pandemic rebound was expected. This decrease can be attributed to internal and external factors which can be distilled down to three issues:
- 4.1.1 The decarbonisation of the electricity grid¹;
 - 4.1.2 A reduction in natural gas and gas oil consumption; and
 - 4.1.3 A reduction in landfilled waste compared to last year.
- 4.2 To stay within the three-years' cumulated budget for the period 2020/21 to 2022/23, a reduction of 11% would have been required. Since 2019/20, a cumulated 192,254 tonnes of CO_{2e} were emitted, meaning the carbon budget has been exceeded by almost 3,000 tonnes. This is equivalent to the annual carbon footprint of more than 300 average UK citizens, or more than 10,000 return flights between Edinburgh and London.
- 4.3 As the annual progress shows, the majority of Council emissions come from powering and heating buildings (68% of the total in 2022/23), with use of natural gas being the main contributor (69% of buildings' emissions, compared to 30% for electricity, and 1% for other fuels). When combined with Council vehicle emissions, this accounts almost 80% of total emissions.
- 4.4 This also needs to be put in the context of external factors out with Council control. Further reducing emissions will be even more challenging next year as the electricity grid emission factor for 2023/24 will increase by 7%. This is because the UK used more natural gas to generate electricity in 2023 than in 2022. Many factors come into play, such as fluctuations in renewable energy generation due to weather conditions, or changes in the international energy market which impacts on imports and exports. A downward trend from 2024 is expected.
- 4.5 Since development of the CERP, the challenges to reduce emissions in our buildings and fleet estates have become increasingly clear, as has the extent to which all local authorities are dealing with the same issue. Both areas will require a significant level of investment, and options will need to be explored to leverage new forms of innovative financing, including private funds. Much of what the Council has achieved to date, has been through spend to save initiatives. From this point forwards, work needs to be undertaken to prioritise investment in actions which will reduce emissions at the pace and scale required.

¹ Decarbonising the grid means decreasing the emissions per unit of electricity generated (how many kilograms of CO₂ are emitted for every kWh of electricity produced). The electricity grid will decarbonise over time due to the UK generating more and more energy from renewables and at the same time closing coal power plants.

4.6 Despite these challenges, the Council remains a local authority leader in the response to climate change - as demonstrated by the CDP² Cities A-list status obtained in 2021 and 2022 - and is able to demonstrate real progress toward the 2030 target.

Governance

4.7 While the [initial plan](#) set out the necessary actions the Council needed to deliver, it was recognised at the time that it would not be enough to get to net zero by 2030. The initial focus so far has been to develop the structures and governance to embed sustainability into the decision-making process and ensure that the climate and nature crisis run through the organisation's DNA.

4.8 The CERP Programme Board, set up in April 2022 and chaired by the Service Director for Sustainable Development continues to meet quarterly.

4.9 In 2023, the Sustainability, Climate and Nature Emergencies All Party Oversight Group (APOG) was reinstated and is chaired by the Convener of the Policy and Sustainability Committee. The CERP reports to the Council Sustainability Board which subsequently reports to the APOG.

2022/23 Progress

4.10 The CERP includes 73 actions. Of these:

- 17 are complete (Blue);
- 29 are progressing on time (Green);
- 24 are progressing with some delay (Amber); and
- Three have not started (Grey) (this includes actions that had been identified for the long-term, as well as new actions).

4.11 There are 53 KPIs which are also used to measure progress. This year, to ensure consistency and objectivity in the assessment of the KPIs, a quantified threshold was agreed by the CERP Programme Board, as described in the table below.

Green	Target met or exceeded
Amber	Target almost achieved (max 10% gap with the target)
Red	Gap with target is greater than 10%
White	Too early to say (no baseline yet)
Grey	Not applicable – no quantified target

4.12 When KPIs have a 2030 target, current performance has been assessed against a theoretical expected level, which has been calculated on the basis of a linear trend towards 2030. Using this methodology, if progress is not moving fast enough, an indicator can be assessed as red despite progress going in the right direction. This is the case for buildings, waste and fleet emissions, which are all decreasing but remain greater than 10% compared to where they should be based on a linear decrease to net zero in 2030.

² CDP (formerly known as Carbon Disclosure Project) is the largest climate change focused data collection and assessment programme in the world. The CDP Cities A-list highlights cities that are taking bold leadership on environmental action and transparency.

4.13 The breakdown of KPIs is as follows:

- 17 have a Green status (performance on or ahead of target).
- 13 have an Amber status (performance is just behind target).
- 11 have a Red status (gap with target is greater than 10%).
- Nine have a White status ('too early to say' – lack of historic data to compare).
- Three have a Grey status (for monitoring only).

4.14 The progress report shows that 30 KPIs are rated Green or Amber based on this new definition, and 11 KPI are rated red. Despite this, the majority (79%) are moving in the right direction (with figures either maintaining or improving compared to the previous year). This shows that, on the whole, good progress is being made, but not yet at the pace required to reach the 2030 net zero target.

4.15 The CERP will be reviewed in 2024 with an aim to identify further projects and re-quantify potential CO₂ savings and reassess the gap to net zero. Learning from the past two years will be used to assess the actions which are currently in the CERP, and a recommendation will be brought to the Policy and Sustainability Committee on the priorities for focus and investment.

Key highlights from the past year

4.16 The Council approved funding to recruit four new posts in the corporate sustainability team which replaced the time limited funding previously secured externally. An additional post was also approved to support delivery of the Local Heat and Energy Efficiency Strategy. The corporate sustainability team will continue to lead on the key sustainability strategies on behalf of the Council, including the 2030 climate strategy, CERP and climate adaptation strategy. The team will also support colleagues across the organisation on sustainability matters, deliver behaviour change initiatives, and create a pipeline of funding applications.

4.17 A new Corporate Property Strategy was approved in [August](#) 2023 with 'Net Zero Properties' being one of the three main strategic themes alongside 'Live Well Locally' and 'Our Future Work'. This will support the journey to decarbonising the Council's estate.

4.18 The Council is taking a lead role in Scotland on deep building retrofits. The programme is progressing with the retrofitting of two buildings planned for 2022/23, Brunstane Primary School and Liberton Nursery. The historic issues which have caused delays in the Brunstane Primary School project are a good example of the complexity around decarbonising buildings.

4.19 Work is progressing to deliver the Council's first complete Passivhaus new build schools (Currie HS and Maybury PS) with completion expected in 2024. The opening of Sciennes Primary School extension, in August 2023, was the first Passivhaus project to be completed on the Council's estate.

4.20 The number of electric vehicles (EV) chargers installed has increased from 203 to 316 charging bays between April 2022 and April 2023. More chargers have been installed since April and are due to come live in the next few months.

- 4.21 In 2023, efforts have focussed on removing unused vehicles from the fleet and reducing the number of assets on hire. As of July 2023, 90% of Council owned cars were electric (104).
- 4.22 Five new electric bin lorries were delivered in June 2023 funded by Zero Waste Scotland. Fleet Services are looking to purchase new electric vehicles (mainly vans), subject to approval from Finance and Resources Committee in the next few months.
- 4.23 The Communal Bin Review project is underway, with phase one and two completed. This project aims to increase recycling rates. The installation of bin sensors is also now complete and will help to make waste collections more efficient.
- 4.24 The in-house delivery of the climate change training continued in 2023, with the number of participants doubling between August 2022 (153) and August 2023 (381), and 20 new facilitators being trained to help with delivery. Two workshops have also been delivered to senior managers and service directors (Corporate Leadership Team and Sustainability Board). A new sustainability e-learning module was also launched in 2023.
- 4.25 A new Behavioural Framework was launched in May 2023 by Human Resources, which includes 'green behaviours' under the Integrity pillar and will underpin the recruitment process as well as annual performance conversations.
- 4.26 A sustainability strategy for cultural venues, museums and galleries is being developed with an aim for the Council to become a leading example of sustainability within the Culture sector. The strategy will cover building efficiency, climate change adaptation, leadership, transport, circular economy, and education and engagement.

Change in targets

- 4.27 The recycling rate target set internally by the Waste team (45% by 2022/23) has been missed and possible reasons for this are detailed in the Waste chapter of the CERP. No new quantified target has been set for 2023 due to the quickly evolving legislative waste landscape (for example, the Deposit Return Scheme and Extended Producer Responsibility). Efforts will be made to increase performance on 2022/23 rates.
- 4.28 Although good progress has been made to electrify the light fleet, with 90% of Council-owned cars now electric, the initial car target (100% low-carbon cars by 12/21) has been missed. Similarly, the van target will be missed (100% low-carbon vans by 12/23). As approved in the [2023-27 Council Business Plan](#) at Full Council on 16 March 2023, these targets have been pushed back to December 2024. Subject to approval at Finance and Resources Committee in the next few months, new vans will be purchased to meet the December 2024 target while ensuring compliance with the Low Emission Zone.
- 4.29 Actions have estimated completion dates, with some postponed due to operational delays. Where this is the case, both the initial and the revised dates are indicated.

5. Next Steps

- 5.1 Council's emissions will continue to be reported annually through the PBCCD statutory report.
- 5.2 An annual CERP progress report will be brought to the Policy and Sustainability Committee in October/November each year (subject to Committee dates) and will provide regular updates against actions and KPIs.
- 5.3 The Council will continue to report annually through the Carbon Disclosure Project (CDP) in July/August. This sustainability questionnaire includes both Council and city-wide climate action and results are anticipated in November 2023.

6. Financial impact

- 6.1 Greater progress to net zero could be achieved if capital and revenue investment, in some areas, was available. An urgent review of the CERP actions will be undertaken with a view to briefing members on the financial implications prior to setting the 2024/25 budget.
- 6.2 However, allocation of Council funding will not be enough. While many of the short-term actions outlined in the plan have resources assigned, or are supported by external funding, additional investment will be required to secure change at the pace needed to remain within the Council's carbon budget. The team will continue to take advantage of opportunities to leverage new forms of innovative financing, including the development of a pipeline of business cases to apply for external funding.

7. Equality and Poverty Impact

- 7.1 This report is focussed on corporate activity, rather than city-wide projects (such as housing or transport projects). As such, the actions in the CERP are expected to have limited equality and poverty impacts on residents.
- 7.2 Council employees will be able to benefit from the Cycle to Work scheme if they wish to purchase cargo bikes (up to £5,000), which can replace a car and save on fuel costs. The bike mileage rate, which was increased last year to 45 p/mile (from 25p/mile) also aims to support employees make sustainable travel choices.

8. Climate and Nature Emergency Implications

- 8.1 The core objective of the CERP is to reduce corporate emissions, and as such this plan is aligned with the Council's Climate Emergency declaration and the Council Business Plan.
- 8.2 This plan does not address the Nature Emergency, and this is covered in other plans as outlined in Appendix 3 of the [Nature Emergency Committee report \(22 August 2023\)](#).

9. Risk, policy, compliance, governance and community impact

- 9.1 This report is focussed on corporate activity, rather than city-wide projects (such as housing or transport projects). As such, community impacts are expected to be

minimal but positive. For example, any energy efficiency improvement to the Council estate will benefit users (including schools), and any replacement of diesel vehicles with electric alternatives will improve public health.

- 9.2 There are no direct risks associated with this progress report. Some of the major actions of the plan (e.g. deep retrofit of Council buildings) will have their own separate risk registers.
- 9.3 There are reputational risks associated with progress made on the net zero target.

10. Background reading/external references

- 10.1 [Council Emissions Reduction Plan – Report to Policy and Sustainability Committee, November 2021](#)
- 10.2 [EnerPhit Tranche 1 Programme – Report to Policy and Sustainability Committee, August 2022](#)
- 10.3 [Edinburgh CDP return – 2021 and 2022](#)
- 10.4 [Council Emissions Reduction Plan – First progress report – November 2022](#)

11. Appendices

Appendix 1 - Council Emissions Reduction Plan – Progress Report – October 2023.



CITY OF EDINBURGH COUNCIL EMISSIONS REDUCTION PLAN

**ANNUAL PROGRESS REPORT
OCTOBER 2023**



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Introduction

The Council Emissions Reduction Plan (CERP) was approved in 2021 and sets out an initial pathway to reducing corporate emissions to net zero by 2030 and covers the period from 2021 to 2030. It focusses on our key corporate emissions sources (energy consumption, waste, fleet, and travel) and identifies key actions to implement.

It is recognised that the transition to net zero will not be easy, and, as such, the CERP is a live document which will be periodically reviewed and refined as more clarity is obtained from our operational projects and as the grid decarbonises and low-carbon HGV and building retrofit technologies evolve. Further work is now required to develop an investment plan to support further emissions reductions.

Structure of the report

This second progress report follows the same structure as the CERP itself. Each chapter focusses on one source of emissions and includes:

- An analysis of the latest emissions figures (financial year 2022/23)
- A summary of the key performance indicators
- A table summarizing the actions agreed in 2021, as well as any new action identified in 2022 and 2023;
- Progress against each action using a RAG rating.

New governance

To ensure robust governance for this strategic action plan, a dedicated CERP Programme Board was set up in April 2022. The Sustainable Development Service Director is Senior

Responsible Officer (SRO) for the plan and chair of the board. The board is attended by all service area leads covering the different areas of the CERP, which ensures ownership and oversight of actions. The board meets quarterly and ensures that all potential risks are identified and mitigation measures considered and agreed.

In 2023, the Sustainability, Climate & Nature Emergencies All Party Oversight Group (APOG) was reinstated and is chaired by the Convener of the Policy & Sustainability Committee. A summary of the internal climate governance structure is shown in Figure 1.

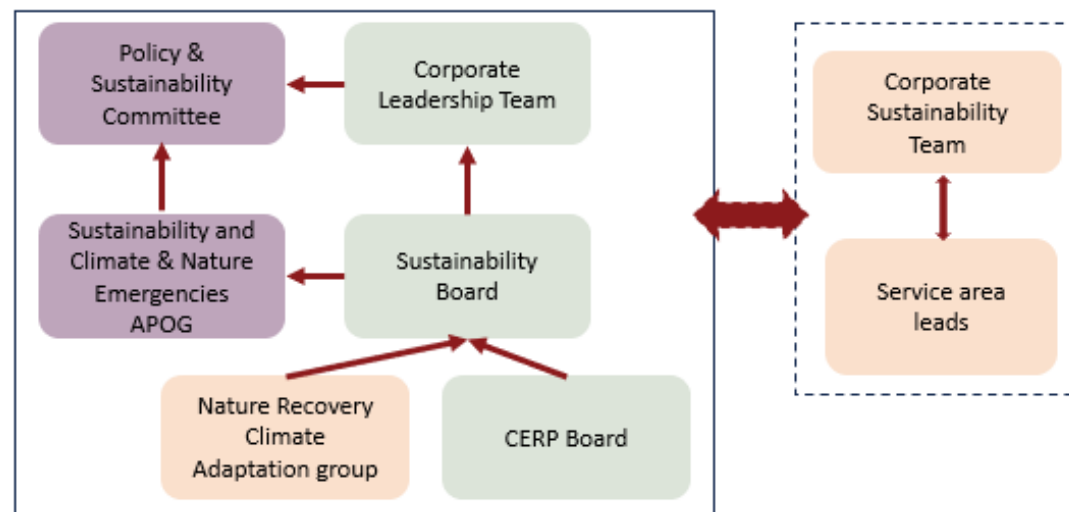


Figure 1: Council's internal sustainability governance structure (Purple: political oversight, Green: Strategic oversight, Orange: Delivery)

Summary – Dashboard

Progress on emissions reduction:

Figure 2 shows the evolution of historic emissions. Total Council emissions amounted to 61,051 tCO_{2e} in 2022/23. This represents a 7% decrease from last year. Since 2019/20, a cumulated 192,254 tonnes of CO_{2e} were emitted, meaning the **three-years' cumulated carbon budget** for the period 2020/21 to 2022/23 **has been exceeded by almost 3,000 tonnes**. To stay within budget, emissions should have had decreased by 11%.

Further reducing emissions will be even more challenging next year as the electricity grid emission factor for 2023/24 will increase by 7%. This is because the UK used more natural gas to generate electricity in 2023 than in 2022. Many factors come into play, such as fluctuations in renewable energy generation due to weather conditions, or changes in the international energy market which impacts on imports and exports. A downward trend from 2024 is expected.

Reducing emissions from our buildings and vehicles is a key priority, as together they account for almost 80% of our emissions. The challenges to reduce emissions in these areas have become increasingly clear, as has the extent to which all local authorities are dealing with the same issue. Both areas will require a significant level of investment, and options will need to be explored to leverage new forms of innovative financing, including private funds.

As the city council, it is our role to influence, support and enable the transition to net zero and we will continue to do so. Demonstrating the progress we are making towards our 2030 target will remain our focus. We will continue to do everything in our power to reach net zero.

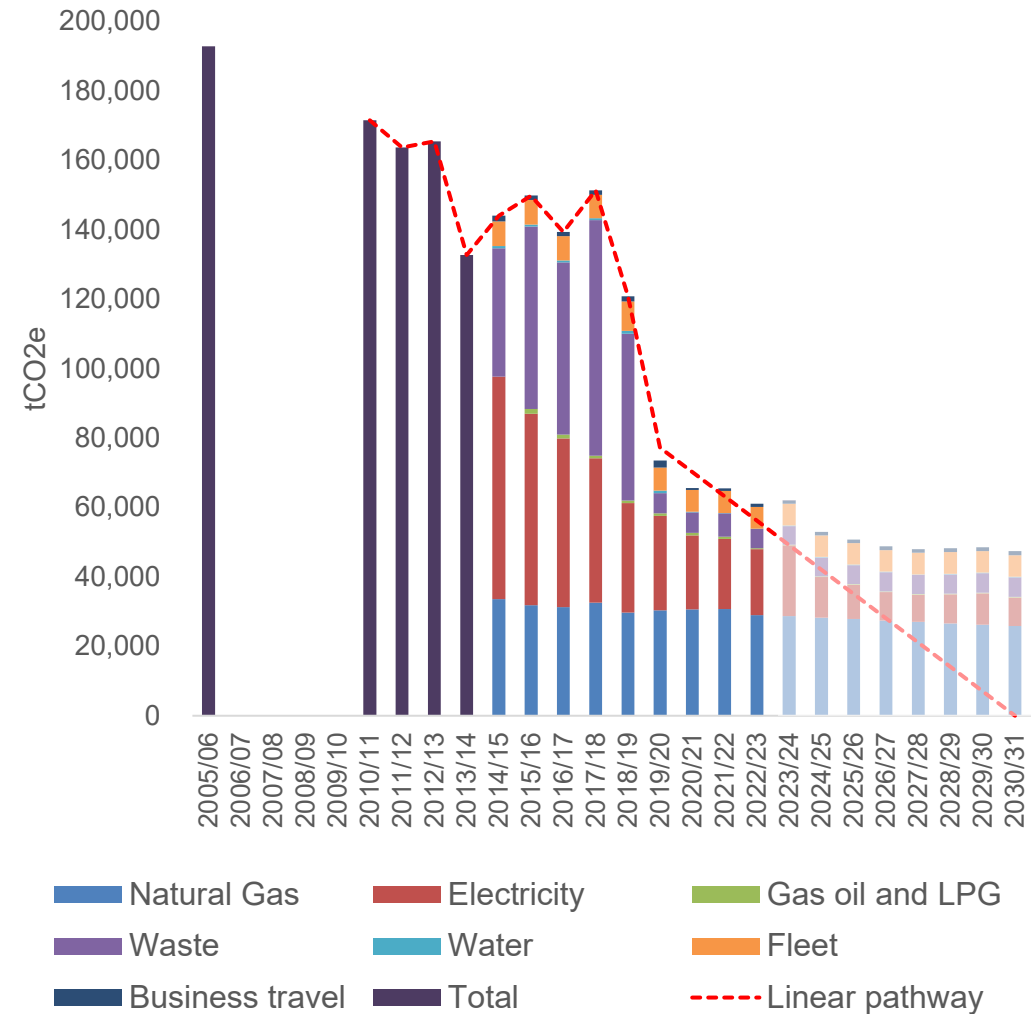


Figure 2: City of Edinburgh Council's carbon footprint: historic emissions and business as usual projections

Reasons for change in emissions:

Total emissions decreased by 7% in 2022/23, or by 4,446 tonnes of CO_{2e}.

The main reasons for this decrease are the decarbonisation of the grid¹, followed by a 6% reduction in natural gas consumption, as shown on Figure 3. Full bars (in green) represent decreases in emissions compared to last financial year, hashed bars (in red) represent increases in emissions.

The graph shows that the increase in emissions from new buildings and supplies (including the new Meadowbank sport centre) was offset by a larger reduction in natural gas and gas oil in other buildings.

The reduction in landfilled waste compared to last year, during which a longer annual plant shutdown took place, also contributed to the overall decrease.

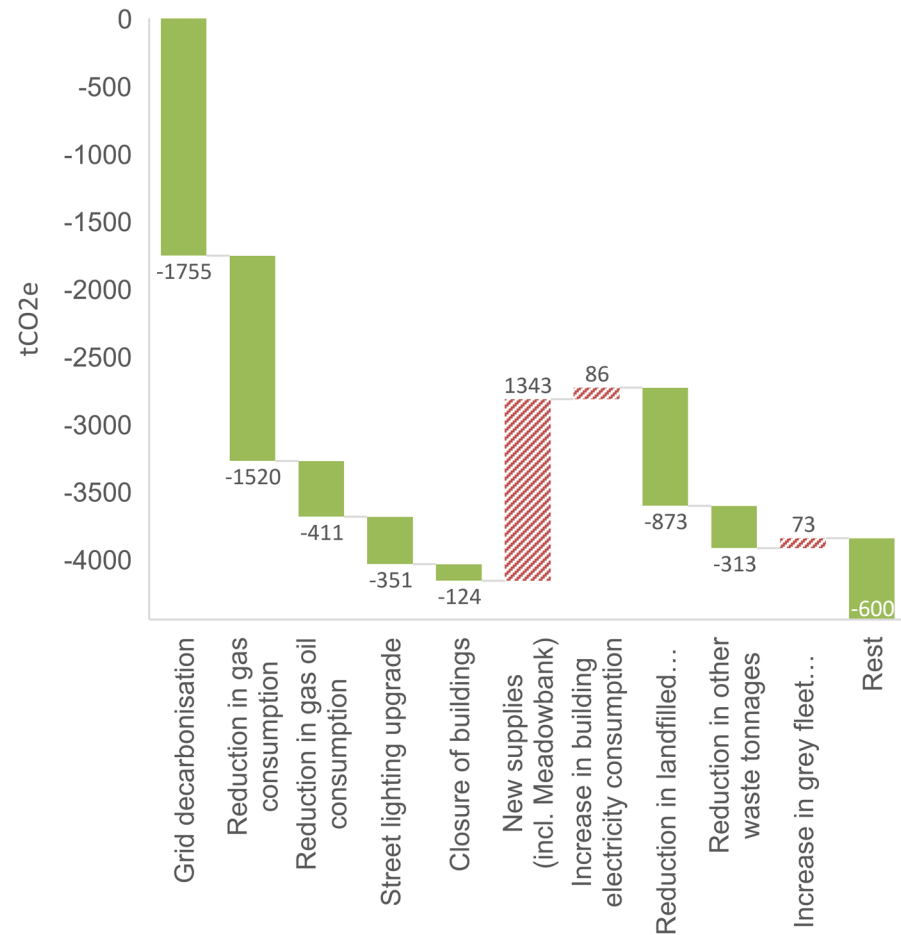


Figure 3: Reasons for change in Council emissions compared to last financial year. Full bars (in green) represent decreases in emissions, hashed bars (in red) represent increases in emissions.

¹ Decarbonising the grid means decreasing the emissions per unit of electricity generated (how many kilograms of CO₂ are emitted for every kWh of electricity

produced). The electricity grid will decarbonise over time due to the UK generating more and more energy from renewables and at the same time closing coal power plants.

Progress on delivery of the actions

There are a total of 73 actions in the CERP (including new actions added in 2022 and 2023).

Of this total of 73 actions:

- 17 are completed (Blue)
- 29 are progressing on time (Green)
- 24 are progressing with some delay (Amber)
- 3 have not started (Grey). This includes actions that had been identified for the long-term, as well as new actions)

There are 53 **Key performance indicators (KPI)** which are also used to measure progress, as shown on the Dashboard in Figure 4.

This year, to ensure consistency and objectivity in the assessment of the KPIs, a quantified threshold was applied, as described in the table below:

Green	Target met or exceeded
Amber	Target almost achieved (max 10% gap with the target)
Red	Gap with target is greater than 10%
White	Too early to say (no baseline yet)
Grey	Not applicable – no quantified target

30 indicators are rated Green or Amber based on this new definition, and 11 KPIs are rated red. Despite this, the majority (79%) are moving in the right direction (with figures either maintaining or improving compared to the previous year). This shows that, on the whole, good progress is being made, but not at the pace required to reach the 2030 net zero target.

Further improvements to emissions monitoring will also be made in 2024 to better understand the contribution of electric vehicles charging in the buildings overall electricity consumption.

What next?

This report shows the progress made in the first two years since the publication of the plan in November 2021, and brings to a close the three years of cumulative emissions from the first carbon budget.

The initial focus was on laying the foundations for success. This involved developing the structures and governance to embed sustainability into the decision-making process and ensure that the climate and nature crisis run through the organisation's DNA.

The [initial plan](#) made it clear that the projects identified in the CERP were not going to reduce Council emissions to net zero, and that this was only the start of the journey. Potential carbon savings were estimated from the identified actions, but it was acknowledged that an emissions gap would still need to be addressed (this was represented by [orange bars](#) in each of the chapters).

While many projects are still progressing, work is on-going to ensure new ones are scoped and incorporated into the new refreshed version of the plan in 2024. Workshops with internal services will be held to analyse which areas or sources of emissions require priority actions.

Work also needs to be undertaken to prioritise investment in actions which will reduce emissions at the pace and scale required.

Every tonne of carbon saved through this plan matters, every year matters, but more needs to be done, and faster, to get to net zero. Getting to net zero is essential to stop our contribution to global climate change.

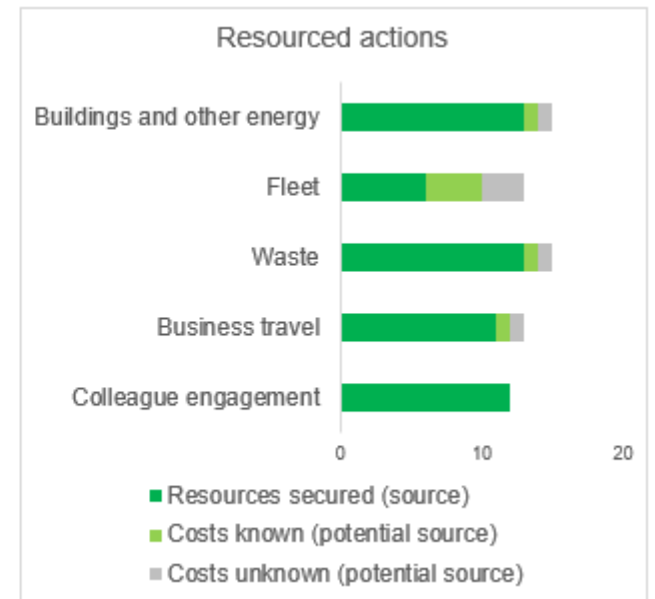
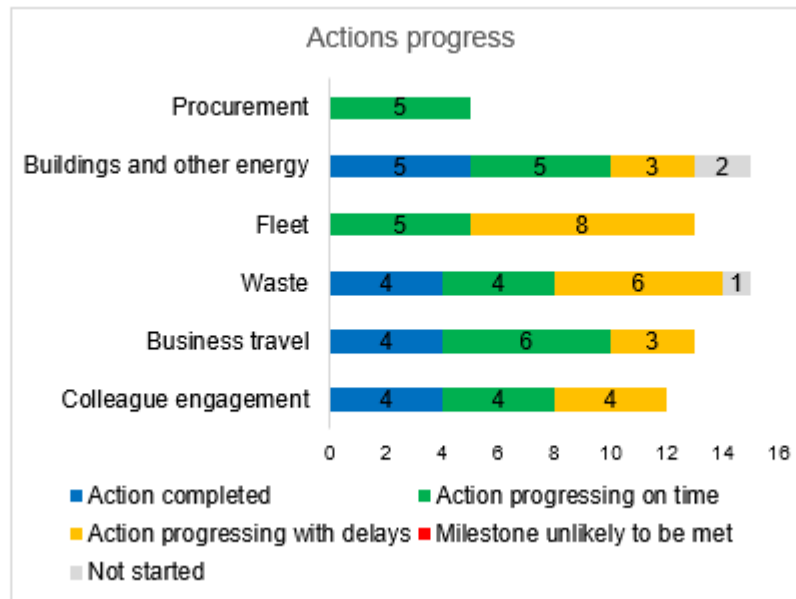
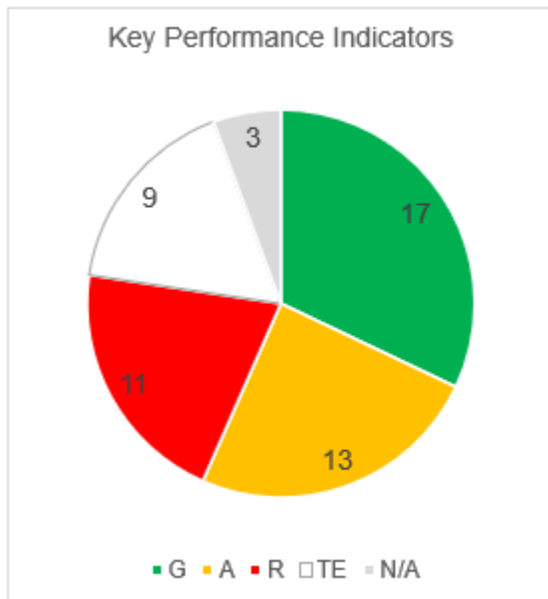
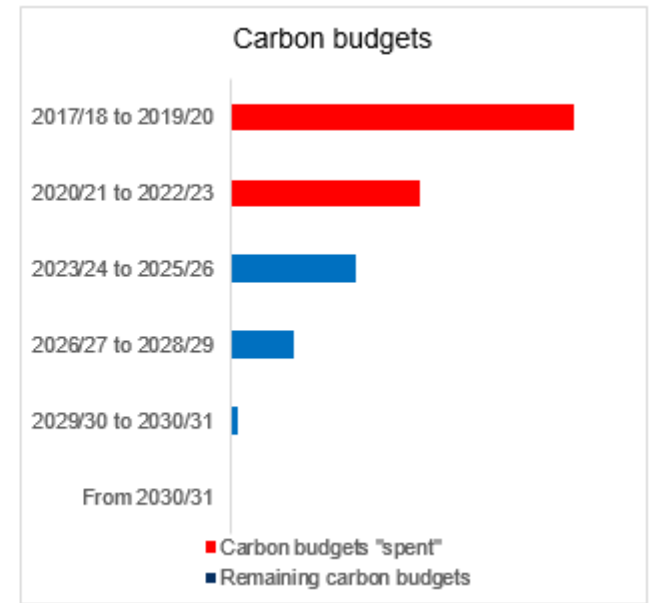
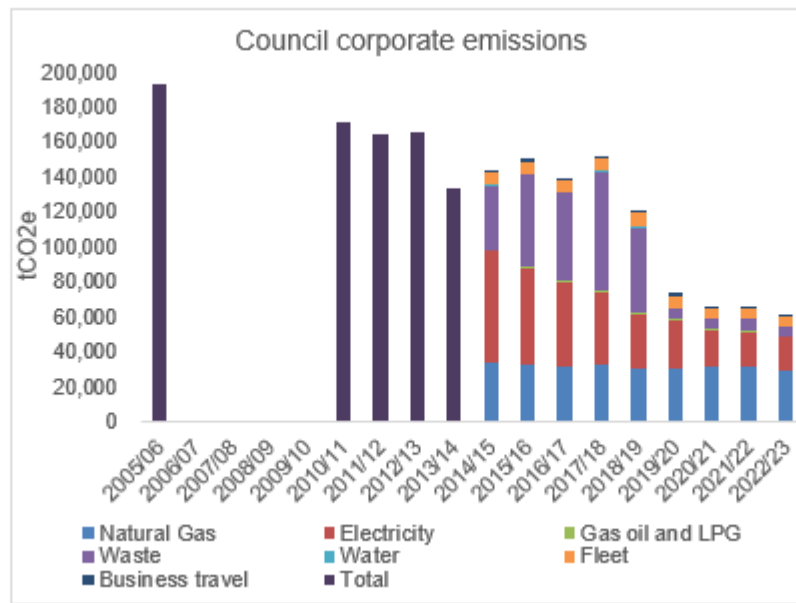
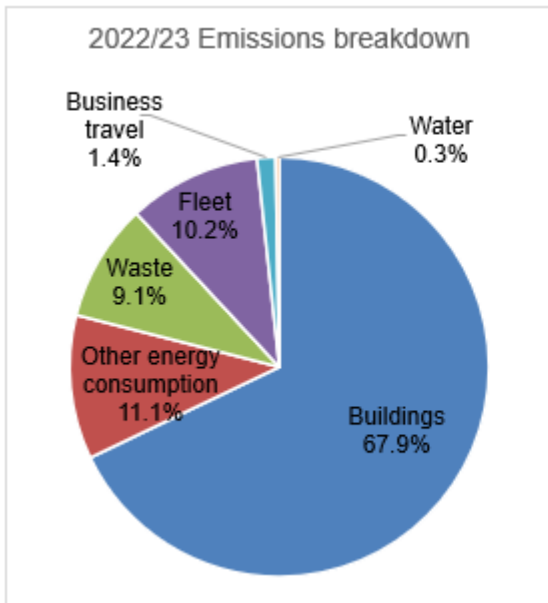


Figure 4: Dashboard of key CERP figures



Buildings Energy Consumption

Evolution of emissions from buildings

Energy consumption in buildings is the central component of our plan to reach net zero by 2030, accounting for 68% of the Council's corporate carbon footprint in 2022/23. Emissions from Edinburgh Leisure buildings represented 15% of total buildings emissions in 2022/23.

Buildings' emissions have reduced by 30% between 2016/17 and 2022/23, largely due to the decarbonisation of the electricity grid (see Figure 5). Emissions have decreased by 6% compared to the previous year (2021/22). This is mostly due to a decrease in natural gas consumption (-6%), which was greater in community centres as well as PPP sites. Gas oil consumption fell by 68% mainly because most depots stopped using it. A few sites in off-gas locations (like Benmore outdoor centre) are still using this for heating.

We have set a default requirement to deliver new build properties to Passivhaus Standard. Work is progressing to deliver our first Passivhaus new build schools at Currie and Maybury with completion expected in 2024. There are currently nine new build projects on the operational estate being delivered to certified Passivhaus standard with zero direct emissions heating plant. The first opened in August 2023 being the new extension at Sciennes Primary School.

The [Corporate Property Strategy](#) approved in August 2023 sets out the strategic themes that will be followed when implementing changes to the Council's operational property estate, including delivering and maintaining net zero properties. The aim is to deliver a smaller, more efficient, affordable, and accessible estate that contributes to the net zero goal. It outlines an approach that will help place the Council on the journey to net zero.

We are adapting strategies to accommodate net zero plans within established asset management practices through a refresh of the approach to existing and future Asset Management Works, as reported to the Finance and Resources Committee on 21 September 2023.

We have initiated the development of a rigorous approach to predict the energy reduction and running costs for differing levels of Retrofit on 12 existing buildings. We are taking a leadership role on this initiative in Scotland and have shared findings and experience with other local authorities and stakeholders. The delivery of two pilot retrofit projects (Brunstane PS and Liberton Nursery) will help build more knowledge and experience. An estate wide assessment will be able to draw from the findings of the above Enerphit-Informed Retrofit (EiRP) feasibility studies.

Levels of Retrofit will inevitably be building specific and bespoke taking account of numerous factors. Factors include, but are not limited to, local electricity network capacity, physical attributes of the building such as heritage status etc, outcome of EiRP feasibility analysis or similar, impact or works (user disruption), location, life of asset etc. meaning that any estate wide analysis will be no more than a broad assessment at this time.

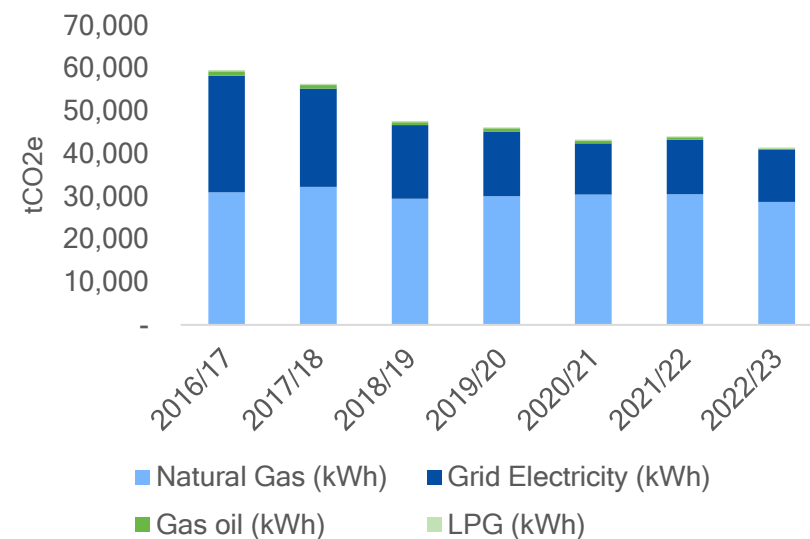


Figure 5: Historic emissions from buildings

Evolution of Buildings KPIs

- Buildings emissions have decreased; however, they represent the most critical challenge to achieve net zero emissions. Large emissions cuts are needed year on year to achieve climate targets. The current trend is not decreasing fast enough to reach net zero emissions by 2030.
- Solar panels were installed on Bangholm Outdoor Centre in 22/23 (35 kWp), bringing the installed solar photovoltaic capacity to 2.481 MW, which is below the indicative intermediary target that was set to achieve an increase of 4 MW in 2030. The 2030 target remains achievable given that there are plans to install another 700 kW or solar PV next year.
- The default approach for all Council new builds is PassivHaus. There are currently nine projects being delivered to Passivhaus Standard with LZC Primary Plant, from 7 last year. At the same time, the number of in-flight projects decreased from 40 to 35. This figure will improve as in-flight projects, which predated the requirement, are completed.
- The annual area retrofitted to an EnerPHit informed standard is currently zero, but this will increase as the retrofit programme progresses. The delivery of the retrofitting works for one of the two first buildings (Brunstane Primary) has been delayed due to a historic coal mining related sink hole issue.

Table 1: Buildings Key Performance Indicators

Key for the RAG rating of the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2020/21	2021/22	2022/23	Target	RAG
Total Buildings emissions (tCO _{2e})	43,308	44,103	41,443	Net 0 by 2030	R
Installed solar PV capacity (MW)	2.211*	2.446*	2.481	3.221* MW by 2023/24 6.221* MW by 2030 (+4 MW)	A
% of new builds in delivery to PassivHaus standard with associated Low and Zero Carbon (LZC) Primary Plant or equivalent	15%	18%	25.7%	100% of conditioned area where Passivhaus is technically appropriate	N/A
Total gross internal floor area agreed to undergo low energy retrofit works and conversion to LZC plant (or equivalent)	0 m ²	0 m ²	0 m ²	<ul style="list-style-type: none"> • By 04/25- approx. 4,396m² • By 04/26- approx. 8,874m² • By 04/27- approx. 17,097m² • By 04/28- approx. 22,665m² of Council buildings are targeted to be retrofitted	TE
Cumulated nb. of staff receiving PassivHaus designer training	0	4	8	4 by 11/21 A further 2 in 23/24 making it a total of 10 by 12/23	G

* Baseline & targets have been recalculated in 11/22 due to reporting improvements

Buildings actions

Table 2: Buildings phased emissions reduction plan (Note: all targets and deliverables are subject to approval and funding).

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with delays	A	Milestone unlikely to be met	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Not applicable	N/A

Phase 1: 2021/22 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
B1. Enerphit pilots: Identification of 2 key properties of differing types taking them to Enerphit Retrofit Plan stage with associated mechanical, electrical and plumbing work to deploy Low and Zero Carbon primary plant. Feasibility will be costed allowing decision to commence full design and delivery subject to funding.	£100K (Former CEEF funds) ***	Completion to feasibility stage by mid-October 2021 for investment decision	10/21	C	N/A	N/A	N/A	N/A	Patrick Brown (Sustainable Development)
B2. Pilot study to include a high-level desk exercise to give an indication of cost across the whole building estate.	Same as B1	Early 2022 report on Tranche 1 feasibilities.	Q1 22	C	N/A	N/A	N/A	N/A	Patrick Brown (Sustainable Development)

Phase 1: 2021/22 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
B3. In-house staff Passivhaus House Design training and knowledge transfer (included as part of Pilot exercise).	Same as B1	8 employees certified Passivhaus Designers. 3 staff attended deep retrofit awareness course. Ongoing secondment in place	on-going	G	No. of staff trained	8	4 by 11/21 Total of 10 by 12/23	G	Patrick Brown (Sustainable Development)
B4. Utilise initial funding to initiate first tranche of Enerphit feasibility studies to EnerPHit informed Retrofit Plan stage for 10-12 additional buildings to provide basis for investment decision.	£500K (CEC) ***	Completion to EIRP or Feasibility Study stage equivalent to RIBA Stage 2	03/22	C	No. feasibility studies	12	12	G	Patrick Brown (Sustainable Development)
B5. Commission the full detailed design of 1 or 2 of the initial pilot buildings for selected demand reduction measures (insulation, glazing, air tightness etc). Enabling the preparation of detailed designs would mean that if a decision was made to progress, works could be brought forward to start in 2022/23.	£500K (CEC) ***	Detailed design for Brunstane PS and Liberton Nursery Retrofit works now underway as Pilot exercises. Liberton and Brunstane now at RIBA Stage 4	03/22	C	No. of pilot buildings (full detailed design)	2	2	G	Patrick Brown (Sustainable Development)

Phase 1: 2021/22 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
B6. Seek budget for commencing retrofit pilot works	Staff time (CEC) ***	Signature of GGA grant agreement delayed due to significant cost increases for works now being projected in RIBA Stage 2 report. Work ongoing with Scot Gov. to refine details of the programme.	07/22	A	Bid application	Successful GGA bid	Funding awarded	G	Crawford McGhie

Phase 2: by 2025 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
B7. Develop proposal for enhanced asset management works programme linked to the retrofit programme.	Staff time (CEC) ***	AMW Board now merged with the Retrofit board to allow future project integration where suitable	No strategy completion date can be advised at this time as it is dependent on budget approval	G	N/A	N/A	N/A	N/A	Crawford McGhie
B8. Delivery of first Passivhaus new build secondary school (Currie HS) and first Passivhaus primary school (Maybury PS)	Both projects are in advanced pre-construction stages. Both CIP funded ***	Currie HS and Maybury PS at RIBA Stage 5 (construction on site). Sciennes PS extension complete and six other buildings are at various stages of delivery to Passivhaus standard.	Currie HS target completion 08/24 Mayberry PS target completion 08/23	A	% of new builds in delivery to PassivHaus standard with associated Low and Zero Carbon (LZC) Primary Plant or equivalent	25.7% ¹	100% of conditioned area where Passivhaus is technically appropriate	N/A	Patrick Brown (Sustainable Development)
B9. Start retrofit works on Pilot buildings and the first tranche (budget depending).	£60.85m (CEC) + £10m (GGA) + £tbc (external) ***	2 buildings by 12/23 (Works will commence following ongoing design and procurement stages subject to project ISG approval)	10/25	NS	N/A	N/A	N/A	N/A	Patrick Brown (Sustainable Development)

		+5 buildings by 12/24 +5 buildings by 09/25 <i>(subject to approval and funding)</i>							
B10. Work with stakeholders, funders and supply chain to set the groundwork for a step change in approach to asset management works.	Staff time (CEC) ***	On-going. Extensive knowledge sharing with local authorities and other stakeholders	on-going	G	N/A	N/A	N/A	N/A	Sustainable Development
B11. Increase installed Solar Photovoltaic capacity across the Council's operational estate	CEC + SALIX funding available (subject to payback) ² **	1MW over next 3 years (approx. split year 1 - 250kW, year 2 - 300kW, year 3 – 450kW)	12/30	A	Installed solar PV capacity (MW)	2.481	3.221 MW by 2023/24 6.221 MW by 2030 (+4 MW)	A	Andrew Crighton (Operational services)

¹ Out of 35 current in-flight projects and completed projects in defects period, 9 are being delivered to Passivhaus Standard with LZC Primary Plant

² PV supported through capital works (new build) with SALIX funding available (subject to payback) to support additional PV on both capital and refurbishment projects

Phase 3 – by 2030 Actions	Resources	Intermediary milestones if relevant	Completion date (MM/YY)	RAG	KPI	2021/22	Target	RAG	Delivery Lead
B12. Report on outcomes from retrofit Pilots and set 2030 plan and funding requirements.	Staff time (CEC) ***	Linked to actions B6, B7, B9, B10.	Linked to actions B6, B7, B9, B10.	G	Linked to actions B6, B7, B9, B10.	Linked to actions B6, B7, B9, B10.	Linked to actions B6, B7, B9, B10.	N/A	(Sustainable Development)
B13. Move to delivery of wide scale building retrofit and scale up in house resource and supply chain for delivery.	£tbc (potential national funding streams tbc in discussion with Operational Services colleagues) *	Strategic overview to be completed before future projects identified and commissioned.		NS	Annual total gross internal floor area agreed to undergo low energy retrofit works and conversion to LZC plant (or equivalent)	0 m ²	<ul style="list-style-type: none"> • By 04/25- approx. 4,396m² • By 04/26- approx. 8,874m² • By 04/27- approx. 17,097m² • By 04/28- approx. 22,665m² of Council buildings are targeted to be retrofitted 	TE	Crawford McGhie



Other energy consumption

Evolution of emissions

This area of the Council’s carbon footprint includes a range of energy uses from street lighting, stair lighting, alarms, park and ride, trams, through to traffic signals, as illustrated in Figure 6. It represented 11% of the total Council emissions inventory in 2022/23.

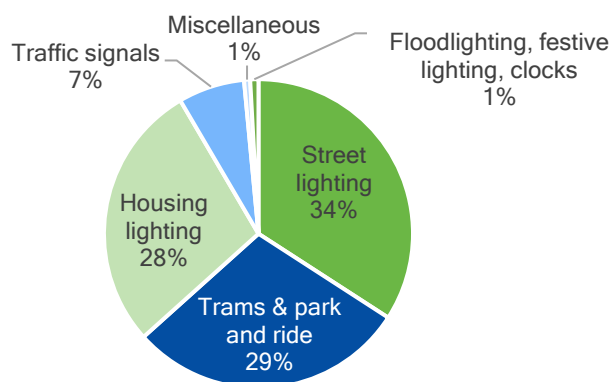


Figure 6: Breakdown of energy consumption, excluding buildings (2022/23)

Emissions have steadily decreased in the past six years (-68% since 2016/17) thanks to a reduction in consumption (-33%) coupled with the decarbonisation of the electricity grid: the electricity emission factor has decreased by 45% during this period. The reduction in consumption since 2016/17 is almost entirely due to the street lighting upgrade project.

Electricity consumption has remained stable compared to the previous year, with savings from street lighting upgrades partly offset by an increase in consumption from park and ride due to the expansion of electric vehicles charging points. The decrease in emissions between 2021/22 and 2022/23 (-9%) visible on Figure 7 is due to grid decarbonisation.

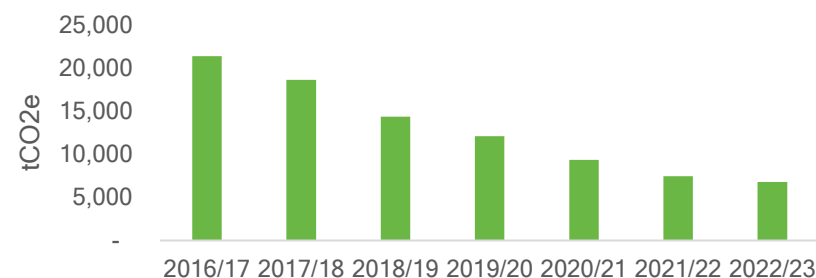


Figure 7: Historic emissions from the "other energy consumption" category

The **city-wide street lighting upgrade project** has reduced street lighting energy consumption by approximately 60% compared to 2017/18 (more than the anticipated 52% reduction) and has seen CO₂ emissions reduce by 78% (thanks to the greening of the grid:). The Council has also avoided energy costs of almost £6.5m to the end of March 2023 thanks to the more efficient lamps.

Energy consumption from **traffic signals** has remained stable compared to last year, despite additional resources allocated in 2022/23 for traffic signal infrastructure improvements. The one-off £250k investment has been used to provide improved safety at key sites, as well as to upgrade the signal optics from tungsten halogen optics to LED signals, which are more energy efficient. However, energy savings have been offset by the installation of 20 new sets of signals this year. There are also additional works regarding options for tungsten to LED retrofit. This allows the traffic signal controller to monitor the lamps and the signals to operate correctly, without the need for full controller and signal head replacement. If the retrofit option is successful, this would be a time and cost-effective solution which means site conversions could be delivered at pace, on track for the 2030 target. The KPI associated with the tungsten lamps is rated as red based on the current trend, which is not decreasing fast enough, but if the retrofit option proves successful, it would move to green.

Other energy consumption - actions

Table 3: Other energy consumption – planned interventions

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with some delays	A	Milestone behind target	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed or unlikely to be met	R	Too early to say	TE	Not applicable	N/A

Interventions	Resources	Completion date (MM/YY)	RAG	KPI	2020/21	2021/22	2022/23	Target	RAG	Delivery Lead
Street lighting LED replacement programme	£24.5 m (over 3 years)	11/21	C	Street lighting electricity consumption (kWh)	18,556,408	12,624,206	10,963,379	13.085 MWh by 2022/23 ²	G	Alan Simpson
Replacement of 254 incandescent traffic light installations with LED	£6.5m (estimate)	12/24	A	Number of sites with Tungsten Halogen Lamps	254 sites	221 sites	212 sites	243 sites by 03/22 0 site by 03/31	R	Mark Love
				Traffic signal electricity consumption (kWh)	2,227,693	2,226,456	2,230,456	Decrease	G	

² Based on an estimated 52% reduction in electricity consumption compared to 2017/18 figures



Fleet

Evolution of Fleet emissions

The evolution of historic fleet emissions is shown in Figure 8. Fleet emissions in 2022/23 amounted to 6,252 tonnes of CO_{2e}, or 10% of the total Council emissions inventory. This figure has been stable in the past three years (2020/21 to 2022/23) and remains 6% below pre-pandemic levels. Emissions have only decreased by 11% compared to 2014/15.

Emissions from electric vehicles are currently captured under the Buildings category, with the total electricity consumption of the buildings equipped with chargers covering their use.

During 2020/21, there was an 8% drop in diesel and gasoil consumption with most trucks delivering essential service only during lockdowns. Diesel and gasoil consumption has increased in 2021/22 and 2022/23 with the service recovering to normal activity but remains 5% below pre-pandemic levels. Gasoil (or red diesel) has been banned in 2022, so 2022/23 figures only include diesel and petrol.

Social distancing requirements led to an increased use of hire cars (mainly petrol cars) in 2020/21. Petrol consumption in 2021/22 was almost three times higher than pre-pandemic levels but is now only 24% higher than 2019/20 and represents only a fraction of the total fuel consumption (only 2%).

Future reductions will come from the continued replacement of vehicles with alternatively powered alternatives. The main barriers to fully decarbonize our fleet include:

- The higher upfront cost of purchasing or hiring low carbon vehicles and the additional cost of installing charging infrastructure. Charging infrastructure has been expanded but mainly using external funding, the availability of which is generally reducing;
- Market availability: None of the Council hire vehicles are electric and works need to be done to ensure low-carbon vehicles can be

hired where available. Lead times are also increasing due to the impact of the pandemic and the war in Ukraine. This is mitigated by the Fleet Asset Management Plan which will reduce reliance on hire vehicles in favour of Council-owned vehicles.

- The majority of the heavy vehicles and specialist equipment do not currently have low-carbon alternatives available on the market. However, this could rapidly evolve, and it is anticipated projected cost reductions will substantially improve affordability in all market segments over the next 10 years.
- A lack of capacity within Fleet Services to focus on data analysis and reporting, funding and budget management, procurement, and asset management of the charger fleet. Additional funding is being sought to address this capacity gap beyond the current temporary arrangements.

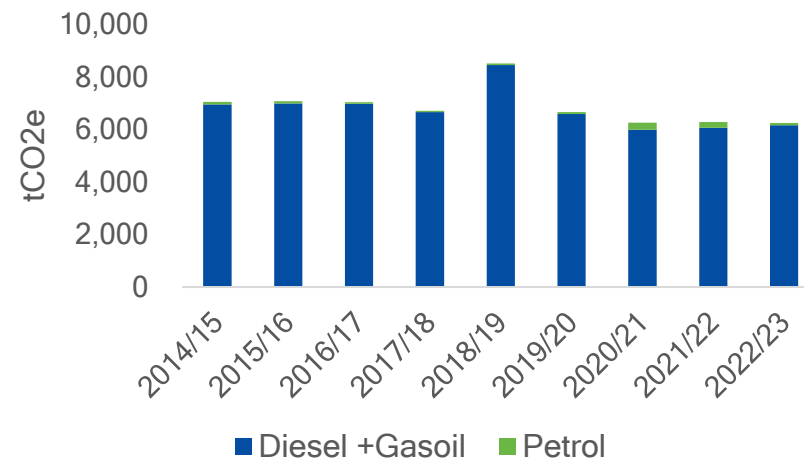


Figure 8: Historic fleet emissions

Evolution of Fleet KPIs

- Fleet emissions have remained stable compared to last year (-0.6%). The red rating reflects the gap with the required trajectory to reach net zero emissions by 2030.
- The aim to electrify 100% of the cars by December 2021 has not been achieved and the decarbonisation of the vans fleet is progressing slowly. In 2023, efforts have been focussed on removing unused vehicles from the fleet and reducing the number of assets on hire. The Fleet department now aims to have a fully low-carbon cars and vans fleet by December 2024 (internal + hire vehicles). As of July 2023, 90% of owned cars were electric (104).
- At the time of writing, Fleet Services is looking to purchase new electric vehicles (mainly vans), subject to approval from Finance & Resources Committee in the next few months. A new procurement framework for vehicles now offers a more straight-forward route to market which means new vehicles will be received more quickly.
- To date, the approach to fleet replacement has been to optimise expenditure on the basis of current budgets. Further decarbonisation of the fleet will require additional investment, with actions and KPIs due to be revised to reflect fleet investment priorities based on the greatest emissions savings.
- The number of EV chargers installed has more than tripled due to financial support from Transport Scotland and the Office for Zero Emission Vehicles and a £250k Council budget allocation in 2021/22. A further [114 new charging bays should go live in Autumn 2023](#).
- Five new electric bin lorries fully funded by Zero Waste Scotland have been added to the fleet in June 2023.
- The percentage of small equipment that is electric was manually calculated but steps are being taken to register these items on the fleet management system to report on this consistently and accurately in the future.

Table 4: Fleet KPIs

RAG rating key for the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2020/21	2021/22	2022/23	Latest data	Target	RAG
Total fleet emissions (tCO ₂ e)	6,267	6,290	6,252	Annual figure	Net 0 by 2030	R
% of EV in the cars fleet (internal fleet)	65%	71%	61%*	90% as of 07/23	100 % by 12/2024	A
% of EV in the total cars fleet (internal + hire fleet)	38%	41%	41%*	69% as of 07/23	100 % by 12/2024	R
% of EV in the vans fleet (internal)	20%	20%	20%*	21% as of 07/23	100 % by 12/2024	R
% of EV in the total vans fleet (internal + hire fleet)	13%	13%	13%*	12% as of 07/23	100 % by 12/2024	R
No. of charging bays installed	86	203	316	-	132 by 04/2022	G
No. of charging bays which are publicly accessible	45	109	270	-	50	G
No. of alternatively powered HGV	1	1	6	-	6 by 04/2023	G
% of electric small equipment	N/A	N/A	10%	-	50 %	TE

* Figures are not directly comparable with previous ones due to new calculation methodology from Sept 22

Fleet actions

Table 5: Fleet phased emissions reduction plan

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with some delays	A	Milestone behind target	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed or unlikely to be met	R	Too early to say	TE	Not applicable	N/A

Phase 1 – 21/22 Action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action F1. Complete 100 % electrification of car fleet.	£0.33m ³ (CEC) + £0.22m (SG funding) + Further resources required ⁴ **	Continue efforts to reduce the size of the internal and hire fleets – on-going. Develop a spot hire approval policy to reduce emissions – by 06/24 Work with Procurement to explore options to ensure low-carbon vehicles can be hired where relevant – still on-going Undertake replacement of remaining petrol or diesel cars – by 12/24	12/21 – now aiming for 12/24	A	% EV (total cars)	90 % - internal fleet/ 69 % - incl. hire fleet as of July 23 ⁵	100% by 12/21 - now aiming for 12/24	A	Scott Millar

³ 32 EV cars – Fleet Renewal Programme – F&R Committee – March 2020

⁴ Cf Fleet Renewal Report – Finance & Resources Committee – October 2023

⁵ This percentage mainly increased thanks to the removal of underutilised diesel/petrol cars.

Phase 1 – 21/22 Action	Resour- ces	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action									
F2. Commit to 100 % electrification of van fleet and implement a strategy for the charging of vans for mobile workers.	Staff time (CEC) **	Working group with HR & trade unions established - 03/22 Telematics policy approved – 05/23 Roll out telematics across remainder of the fleet – 12/23 Review vehicle telemetry and charger data flows to help determine the adequate strategy– 03/24 (subject to capacity)	12/23 <i>(delayed to 03/24 due to Telematics policy being approved later than anticipated)</i>	A	N/A	N/A	N/A	N/A	Karen Reeves
F3. Work with city partners to explore the potential for alternative fuels and scope the feasibility and cost of a joint approach to electric and/or hydrogen solutions for heavy fleet	Pilot costs met by Lothian Buses & suppliers ***	Lothian Buses electric and hydrogen buses trials – on-going as new technology develops Retrofit bus trial planned 02/24 (diesel bus being repowered to electric). Exploring options for H2 charging infrastructure – on-going Application to consortium bid (Scottish Zero Emission Bus Fund) with Lothian Buses to mutualise use of city centre charging infrastructure – outcome 12/23 and in place by Q2/25 if successful	12/22 <i>(on-going as new technology develops)</i>	A	N/A	N/A	N/A	N/A	Hannah Ross / Gareth Barwell

Phase 1 – 21/22 Action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action									
F4. Roll out fuel efficiency drivers' training	TBC *	Pilot use of a driving simulator – Q4 23 Start of training roll out based on the results of the pilot - Q3 24	Q3 2024 (delayed from 11/22)	A	TBC	TBC	TBC	N/A	Scott Millar
F5. Work with public sector partners to develop a city-wide network of EV charge points/depots to service public sector fleet, to be made available on Chargeplace Scotland for members of the public to use out-of-hours, beginning with 50 additional chargers initially, with 20 % being rapid chargers	£250k (CEC) + £2.2m (Transport Scotland Switched on Towns & Cities) + £191k (OZEV On-Street Residential Charging Scheme + TS ⁶) +£90k (SG Air Quality Action Plan grant) ***	Installation of charging infrastructure for new electric bin lorries - 08/23 Installation of 44 additional charging bays funded by the Office for Zero Emission Vehicle and Energy Saving Trust – to go live by Autumn 2023 Installation of 70 additional charging bays for use by Enterprise Car Club vehicles – to go live by Autumn 2023	On-going	G	No. of charging bays No. of publicly accessible charging bays	316 270	132 chargers by 04/22 (estimated 431 chargers by Q4 2023)	G	Steven Murrell/ Scott Millar
★ F12. Review the potential electrical impact on depots required to	Staff time (CEC) ***	Initial high level costing based on SPEN inputs largely completed.	12/22	G	N/A	N/A	N/A	N/A	Paul Jones

⁶ [Electric vehicle charging points – The City of Edinburgh Council](#)

Phase 1 – 21/22 Action	Resour- ces	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action support the transition to an electric Council fleet.		Current focus on optimising vehicle utilisation to inform more comprehensive options appraisal.		Green					

Phase 2 – by 2025 Action ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
F6. Develop a fleet optimisation strategy	£25k for study + Staff time (CEC) ***	Fleet optimisation report produced by EST – 06/21 Detailed study on capital costs required to replace vehicles + charging infrastructure – 12/22 (delayed) Committee report – options to transition the fleet & associated costs – F&R Committee 10/23 Fleet optimization strategy for the remainder of the fleet – Q4 2024	Q4 2024 (Initial completion date was Q1 2023 - Study and committee delayed)	A	Fleet optimisation strategy	On-going study	Strategy developed	TE	Scott Millar
F7. Begin the roll out of alternatively powered van fleet	£22.7m + Further resources required ⁷ **	Report to F&R Committee to approve funding – 09/23 (delayed from 04/23) Contract award & orders placed – 09/23 Vehicles received – 06/24	12/23 – now aiming for 12/24	A	% EV (total vans)	21 % - internal fleet, 12 % - incl. hire fleet as of July 23	100 %	R	Scott Millar
F8. Begin the roll out of alternatively powered heavy vehicle fleet	£2.5m for 5 e-RCV (ZWS) + further resources required for the rest of the fleet ⁸ *	5 e-RCVs (fully funded by ZWS) received in June 2023 Request to purchase 2 electric mobile library vehicles and potentially 21 electric buses subject to funding (F&R report 10/23).	On-going	G	# of alternatively powered HGV	6 as of June 23	6 by 04/23	G	Gareth Barwell

⁷ Fleet Upgrade report F&R Committee – October 2023

⁸ This only covers 5 electric Refuse Collection Vehicles. Costs involved to transition the full heavy fleet are currently unknown but current prices indicate that the cost of an electric RCV is currently three times the cost of a diesel counterpart. A clearer indication of further resources required will be available in the study– cf action F6

Phase 2 – by 2025 Action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action ★ F13. Implement the Flexiroute Programme which will allow route optimisation, real time management, improved logistics, vehicle management and will enable the Council's Passenger Operations Service to move into Mobility Hubs.	£153k (SG funding) + £875k (CEC) ***	Kick off implementation of new IT system – 07/22 Organisational Review – 09/22 to 02/24 Internal Transport Provision onto new platform – 09/23 Implementation of Internal transport scheduling – 09/23 Roll out Strategic Commissioning Plan – external provision – 05/24 Implementation of External Transport plan – 05/24	04/24 (<i>delayed to 05/24</i>)	A	N/A	N/A	N/A	N/A	Frank Henderson

Phase 3 – by 2030 Action ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
F9. Commit to replace equipment such as lawnmowers and chainsaws with non-fossil fuel alternatives when appropriate	50 % increase on standard cost **	Successful trials with Parks teams – Q1 2022 £15k order placed for 4 electric blowers and associated equipment – 02/23 £10k order placed for 5 hand tools and associated equipment – 08/23 Register small equipment on the fleet management system to monitor progress against KPI – by Summer 2023 – <i>delayed to Q1 2024</i>	03/25	A	% of electric small equipment	8%	50 % of equipment electric by 03/25	TE	Scott Millar
F10. Secure external funding to transition the remaining fleet	£TBC *	Working with TS and EST for potential future funding opportunities Application submitted for ScotZEB funding for welfare buses – outcome by 12/23	on-going	A	N/A	N/A	N/A	N/A	Karen Reeves
F11. Investigate opportunities for utilising fleet as part of broader approaches to Mobility as a Service (MaaS) within 20 min neighbourhood approach	Staff time (CEC) ***	Car Club Review report – completed 06/23 Prior Information Notice to market – Q3/23 Review contract to expand the network of city car club vehicles accessible to colleagues and vehicle locations by 12/24	2030	G	N/A	N/A	N/A	N/A	Karen Reeves



Waste

Evolution of waste emissions

Waste emissions represented 9% of the total Council emissions inventory in 2022/23. For the purposes of this plan, emissions from waste refuse vehicles are included in the fleet category.

The evolution of historic waste emissions is shown in Figure 9. 2022/23 emissions are still well below 2018/19 levels, and 18% lower than last year. The large drop in 2019/20 corresponds to the Millerhill plant becoming operational, diverting most of the residual waste from landfill to the Energy from Waste facility.

Landfilled waste tonnages in 2022/23 represented 2% of total waste tonnages but were responsible for around 33% of total waste emissions. Landfilled tonnages are back to 2020/21 levels, after an increase in 2021/22 due to a longer annual plant shutdown.

Food waste tonnages are back to pre-pandemic levels (only 1% higher), despite an increase in the past two years which was probably due to the lockdowns during which people ate more meals at home. It may be that people are wasting less food due to the cost-of-living crisis. The last waste composition analysis revealed that residual waste bins still contained an estimated 27% of food waste, which is a significant reduction from 2015 (where it was around 33-35%) but means there is scope to further increase food waste recycling. (This analysis only represents a snapshot in time on a small sample, so these figures are only high-level estimations.) Door-to-door engagement and improved food waste collection capacity should help increasing food waste recycling further.

Garden waste tonnages are 19% lower than the two previous years.

Garden waste tonnages can fluctuate year on year due to the climatic conditions which impact on plant growth. For example, the extremely hot, dry weather in summer 2022 slowed the growing cycle and this would lead to a reduction in garden waste tonnages. Climate change itself will make this more unpredictable.

Paper, metal and plastics recycling tonnages were down 12% on last year, which can be explained by a continued decline in newspapers and magazine purchases. Paper and cardboard are by far the two most important types of materials currently recycled in the dry-mixed recycling bins, so a switch to online press content can have large impacts on total collected tonnages. This may also reflect the industry's efforts to design lighter packaging. The industrial dispute in August 2022 may also have played a role.

Overall, **total tonnages** collected have decreased by 9% in 2022/23 compared to the previous year, or 4% compared to pre-pandemic levels.

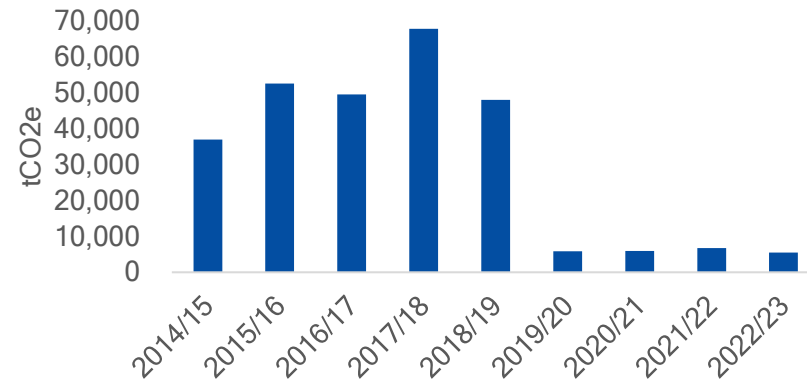


Figure 9: Historic Waste emissions

Evolution of waste KPIs

- Waste emissions have decreased by 18% compared to last year but by only 5% compared to 2019/20. The current trend is not decreasing fast enough to reach net zero emissions by 2030.
- Total waste tonnages have significantly decreased, and total food waste tonnages are back to 2019/20 levels, as explained in the previous section.
- The recycling rate was 40.7% in 2022/23, lower than last year. Collected waste tonnages were lower than the previous year across all streams, but with recycling tonnages reducing more than residual tonnages. This means the 45% target for 22/23 has not been achieved. This may be due to the industrial dispute in August 2022 as well as changes in consumption habits post-covid. The on-going roll out of the Communal Bin Review project aims to improve recycling rates further.
- Zero Waste Scotland (ZWS) has funded modelling work by Eunomia to help Councils prepare for the implementation of the Deposit Return Scheme (DRS) for drinks containers. The latter has now been delayed until at least October 2025. As a result, we are taking the opportunity (again supported by ZWS) to continue working with Eunomia to model different scenarios to ensure our waste collection systems continue to meet the demands of the wider emerging legislative changes being developed by both the Scottish and UK Governments with this work expected in late summer 2023.

Table 6: Summary of key KPIs for Waste

Key for the RAG rating of the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2019/20	2020/21	2021/22	2022/23	Target	RAG
Total waste emissions (tCO _{2e})	5,843	5,949	6,725	5,539	Net 0 by 2030	R
Total waste tonnages collected	205,209	209,944	215,736	196,313	decrease	G
Percentage of waste recycled	41.10%	39.60%	42.70%	40.70%	45% by 2022/23 Increase ⁹	A
Total food waste tonnages collected	9,716	10,966	10,489	9,828	increase	A

⁹ The 45% by 2022/23 target has not been achieved. No new quantified target has been set for 23/24.

Waste actions

Table 7: Waste - phased emission reduction plan

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with some delays	A	Milestone behind target	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Not applicable	N/A

Phase 1 – 21/23 Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
W1. Provide additional communal recycling bins for high-density properties over the next two years to deliver an increase in communal recycling bins across the city	£7.4M (total cost):	Funding application submitted to ZWS – 07/21 (successful) CBR project updates – T&E Committee – 05/23	06/23 (delayed to 06/24)	A	% of waste recycled	40.7 %	45 % by 2022/23	A	Andy Williams
	£2.5M (CEC) + £4.9M (ZWS) + remaining (CEC) ***	Phase 1 – Finalised Summer 2022.			Recycling, glass and food waste capacity per resident per week before and after the project is delivered (Liter)	Phases 1, 2, A: 60L (before) >150L (after)	Increase	G	
		Phase 2 – Including Portobello, Newhaven and Trinity – finalised March 2023			Non-recyclable waste capacity per resident per week before and after the project	Phases 1, 2, A: 236L (before) >150L (after)	Decrease	G	
		Phase 3 (depending on TRO) – Planned to start 09/2023							

Phase 1 – 21/23 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action		Phase 4 (depending on TRO) – Estimated implementation Q1 2024 Phase A - On-going implementation throughout 2022/23/24			is delivered (Liter) Number of locations with fully integrated waste and recycling facilities before and after the project is delivered. Number of locations with only non-recyclable waste bins before and after the project is delivered.	Phases 1, 2, A: 59L (before) 550L (after) Phase 1: 255L (before) N/A (after)	Increase Decrease	G G	
W2. Implement routing changes for kerb-side food waste collection to support reduction of the fleet by two vehicles	Staff time (CEC) ***	Project complete	04/21	C	No. of waste collection vehicles	-5	-2	G	Andy Williams
★ W12. On-going route optimisation to ensure routes are efficient and provide extra capacity	Staff time (CEC) ***	Work on kerbside routes completed on the West of the city, and due to be completed by 12/23 for the East side.	On-going	G	RCVs annual fuel consumption (thousand liters)	967	decrease	A	Andy Williams

Phase 1 – 21/23 Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
W3. Deliver awareness raising campaigns to encourage citizens to reduce, re-use and recycle	£90k for 2021/22 £86k for 2022/23 (CEC - Change-works contract) + Staff time (CEC) ***	Several campaigns delivered (food waste, fly tipping, 8 CBR engagement events, online promotion of Reuse Map etc). Waste campaigns with focus on waste education and reuse now planned for FY23/24.	On-going	G	Increase in food waste weight presented for recycling in areas targeted by Changeworks campaign	+50 %	+10 %	G	Andy Williams
					No. of schools engaged	15	Min 10		
					No. of residents engaged during fly-tipping events	108	N/A		
W4. Improve the recycling infrastructure in schools and explore options to enhance facilities management capacity to divert further waste towards recycling	£100k ***	Business Case developed – 02/22 Update on approach and progress – P&S Committee – 06/22	12/22	C	% of educational settings with recycling in place	100 % (as of June 22)	100 % (circa 150)	G	Mark Stenhouse
★ W13. Undertake a waste composition analysis to inform future waste services priorities	£30k TBC (majority funded by ZWS) ***	Analysis complete.	03/23	C	N/A	N/A	N/A	N/A	Andy Williams

Phase 1 – 21/23 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action ★ W15. Recruit a food waste officer to improve recycling on the least performing routes	CEC + waste contractor <i>Budget not confirmed yet</i> **		Q2 2024	NS	N/A	N/A	N/A	N/A	Andy Williams

Phase 2 – by 2024/25 Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2021/22	Target	RAG	Delivery Lead
W5. Work with the third sector and Scottish Government to explore incentivisation models for increasing re-use and recycling of bulk items.	£tbc (CEC/ external funding) *	Bulky waste refurbishment pilot project at Bankhead depot with Edinburgh Furniture Initiative – Pilot due to start by end 2023	03/23 (now delayed to 12/23)	A	N/A	N/A	N/A	N/A	Andy Williams
W6. Improve the city's domestic recycling infrastructure through expanded household waste recycling facilities and capacity, and the use of smart technology such as QR codes, and smart phone apps, subject to successful bids to the Scottish Government Recycling Infrastructure Fund.	£106.5k routesmart devices + £55k for other technology (ZWS funding) ***	ZWS funding carried forward into 23/24 to allow for transition from Routesmart Navigator to Smart Suite. QR codes added on all new bin as part of the CBR project.	12/25 (should be completed by 03/24)	G	% route completion	N/A	N/A	N/A	Andy Williams
W7. Begin the implementation of the City Operations Centre by investing in Internet of Things (IoT) bin sensors to monitor communal waste and recycling and litter bins and a new CCTV system to help us to manage the city on a more proactive basis.	1M for 11,000 bin sensors: £305k (ERDF) + CEC + other funding streams - £1.78M for CCTV (£1.068M CEC + £0.712M ERDF) **	Lab testing of bin sensors – 02/22 In-field testing of bin sensors – 07/22 Roll out of bin sensors – completed 07/23 (10,650 sensors installed + 250 spares + 100 to be replaced) - Transition to Digital Video Management System for the entire CCTV network implemented – 06/23 City Operations Centre and CCTV system now operational	06/23 - 02/23 (completed 06/23)	C	Number of datasets opened for innovation - % of full bin alerts responded to within 24-48 hrs - % of fire alerts responded to within 15 mins. - % of vandalism	N/A - N/A - N/A -	5 by 2023 - increase - increase -	N/A	Karin Hill

Phase 2 – by 2024/25 Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2021/22	Target	RAG	Delivery Lead
					alerts (i.e. bins being tipped over) responded to within 24 hrs	N/A	increase		
W8. Review dry mixed recycling contract specifications at point of expiry to identify opportunities for requiring contractors to extract more value from materials.	£100k Year 1 + £100k Year 2 (CEC) ***	Engagement with contractor leading to additional materials (pots, tubs and plastic trays) now included in the recycling contracts	12/25	G	% of waste recycled	40.7 %	45 % by 2022/23	A	Andy Williams
W9. Finalise proposals for the opening of a fourth HWRC at Braehead to manage increased waste resulting from the significant housing developments in the West of the City.	Staff time (CEC) ***	Re-assessment of estimated capital and on-going operational costs linked with a 4 th HWRC- 04/22 Outline business case developed - 03/23 Formal bid to ZWS by 03/24	03/23 at the latest	A	No. of recycling centres	3	4	TE	Andy Williams
★ W14. Progress with the construction of the Millerhill Energy from Waste plant heat offtake unit to provide heat to the Midlothian Energy Heat Network, in collaboration with Scottish Government, Vattenfall, Midlothian Council, FCC Environment and Shawfair LLP	£5.9m (CEC) – subject to Full Council approval and final design & build costs ***	Sign-off of Heat Offtake Agreement – 10/22 Approval of Contractors Change notice – 02/23 Start of infrastructure construction – end of 2022 (delayed) Delivery of heat to homes – by 2024	12/24	A	MWh of electricity and heat generated through the incineration of waste collected by CEC (TBC subject to data availability)	67,607 MWh for electricity	N/A (monitoring only)	N/A	Andy Williams

Phase 3 – by 2030									
Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2021/22	Target	RAG	Delivery Lead
★ : New action									
W10. Investigate the potential for a joint authority Materials Recovery Facility to extract more value from materials	Staff time (CEC) ***	Discussions with Midlothian, Borders and West Lothian Councils + engagement with the sector - on-going Engagement with legal advisors – Summer 23 Looking to arrange a meeting with FCC to compare legal points of view – 10/23	Decision to go for procurement – 03/23 <i>(delayed)</i>	A	N/A	N/A	N/A	N/A	Andy Williams
W11. Review the impact of the Extended Producer Responsibility and Deposit Return Scheme on the city's domestic waste service requirements and bring forward service redesign proposals which ensure that at least 50 % of any savings are re-invested in further actions to reduce emissions	Staff time (CEC) ***	Consultancy support (modelling work) by Eunomia on behalf of ZWS to analyse the impact of the future DRS on waste services– by 03/23. 10/26: Review impact of DRS (after 1 year of DRS implementation – <i>DRS now delayed to 10/25</i>) 12/26: Review impact of EPR (<i>EPR delayed to late 2025</i>) Q1-27: Bring forward service design proposals (subject to any EPR delays)	03/25 <i>(delayed to Q1-27 due to legislative delays)</i>	A	% of savings reinvested	N/A	50 %	TE	Andy Williams



Business travel

Evolution of business travel emissions

Business travel emissions represented around 1% of total Council emissions in 2022/23. They do not include emissions from employees commuting from home to work.

As shown in Figure 10, business travel emissions have increased by 11% compared to last financial year but remain well below pre-pandemic levels (-56 % compared to 2019/20). This is mainly due to a 17% increase in grey fleet mileage¹⁰ claims, which again are still well below pre-pandemic level (44% below 2019/20).

The methodology for calculating emissions from taxis use by the Travel Hub has been improved this year. The new methodology is based on actual mileage data, which is much more accurate than the previous one, which was based on financial data. The 3% decrease in emissions between 2021/22 and 2022/23 is entirely due to methodology improvements. In reality, mileage has increased by 17% compared to last year, and +32% compared to pre-pandemic. This increase can be explained by several factors:

- **Ukraine:** There has been a consistent demand on servicing the needs of the Ukrainian Refugees and resettling thousands of them.
- **School transport:** Placing children in Enhance Support Bases as an alternative to Additional Support Needs schools has invariably led to greater demand for statutory transport. Growth in the South Queensferry/ Kirkliston area will mean a surge in transport requests due to a current lack of Public Transport or safe Active Travel.
- **Health and social care:** The move away from in-house provision of day care services for older people and adults with disabilities has effectively dispersed people into part-time

smaller registered and unregistered services. In effect, the same number of people are making more journeys to attend a wider variety of activities.

Emissions from train and air travel continue to gradually increase and have more than doubled compared to 2021/22, reaching 36 tCO_{2e} in 2022/23. This is still significantly below pre-pandemic levels (123 tCO_{2e} in 2019/20), with the largest drop being associated with long-haul flights.

There is a real challenge ahead to curb this trend and ensure that business travel emissions do not gradually rise to pre-pandemic levels. Initiatives like the increase in the bike mileage rate and the cargo bike pilots are aiming to support low carbon alternatives.

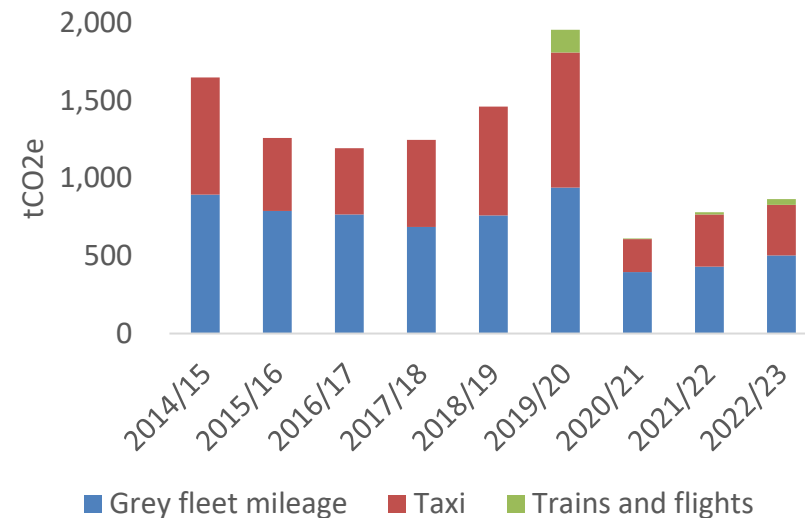


Figure 10: Historic business travel emissions

¹⁰ A grey fleet vehicle is one owned and driven by an employee for business.

Evolution of business travel KPIs

- Business travel emissions are rated 'Amber' in Table 8, even though emissions levels are well below the theoretical linear trajectory leading to zero emissions in 2030. This rating reflects the steady increase in emissions since 2020.
- Emissions from air travel (which are monitored since 2019/20) amounted to 29 tCO_{2e}, down from 123 tCO_{2e} pre-pandemic, but have been rising steadily since 2020/21. The revised Business Travel & Accommodation Guidance, which does not allow air travel when a direct rail connection is available, should help keep these emissions as low as possible.
- Emissions from taxis have decreased by 3% but this is entirely due to methodological improvements (see previous section).
- Grey fleet mileage has increased by 17% compared to 2021/22 or 28% compared to 20/21. This remains well below pre-pandemic levels (-37%).
- Despite the increase in the bike mileage rate from 25p to 45 p/mile to match the car mileage rate in 2022, bike mileage claims have fallen by 21% this year.
- The uptake of the cycle to work scheme has also dropped this year. The recent increase in the total allowance (£5,000) which offers employees a wider choice for the purchase of bikes, including cargo-bikes, could reverse this trend.
- Ten colleagues from the active travel team received a cargo-bike training in January 2023, and a two-month cargo bike pilot with twelve park rangers took place in the Pentland Hills between February and March 2023. Other services are now being identified for new cargo bike trials.

Table 8: Summary of key KPIs for Business Travel

RAG rating key for the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2020/21	2021/22	2022/23	Target	RAG
Total business travel emissions (tCO _{2e})	612	781	866	Net 0 by 2030	A*
Air travel emissions (tCO _{2e})	2	12	29	decrease	R
Taxi travel emissions (tCO _{2e})	213	335	326	decrease	G
Grey fleet mileage claims (million km)	2.3	2.5	2.9	decrease	R
Staff bike mileage claimed	9,984	13,556	10,664	increase	R
Uptake of Cycle to Work scheme	408	410	273	increase	R
Number of colleagues receiving e-cargo bike trainings	0	0	22	5	G

*This indicator would have been rated 'green' if strictly following the methodology explained on page 37. It is rated 'amber' due to the increasing trend since 2020.

Business travel actions

Table 9: Business travel - phased emission reduction plan

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with some delays	A	Milestone behind target	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Not applicable	N/A

Phase 1 – 21/22 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
<p>★ : New action</p> <p>T1. Review Council business travel policies, procedures & guidance to ensure they are centred around a sustainable travel hierarchy that takes account of employees' operational base location and incentivises to consider the most sustainable mode of transport first.</p>	Staff time (CEC) ***	Review of current content, benchmarking and developed proposals by 03/22 New guidance approved by CLT – 09/22	06/22	C	Revised business travel guidance published	Guidance approved and published on the Orb	Guidance published on the Orb	G	Nareen Turnbull
<p>T2. Re-establish Transport Allocation Panels to support citizens' needs and reduce miles travelled by private car and taxi in connection with service delivery</p>	Staff time (CEC) ***	C&F TAP meetings in place	On-going	C	Business travel emissions – taxis	326 tCO2e (870 tCO2e in 2019/20)	decrease	G	Crawford McGhie

Phase 1 – 21/22 Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
T3. Finalise a Sustainable Colleague Travel Plan and create a new Travel Plan and Research/Monitoring Officer post, to oversee its implementation and monitoring.	£50K (Path 4 All, Smarter Choices, Smarter Places funding) ***	Recruitment of Travel Plan Officer – 09/21 Establishment of a cross service travel working group – 10/22 Publication of Sustainable Colleague Travel Plan - delayed to Q2 2024	03/22 (Delayed to Q2 2024)	A	Staff bike mileage claimed	10,664 miles	Increase	A	Travel Plan and Research/Monitoring Officer
T4. Deliver a colleague engagement programme to raise awareness of new travel plan and policies and encourage uptake of staff benefit schemes supporting sustainable transport modes, to events such as Dr Bike sessions, e-bike pools and sustainable transport subsidies.	Path for All – SCSP funding ***	Step Count Challenge 10/21, 05/22, 10/22 Walking webinar -11/21 Scottish Workplace Journey Challenge – 03/22 Lunch & Learn on sustainable travel – 05/22 Love to Ride campaigns – 09/22 to 03/24 Cargo bike awareness days 31/1/23, 20/4/23, 15/6/23 Bike maintenance courses - 3/23	On-going	G	Uptake of Cycle to Work scheme	273 users (2022)	Increase	A	Travel Plan and Research/Monitoring Officer - Communications
T5. Develop and implement the 'Our Future Work' strategy which identifies opportunities to support and promote sustainable travel	Staff time (CEC) (+ resources to be secured for further trials) **	Strategy approved P&S Cttee – 10/21 Feedback survey incl. changes in staff commuting habits – 12/21 Carbon impact of working from home included in Our Future Work FAQ	On-going	G	N/A	N/A	N/A	N/A	Nareen Turnbull

Phase 2 – by 2024/25 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action T6. Benchmark mileage claims and rates of payment – explore possibility of changing rates, phasing reductions (e.g. diesel cars) and increasing other e.g. bike	£4K ¹¹ (CEC) *	Analysis of datasets, benchmarking & cost modelling – 03/22 New bike mileage approved by CLT and included in revised Business travel guidance – 09/22	03/22	C	Staff bike mileage claimed	10,664 miles	Increase	G	Nareen Turnbull
T7. Re-design the myTravel booking system to support the new Sustainable Colleague Travel Plan and sustainable travel hierarchy	Staff time (CEC) ***	Engagement with supplier (CTM) to implement changes to the travel booking platform – Q2 to Q4 2022 New pop-up notification for air travel and need to select service director when making booking - complete. Enable booking bed in sleeper train – work in progress TravelCTM carbon tools to be launched late 2023.	03/22 (delayed to 12/23)	A	TBC	TBC	TBC	N/A	Nareen Turnbull Travel Plan and Research/ Monitoring Officer
T8. Review the designation and use of Council parking spaces to encourage more sustainable transport choices	Staff time (CEC) ***	Develop general principles for designation of parking spaces – 03/22	06/22	C	TBC	Draft principles developed	TBC	N/A	Nareen Turnbull
★ T13. Engage with service areas, trade unions and CLT to approve the draft	Staff time (CEC) ***	Engagement with relevant stakeholders Discussion at Our Future Work Board – Q4 23	TBC	A	N/A	N/A	N/A	N/A	Travel Plan and Research/ Monitoring

¹¹ Estimated costs based on 18/19 and 19/20 data, assuming an increase in the bike mileage rate from 25 to 45 p/mile

Phase 2 – by 2024/25 Actions	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2022/23	Target	RAG	Delivery Lead
★ : New action parking spaces allocation principles and ensure they are implemented.		Work with Comms to promote and enact this new culture							Officer - Facilities Management
T9. Commit to phasing out air travel for business as part of an integrated approach to digital innovation in public sector strategic and operational delivery	Staff time (CEC) ***	Included within scope to review policy guidance – 03/ 22	06/22	G	Air travel emissions	29 tCO2e (123 tCO2e in 2019/20)	Decrease	A	Nareen Turnbull
T10. Work with third sector partners to pilot the replacement of business journeys by car with e-cargo bikes and roll-out e-cargo bike training to target staff groups	Pilot & training delivered by 3 rd sector partner ***	Try-it session for active travel team, planners/ designers. 2 months pilot w/ Park Rangers/ Officers (02&03/23) Service areas identified for further trials – 08/23.	Q1 2023 (tbc subject to insurance/ training requirements)	G	Number of staff receiving e-cargo bike trainings	22	8 for 1 st pilot Future target TBC following pilot outcomes	G	Travel Plan and Research/ Monitoring Officer

Phase 3 – by 2030										
Actions ★ : New action	Resources	Intermediary milestones	Completion date (MM/YY)	RAG	KPI	2021/22	Target	RAG	Delivery Lead	
T11. Ensure the Active Travel Action Plan and Investment Programme delivers an active travel infrastructure which contributes to modal shift for business travel	£117.6m: £20.5m (CEC to 2025/26 subject to internal allocations) + £84.5m (to 2025/26, Sustrans) + £12.6m (to 2025/26, SG CWSR grant) + £0.1m (SG Place Based Investment Programme in 2022/23) ***	Ensure CEC work on service redesign and new ways of working Helps to inform future active travel investments Gather data on business travel routes and transport modes to inform future active travel infrastructure investment by 12/23 – <i>tbc subject to resources</i>	03/25	G	Car mileage claims	2.9 million km	decrease	A	Active travel with support from Sustainability team	
T12. Commit to 'EV only' for business travel by taxi	Staff time (CEC) ***	Review the Council contract specifications at point of renewal to ensure only EV taxis can be booked by 2030 – (Revision of Contract for unescorted passenger journeys - 10/22) Embed stricter environmental requirements in the taxi licensing requirements – TBC	By 2030 at the latest	G	TBC	TBC	TBC	N/A	Sustainability team/ Passenger Operations	



Colleague engagement

Colleague engagement progress

Colleague engagement and empowerment is key if we are to achieve our ambitious climate targets. In 2022 and 2023, Human Resources have worked closely with the corporate sustainability team to drive cultural change within the Council, with regular meetings held to progress on actions.

The sustainability team’s senior communications officer left the Council in Summer 2022, meaning that internal and external engagement activity has reduced over the past year. Following Committee approval in 2023, four new posts have been recruited, which will include a communications and engagement role.

Nevertheless, the in-house delivery of the climate change training continued in 2023, with the number of participants doubling between August 2022 (153) and August 2023 (381), and 20 new facilitators being trained to help with the delivery. Climate change training is at the heart of the culture shift needed to embed sustainability in everything we do. A tailored version of the workshop has been rolled out across the Planning & Building Standards service. As of August 2023, 102 staff had attended the climate training, which represents 66% of the whole service. Two workshops have also been delivered to senior managers and service directors (with a focus on members of the Corporate Leadership Team and Sustainability Board). Despite this progress, more facilitators are required to sustain a high delivery pace and achieve the target. This indicator is rated as red to reflect the gap with the ambitious target of 2,500 colleagues trained by 2025.

The new Behavioural Framework has been launched in May 2023 and includes ‘green behaviours’ under the “Integrity” pillar. It will underpin the recruitment process as well as the annual performance conversations.

Evolution of Colleague engagement KPIs

Table 10: Summary of Colleague engagement KPIs

Key for the RAG rating of the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2020/21	2021/22	2022/23	Latest data	Target	RAG
Number of Climate lunch and learns	Launched 04/21	3	3	-	4 per year	A
Number of staff who have attended climate change training	4	66	241	381 as of 08/23	15% of staff by 2025 (around 2,500)	R
Number of staff trained to deliver climate change training	N/A	6	22	-	Minimum 20 by 2025	G
Number of users who have completed the e-learning module	N/A	N/A	N/A	26	increase	TE
Number of departments with sustainability network members	8	10	12	-	17 by 2030	A
Number of green car leasing scheme users	Launched 03/21	38	59	-	increase	G

Colleague engagement actions

Table 11: Colleague engagement programme

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with some delays	A	Milestone behind target	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Not applicable	N/A

Actions ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
E1. Climate Literacy training for elected members and colleagues: Support, decision making and scrutiny and enable to make informed choices which help to reduce emissions	£27K (CEC) ***	External provider contracted – 12/21 Training delivery to phase 1 priority groups – from 03/22 Move to in-house delivery of Climate Fresk workshops – 11/22	12/25 (<i>subject to capacity</i>)	A	No. of colleagues who have attended training No. of colleagues trained to deliver training	360 (Aug 23) 22	15 % of staff by 2025 (~ 2,500) (<i>Silver accreditation</i>) Minimum 20 by 2025	A	Sustainability team
E2. Sustainability Network: Collaborative network to harness existing assets and resources for members to enable teams to become more sustainable. Support promotion of best practice across council workstreams.	Staff time (CEC) ***	Network launched & regular meetings set up– 03/21 Recruitment of new comms officer – 09/23	On-going	A	# different departments with sustainability network members	12	17	A	Sustainability team

Actions ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
E3. Climate lunch and learns: Raising awareness and encouraging action on key issues, such as sustainable staff travel and waste reduction	Staff time (CEC) ***	3 dates in 2022/23: (Sustainable travel 05/22, Clean air day 06/22, Digital clean up day 03/23)	On-going	A	# of lunch and learns	3	4 per year	A	Sustainability team
E4. Supporting colleagues to reduce emissions from energy and waste in the workplace: Promoting and encouraging re-use, repair and recycling.	Staff time (CEC) ***	Sustainability embedded in Our Future Work pilot workbook Festive waste awareness raising campaign – 12/21 and 12/22 Update of Sustainability Orb pages – Summer 22 Recruitment of new comms officer – 09/23	On-going	A	TBC	TBC	TBC	N/A	Sustainability team
E5. Awareness and engagement around procurement strategy: Support decision making & scrutiny and enable to make informed choices in line with the net zero ambition	Staff time (CEC) ***	Organise 10 procurement strategy/delivery related training events per year delivered to Council service areas	On-going	G	Number of events organised per year	10+	10	G	Lynette Robertson
E6. On-boarding: Refresh sustainability e-learning	Staff time (CEC) ***	Identification of refreshed content – 12/21 e-learning developed for myLearning Hub – Q3 22 New work module launched Q1 23	Summer 22	C	Number of users who have completed the e-learning module	26	increase	TE	Nareen Turnbull / Sustainability Team

Actions ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
E7. The role of our leaders: Ensure sustainability is embedded in decisions about Our Future Work & service/organisational design principles.	Staff time (CEC) ***	Sustainability embedded in Our Future Work pilot workbook ★Explore how sustainability can feature under one of the behaviours in our purpose and behaviours framework – Q3 22 ★Sustainability included as a measure of the leadership goals – 03/23 ¹² 2 dedicated climate training sessions for Sustainability Board members and CLT (02 and 04/23) – 20 participants	03/23	C	N/A	N/A	N/A	N/A	Nareen Turnbull
E8. Employee benefits platform: review current offering to improve alignment benefits with net zero ambition	Staff time (CEC) ***	Green car leasing scheme launched – 03/21 Cycle to Work allowance increased to £5000 to enable the purchase of cargo bikes – 08/23	Summer 22	C	Number of green car leasing scheme users	59	Increase	N/A	Nareen Turnbull
E9. Review and develop coherent intranet content (Orb) and policies to ensure alignment with net zero objectives	Staff time (CEC) ***	Review and integrate Orb content by 01/22 New Transport & Travel pages and Sustainability pages launched – Q3 22	06/22	C		N/A	Orb content updated	N/A	Nareen Turnbull / Sustainability team

¹² New leadership goal: "Ensure all decisions made by myself and my team members are in line with the Council's net zero commitment"

Actions ★ : New action	Resources	Intermediary milestones	Completion date	RAG	KPI	2022/23	Target	RAG	Delivery Lead
E10. Encourage staff modal shift from vehicle use to active travel through the delivery of 20-minute neighbourhood hubs	Staff time (CEC) ***	Publication of 20-minute neighbourhood strategy – 06/21 Publication of Sustainable Colleague travel Plan – 03/22 (delayed to Q2 24)	On-going	A		2.9 million kms (5.3m in 2019/20)	decrease	A	Sustainability team
★E11: Explore the possibility to develop an Employee Volunteer Policy which would grant 1 paid day per year for colleagues to volunteer locally	TBC *	Update of the existing Special Leave policy – Q1 24	12/25	G	Publication of Volunteer policy	-	-	N/A	Nareen Turnbull
★E12: Behaviour based recruitment: ensure our sustainability commitment are embedded in recruitment process	Staff time (CEC) ***	Council's sustainability commitment embedded in recruitment materials since 2020. Explore the possibility to review job descriptions to add a responsibility to contribute to the net zero target - by 12/27 Recruitment process including refreshed Employer Value Proposition will be reviewed following implementation of Oracle Fusion in October 2024.	12/27	G	N/A	N/A	N/A	N/A	Nareen Turnbull



Procurement and circular economy

Although emissions from purchased goods are not included in the city or Council carbon footprint data, we are nonetheless working with city partners to reduce these. The city's 2030 Climate strategy seeks to address these emissions and includes several actions related to procurement and circular economy. We are working to reduce emissions from our procurement activity and engaging with providers to support the reduction of emissions across their supply chains.

We reviewed and updated our five-year Sustainable Procurement Strategy in September 2023 following the updated Business Plan and the recently published Public Procurement Strategy for Scotland 23-28, the first national procurement strategy. The Strategy continues to place sustainability at the heart of the Council's procurement programme, to ensure that our considerable spending power is used to promote those economic, environmental and social outcomes that enable the effective delivery of essential services and simultaneously assist the Council in addressing the challenges that the city is facing.

Key highlights from the last financial year include:

- A supplier engagement strategy was approved in March 2023.
- Since June 2023, Climate Change Plans are now being requested as standard from suppliers where the frameworks or contracts are identified as priority or relevant and bidders are being asked to note sources of emissions to help them consider how they can reduce those.

- A procurement pipeline prioritisation was supported by Zero Waste Scotland to help ensure a focus on the contracts that will have the greatest impact.
- Climate criteria was applied to all construction projects and a wider action to seek carbon reduction plans at organisation as well as contract specific levels is now in place.
- A new member of staff with a Diploma in Sustainable Development has been recruited to the Engagement team.
- The Council continues to adopt a whole-life costing approach to evaluation criteria whenever possible. Whole life cost is considered early at the time of strategy development, with evaluation focused on a balanced cost, quality and sustainability threshold, and embedded in the Council's procurement procedures. There is also continual monitoring on the use of whole-life costing within our tender approach, with Best Practice shared and recorded for future reference.
- The Roads and Transport Infrastructure Construction Framework tender had specific emphasis on a reduction of vehicle and plant emissions, efficient use of energy, minimisation of waste and sustainable use of materials specific to the industry.
- Construction projects such as those at Ratho, Deanbank and Kirkliston had requirements focussed on energy efficiency and local conditions which considered noise and dust impact on local neighbourhoods.
- Road Resurfacing at Crammond Brig set a benchmark for sustainable road construction practices. The lower temperature production used resulted in decreased energy consumption and greenhouse gas emissions. A zero-waste approach was adopted where every tonne of road planings

removed from the site, was sent back to Duntilland Quarry to be reused in this, and future projects.

Key Performance Indicators:

The Corporate Procurement Service continued to provide monthly engagement sessions, as well as a quarterly Supplier Newsletter and delivered 25 training events in the last financial year.

The percentage of spend covered by a carbon reduction plan and with reuse/repair requirements are new indicators and are still to be baselined.

The Local Government Benchmarking Framework figures for 2021/22 recorded the Council's 37.8% percentage of procurement spend with local enterprises as being the third highest of similar size Councils, well above the Scottish average of 29.9%. The 2022/23 figure is slightly lower (37.3%) and below the target of 41% set for this financial year, but the volume of local suppliers has increased from 633 to 653 this year. As the profile of contracts and projects let will change from year to year so will the overall profile of the core spend which can as a result impact on the percentage of spend with local enterprises e.g. a number of large capital projects may be awarded to prime contractors who sub-contracts part of the work to local trades and specialists but the spend with these SMEs may not be captured by the Council.

Evolution of Procurement KPIs

Table 12: Summary of Colleague engagement KPIs

Key for the RAG rating of the Key Performance Indicators (KPIs):

Target achieved/ on track	G	Target almost achieved	A	Gap with target is >10%	R	Too early to say	TE	Not applicable	N/A
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KPI	2020/21	2021/22	2022/23	Target	RAG
Supplier engagement strategy developed	New indicator	New indicator	Approved 03/23	Supplier engagement strategy developed by 04/23	G
Number of monthly engagement sessions	12+	12+	14	12 per year	G
Number of procurement strategy/delivery related training events per year delivered to Council service areas	10+	10+	25	10 per year	G
% of annual influenceable spend covered by a carbon reduction plan	New indicator	New indicator	Commenced in 06/23 – will be measured from 23/24	TBC once baseline available	TE
% of annual influenceable spend with reuse, repair recycle requirements in tender documents	New indicator	New indicator	Still to be baselined	TBC once baseline available	TE
Percentage of total core spend with local suppliers	41 %	38 %	37%	39 % for 20/21 40 % for 21/22 41 % for 22/23 42 % for 23/24	A

Procurement actions

Table 13: Key procurement actions

Resources:	Resources secured (source)	***	Costs known (potential source)	**	Costs unknown (potential source)	*				
Actions:	Action progressing on time	G	Action progressing with delays	A	Milestone unlikely to be met	R	Action completed	C	Not started	NS
KPI:	Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Not applicable	N/A

Action ★ : New action	Resources	Milestones	Completion date (MM/YY)	RAG	Delivery Lead
<p>★P1. Procurement representation and influence across the Council and with public sector colleagues through knowledge sharing and resources leading to opportunities for carbon reduction.</p>	Staff time (CEC) ***	<ul style="list-style-type: none"> - Representation on the SGs Climate & Procurement Forum with representative bodies from across the public sector (although currently paused pending consultancy report). - Knowledge sharing with colleagues from English authorities. - Sharing of resources via the National Climate and Procurement Forum, the Knowledge Hub, Scottish Local Government Procurement Forum, and Sustainability Board with examples of collaborative projects reviewed to identify opportunity - on-going - Production and input to national Primary Impact Area for Climate Change guides shared with the internal team and wider public sector organisations – completed Q1 2022 - Completion of carbon literacy training by Procurement colleagues, through the Scottish 	On-going	G	Lynette Robertson

Action ★ : New action	Resources	Milestones	Completion date (MM/YY)	RAG	Delivery Lead
<p>★P2. Engagement with suppliers and experts to better understand what opportunities for carbon reduction can be delivered through influenceable spend and in particular our key priority sectors such as fleet, waste and construction</p>	<p>Staff time (CEC) ***</p>	<p>Government sustainable procurement toolkit and Council internal Climate Fresk training - Promotion of e-learning opportunities through the Procurement Learning & Development Team to wider Council including commissioning colleagues – on-going - Engagement with Sustainable Procurement Limited on behalf of Zero Waste Scotland to produce prioritisation programme for Council planned procurement expenditure, using the Sustainable Procurement Prioritisation Methodology. - National Meet the Buyer event – 17/05/23 - EICC Conference Centre - Calls for innovation and low-carbon market solutions – from 01/23 - Building of carbon reduction solutions into tender documents such as specifications and through the evaluation process - on-going - Development of supplier engagement strategy- by 04/23 - Expert support sought from organisations such as Zero Waste Scotland to educate and raise awareness in Council staff involved in tendering and managing contracts and to highlight good practice and opportunities for the circular economy outcomes via procurement activity – on-going</p>	<p>On-going</p>	<p>G</p>	<p>Lynette Robertson</p>
<p>★P3. Promotion of carbon reduction plans leading in future to a requirement for suppliers in all Council key priority areas</p>	<p>Staff time (CEC) ***</p>	<p>- Requirement that suppliers provide Climate Change Plans/Carbon reduction plans based on Scottish Government SSPD requires as standard for all relevant and priority contracts as from June 23 (to date 19 tenders).</p>	<p>06/23</p>	<p>G</p>	<p>Lynette Robertson</p>

Action ★ : New action	Resources	Milestones	Completion date (MM/YY)	RAG	Delivery Lead
		<ul style="list-style-type: none"> - Develop and apply a triage and assessment process for appropriate use of the Scottish Government Sustainable Procurement Toolkit to identify influenceable spend with most significant carbon reduction potential – completed 03/23 - Seek to influence the behaviour of the market and suppliers as to what is expected i.e. carbon reduction plans and future continuous improvement to reduce their climate impact including setting and achieving carbon reduction targets – on-going 			
★P4. Consider potential for reuse, repair and recycling of goods and materials in scoping requirements on a routine basis to prevent waste	Staff time (CEC) ***	<ul style="list-style-type: none"> - Use of the Scottish Government Sustainable Procurement Toolkit when considering new procurements – on-going - Assessment of the potential for reuse, repair & recycling in the procurement planning stage – on-going. - Use and promotion of Warp-It to reduce landfill and increase reuse by the Council, Edinburgh based public bodies and the third sector – on-going - Procurement Strategy template includes reference to use of sustainable tools as well as highlighting consideration of circular economy, reuse/recycle/repair and whole life costing 	On-going	G	Lynette Robertson

Action ★ : New action	Resources	Milestones	Completion date (MM/YY)	RAG	Delivery Lead
<p>★P5. Adopt industry standards to ensure consistency in approach with the market and clear measurement tools understood by all</p>	<p>Staff time (CEC) ***</p>	<ul style="list-style-type: none"> - Ongoing on a procurement-by-procurement basis - Establishment in Council's procurement procedures that suitable standards and certifications sought in tender exercises – on going - New Schools to be built to Passivhaus standard. - Application of Housing Service's net zero design guide for new home developments (refreshed in November 2020). - Environment Management Systems supported by ISO 14001 or equivalent are becoming standard with contractors as well as application of the Considerate Contractor Scheme. - Delivery of Community Benefits which support the 'Million Tree City' projects and other Council nature initiatives such as urban gardening projects and working with schools. 	<p>On-going</p>	<p>G</p>	<p>Lynette Robertson</p>



Performance monitoring and reporting

We will continue to publicly report its organisational emissions annually to the Scottish Government through the Public Bodies Climate Change Duty Reporting (PBCCD).

We also participated in the Carbon Disclosure Project (CDP)¹³ for the first time in late 2020. CDP is an international non-profit organisation for companies and cities' environmental reporting organisation. It is the largest climate change-focused data collection and assessment programme in the world.

In 2021 and 2022, Edinburgh was on **CDP A-List**; meaning it has been recognized by CDP as a city that is taking bold leadership on environmental action and transparency.

The reporting arrangements for the monitoring of Council emissions are listed in *Table 13*.

Table 14 summarizes the key performance indicators which are used to track progress against of the actions identified in each section of this plan.

Table 14: Reports that include monitoring of Council corporate emissions

Report	Key dates	Schedule
Carbon Disclosure Project	Jul 2023	Annual
City of Edinburgh Council Annual Performance report	Aug 2023	Annual
Public Bodies Climate Change Duties report	Oct 2023	Annual
Council Emissions Reduction Plan Annual Progress Report	Oct 2023	Annual

¹³ <https://www.cdp.net/en/cities>

Table 15: Summary of key performance indicators across all chapters

Key for the RAG rating of the Key Performance Indicators (KPIs):

Target achieved or exceeded	G	Target almost achieved	A	Target failed	R	Too early to say	TE	Monitoring only	N/A
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Sector	KPI	2019/20	2020/21	2021/22	2022/23	Target	RAG
All	Total Council emissions (tCO _{2e})	73,503	65,647	65,527	61,081	Net 0 by 2030	N/A ¹⁴
All	3-years carbon budget spend (thousand tonnes of CO _{2e})	N/A	66	131	192	190 ktCO _{2e} (cumulated from 2020/21 to 2022/23)	A
Buildings	Total Buildings emissions (tCO _{2e})	46,214	43,308	44,103	41,443	0 by 2030	R
Buildings	Installed solar PV capacity (MW)	1.458	2.221	2.446	2.481	3.221 MW by 2023/24 (approx. split year 1 - 250kW, year 2 - 300kW, year 3 – 450kW) 6.221 MW by 2030 (+4 MW)	A
Buildings	Percentage of new builds in delivery to PassivHaus standard with associated Low and Zero Carbon (LZC)	N/A	15%	18%	25.7%	100% of conditioned area where Passivhaus is technically appropriate	N/A

¹⁴ Performance is monitored against the three years cumulated carbon budget rather than annual emissions due to annual fluctuations.

	Primary Plant or equivalent						
Buildings	Annual total gross internal floor area agreed to undergo low energy retrofit works and conversion to low and zero carbon plant (or equivalent)	N/A	0 m2	0m2	0m2	<ul style="list-style-type: none"> • By 04/25- approx. 4,396m² • By 04/26- approx. 8,874m² • By 04/27- approx. 17,097m² • By 04/28- approx. 22,665m² of Council buildings are targeted to be retrofitted 	TE
Buildings	Cumulated Number of staff receiving PassivHaus designer training	0	0	4	8	4 by 11/21 10 by 12/23	G
Other energy	Total emissions from other energy consumption (tCO _{2e})	12,083	9,355	7,449	6,779	Net 0 by 2030	G
Other energy	Electricity consumption from street lighting (kWh)	23,063,626	18,556,408	12,624,206	10,963,379	13,085,393 kWh by 2022/23	G
Other energy	Number of sites with Tungsten Halogen Lamps	N/A	254	221	212	243 sites by 03/22 0 site by 03/31	R
Other energy	Traffic signal electricity consumption (kWh)	2,250,838	2,227,693	2,226,456	2,230,747	decrease	A
Fleet	Total fleet emissions (tCO _{2e})	6,671	6,267	6,290	6,252	Net 0 by 2030	R

Fleet	Percentage of Electric vehicles in the total cars fleet (internal fleet)		65%	71%	61% / 90% as of 07/23	100% by 12/2024	A
Fleet	Percentage of Electric vehicles in the total cars fleet (internal + hire fleet) (*as of Aug 2023)		38%	41%	50% / 69% as of 07/23	100% by 12/2024	R
Fleet	Percentage of Electric vehicles in the total vans fleet (internal) (*as of Aug 2023)		20%	20%	21%	100% by 12/2024	R
Fleet	Percentage of Electric vehicles in the total vans fleet (internal + hire fleet) (*as of Aug 2023)		13%	13%	12%	100% by 12/2024	R
Fleet	Number of charging bays installed		86	203	316	136 by 04/2022	G
Fleet	Number of charging bays which are publicly accessible		45	109	270		G
Fleet	No. of alternatively powered HGV	0	1	1	1	6 by 04/2023	G
Fleet	Percentage of electric small equipment	N/A	N/A	N/A	10%	50% of equipment electric	TE
Waste	Total waste emissions (tCO _{2e})	5,843	5,949	6,725	5,539	Net 0 by 2030	A
Waste	Percentage of waste recycled	41.10%	39.60%	42.70%	40.7%	41% by 2021/22	A
Waste	Total waste tonnages collected	205,209	209,944	215,736	196,313	decrease	G

Waste	Total food waste tonnages collected	9,716	10,966	10,489	9,828	increase	A
Waste	Recycling, glass and food waste capacity per resident before and after the project is delivered (Liter)	N/A	N/A	Phase 1: 60 L (before) >150 L (after)	Phases 1, 2, A: 60L (before) >150L (after)	increase	G
Waste	Non-recyclable waste capacity per resident before and after the project is delivered (Liter)	N/A	N/A	Phase 1: 236 L (before) >150 L (after)	Phases 1, 2, A: 236L (before) >150L (after)	decrease	G
Waste	Number of locations with fully integrated waste and recycling facilities before and after the project is delivered.	N/A	N/A	Phase 1: 32 (before) 360 (after)	Phases 1, 2, A: 59L (before) 550L (after)	increase	G
Waste	Number of locations with only non-recyclable waste bins before and after the project is delivered.	N/A	N/A	Phase 1: 235 (before) 0 (after)	Phase 1: 255L (before) N/A (after)	decrease	G
Waste	Annual fuel consumption from Refuse Collection Vehicles (thousand litres)	970.773	N/A	953,253	966,657	decrease	A
Waste	Number of datasets opened for innovation	N/A	N/A	N/A	N/A	5 by 2023	TE

Waste	% of full bin alerts responded to within 24-48 hrs	N/A	N/A	N/A	N/A	increase	TE
Waste	% of fire alerts responded to within 15 mins.	N/A	N/A	N/A	N/A	increase	TE
Waste	% of vandalism alerts (i.e. bins being tipped over) responded to within 24 hrs	N/A	N/A	N/A	N/A	increase	TE
Waste	Number of recycling centres	3	3	3	3	4	A
Waste	MWh of electricity and heat generated through the incineration of waste collected by CEC (TBC subject to data availability)	N/A	74,370 MWh	72,419 MWh (electricity)	67,607 MWh (electricity)	Monitoring only	N/A
Business travel	Total business travel emissions (tCO _{2e})	1,956	612	781	866	Net 0 by 2030	A*
Business travel	Air travel emissions (tCO _{2e})	123	2	12	29	decrease	R
Business travel	Business travel emissions from taxis (tCO _{2e})	870	213	335	326	decrease	G
Business travel	Grey fleet mileage claims (million km)	4.665	2.255	2.47	2.903	decrease	R
Business travel	Staff bike mileage claimed (miles)	21,852	9,984	13,556	10,664	increase	R
Business travel	Uptake of Cycle to Work scheme	N/A	408	410	273	increase	R

Business travel	Number of staff receiving e-cargo bike trainings	0	0	0	22	5 (now aiming for 8 in 2022)	G
Engagement	Number of Climate lunch and learns	N/A Launched April 2021	N/A Launched April 2021	3	3	4 per year	A
Engagement	Number of staff who have attended climate change training	2	4	66	241 (381 as of 08/23)	15% of staff by 2025 (approx 2,500)	R
Engagement	Number of staff who have been trained to deliver climate change training	N/A	N/A	6	22	Minimum 20 by 2025 Tbc to increase the target	G
Engagement	Number of users who have completed the e-learning module			N/A	26	increase	TE
Engagement	Number of different departments with sustainability network members	N/A	8	10	12	17	A
Engagement	Number of green car leasing scheme users	N/A Launched end of 03/21	N/A Launched end of 03/21	38	59	increase	G
Procurement	Percentage of total core spend with local suppliers		41%	38%	37.3%	39% for 20/21 40% for 21/22 41% for 22/23 42% for 23/24	A

Procurement	% of annual influenceable spend covered by a carbon reduction plan			New indicator		TBC once baseline available	TE
Procurement	% of annual influenceable spend with reuse, repair recycle requirements in tender documents			New indicator		TBC once baseline available	TE
Procurement	Number of monthly engagement sessions		12+	12+	14	12 per year	G
Procurement	Number of procurement strategy/delivery related training events per year delivered to Council service areas		10+	10+	25	10 per year	G

Glossary

Term	Meaning
Carbon Dioxide (CO₂)	A naturally occurring gas and one of the most abundant greenhouse gases in the atmosphere. Carbon dioxide is also a by-product of industrial processes, burning fossil fuels and land use changes.
Business as usual Scenario	A description of what would most likely occur in the absence of a carbon reduction project, also referred to as the 'baseline scenario'.
Carbon Dioxide Equivalent (CO_{2e})	Universal unit of measurement used to compare the relative climate impact of the different greenhouse gases. The CO _{2e} quantity of any greenhouse gas is the amount of carbon dioxide that would produce the equivalent global warming potential.
Carbon footprint	A carbon footprint is the sum of all emissions (in CO _{2e}), which were produced by an individual or organisation in a given time frame. Usually a carbon footprint is calculated for the time period of a year.
Circular economy	A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Looking beyond the current take-make-waste extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. <i>(Source: Ellen MacArthur Foundation)</i>
EnerPHit/Passivhaus	EnerPHit is the established standard for refurbishment of existing buildings using the Passive House basic principles and components. The Passivhaus Standard for new construction is not always achievable for works to existing buildings. For this reason PHI (Passive House Institute) developed the 'EnerPHit – Quality Approved Energy Retrofit with PassivHaus Components' certification process for existing buildings. Significant energy savings of between 75 % and 90 % can be achieved even in existing buildings. The basic 5 principles of the Passivhaus Standard are still used to achieve the EnerPHit Standard; <ul style="list-style-type: none"> • optimising thermal insulation levels • reduction of thermal bridges • high thermal performance windows • considerably improved airtightness • good indoor air quality maintained by a ventilation with heat recovery system with highly efficient heat recovery levels

Fabric first	An approach to building design which involves maximising the performance of the components and materials that make up the building fabric itself, before considering the use of mechanical or electrical building services systems. <i>(Source: Carbon Futures)</i>
Greenhouse gas (GHG)	The collective term for emissions which contribute to the greenhouse effect by trapping heat from the sun. Carbon dioxide is a greenhouse gas, but other gasses such as methane also contribute to the greenhouse effect.
Grid decarbonisation	Decarbonising the grid means decreasing the emissions per unit of electricity generated. The electricity grid will decarbonise over time due to the UK generating more and more energy from renewables and at the same time closing coal power plants.
Heat network	Heat networks (also known as district heating) supply heat from a central source to consumers, via a network of underground pipes carrying hot water. Heat networks can cover a large area (including even an entire city) or be local (supplying a small cluster of buildings). <i>(Source: Department for Business, Energy and Industrial Strategy)</i>
Landfill	Disposal of waste material by burying it under layers of earth.
Net-zero emissions	According to the Scottish Government, a situation in which any greenhouse gas emissions put into the atmosphere are balanced out by the greenhouse gases removed from the atmosphere, so that the “net” effect is zero emissions. Edinburgh has committed to ‘net zero’ emissions by 2030. To achieve this, we must reduce the emissions we produce to a minimum and capture any greenhouse gases we cannot avoid emitting through initiatives like tree planting.
Offsetting	Designs the process of trying to reduce the damage caused by releasing carbon dioxide into the environment by doing other things that remove carbon dioxide, for example, by planting trees”. <i>(Source: Cambridge Dictionary)</i>
Retrofit	Modifications to existing buildings that improve energy efficiency or decrease energy demand and may include installation of low carbon heating systems.

Appendix 1: Council organisational carbon footprint boundary

Scope 1 emissions (direct emissions)
Fuel consumption (Transport)
Controlled fleet
Edinburgh Leisure vehicles
Edinburgh Roads services
Natural Gas consumption
Bus stations, tram stops, substations, cabinets and Park & Ride
Care homes
Cemetery
Community / Family / day / education centres
Energy centre
Offices
Culture, arts, theatres and sports, libraries
Farmhouses
Hostels
Housing services / Domestic
Parks
Schools
Workshop / Depots
Oil consumption
Workshops/depots
Buildings (community centres, cemetery...)
LPG
Edinburgh leisure
Scope 2 emissions (indirect emissions)
Electricity consumption
Bus stations, tram stops, substations, cabinets and Park & Ride
Care homes
Cemetery
Community / Family / day / education centres
Energy centre
Offices
Culture, arts, theatres and sports, libraries
Farmhouses
Hostels
Housing services / Domestic
Parks
Schools
Workshop / Depots
Toilets
Street lighting
Christmas lighting
Traffic signals
Housing stair lighting
Lothian Pension Fund properties

Scope 3 emissions (other indirect emissions)	
Electricity Transmission and Distribution losses	
Water supply and water treatment	
	Council estate
	Edinburgh Leisure estate
Waste	
	Household waste collected by the Council (Landfill + Recycling + Incineration + Composting)
	Waste collected by the Council from Council buildings (Landfill + Recycling + Incineration + Composting)
	Litter (bins in parks and in the city)
	Waste generated in Edinburgh Leisure buildings
Business travel	
	Car mileage by Council employees (grey fleet)
	Car mileage by Edinburgh Leisure employees (grey fleet)
	Air and rail travel (Data from Council Travel Provider + Lord Provost Office)
	Taxi (data from Council Travel Hub)