

Meeting:	Decision Session - Executive Member for Environment and Climate Emergency
Meeting date:	21/11/2023
Report of:	Claire Foale, Assistant Director of Policy and Strategy
Portfolio of:	Executive Member for Environment and Climate Emergency

Decision Report: Annual Carbon Emissions Report 2022/23

Subject of Report

Summary

1. City of York Council (the Council) has set a target to reduce carbon emissions from corporate activity to net zero by 2030. An Annual Carbon Emissions Report is produced every year to monitor progress against this target and identify areas of improvement.
2. The data collected covers the Council's Scope 1 and 2 emissions for 2022/23. For the first time, we have incorporated elements of the Council's Scope 3 emissions associated with staff travel, homeworking and material usage. The Council's corporate emissions account for less than 3% of city-wide greenhouse gas emissions¹.
3. The Council's 2022/23 emissions are reported using the Local Government Authority's Greenhouse Gas Accounting Tool. An operational boundary was adopted to account for sites the Council has ownership of, or maintenance responsibility over.

¹ [UK local authority and regional greenhouse gas emissions national statistics_York 2020.xlsx](#)

4. 2022/23 represents the third year of reporting carbon emissions from our own buildings and operations. In some areas, we have data going back to 2015/16 which is used for historical comparison.

Policy Basis for Decision

Council Plan and 10-year Climate Strategy

5. Climate is a core commitment in the Council Plan, requiring the Council to understand the impact our actions have on the environment.
6. The Council has set out a priority to understand and take consideration of climate impacts when making Council decisions. This report demonstrates the carbon impact associated with Council operations.
7. In 2019, the Council declared a Climate Emergency and set the ambition for York to reach net zero by 2030. The York Climate Change Strategy (2022-2032) sets the framework required to meet this ambition. This report demonstrates the Council's progress towards net zero.

Financial Strategy Implications

8. The report identifies a number of actions that the carbon reduction team propose to undertake over the coming year. The majority require officer time and can be contained within agreed budgets. The Council has been successful in sourcing external funding and will continue to maximise such funding to match fund Council contributions.
9. The Council has set capital funds aside to upgrade the fleet with electric vehicles where practical. There are also budgets set aside for replacing lights in Council buildings with LED.

Recommendation and Reasons

10. The Executive Member is asked to:
 - i) Approve the Corporate Emissions Report for publication.

Reason: Monitor progress against the ambition for the Council to be net zero by 2030.

Background

Annual Emissions 2022/2023

11. The Council's operational emissions totalled 5,490 tCO₂e in 2022/23.
12. Direct (Scope 1) emissions account for 78% of the Council's total emissions. Scope 2 emissions (from purchased and metered electricity) are deemed to be zero due to our green tariff². Indirect (Scope 3) emissions are calculated from the wider supply chain.

Scope	Scope Definition	Emissions Type	Emissions (tCO₂e)
Scope 1	Direct GHG emissions from buildings, plant and vehicles owned or controlled by City of York Council	Heating	2,607
		Authority's Fleet	1,669
Scope 2	Indirect emissions associated with purchased energy consumed by City of York Council	Electricity	0
Scope 3	All other indirect emissions that occur in the Council's supply chain.	Staff Business Travel	42
		Staff Commuting	10
		Working From Home	723
		Transmission and Distribution Losses	248
		Material Use	177
		Waste	15
Total Emissions			5,491

² Since April 2020, we purchase 100% renewable electricity, reducing our emissions by 2,711tCO₂e this year. 5tCO₂e have been produced by electricity for cars and vans in our fleet.

13. This year's reporting incorporates data from schools and museum sites which has not previously been included. Increasing the scope of data collection allows us to identify key areas for emission reduction; we will continue to expand the scope of reporting where feasible.
14. The extent of this year's reporting has expanded to include some of the Council's Scope 3 activities; including material usage, transmission and distribution (T&D losses)³, staff commuting and home working.
15. An additional 2,200 tCO₂e has been accounted from these data sources.
16. Removing the additional data sources shows that comparable emissions have reduced by almost 10% between 2021/22 and 2022/23 (-342tCO₂e).

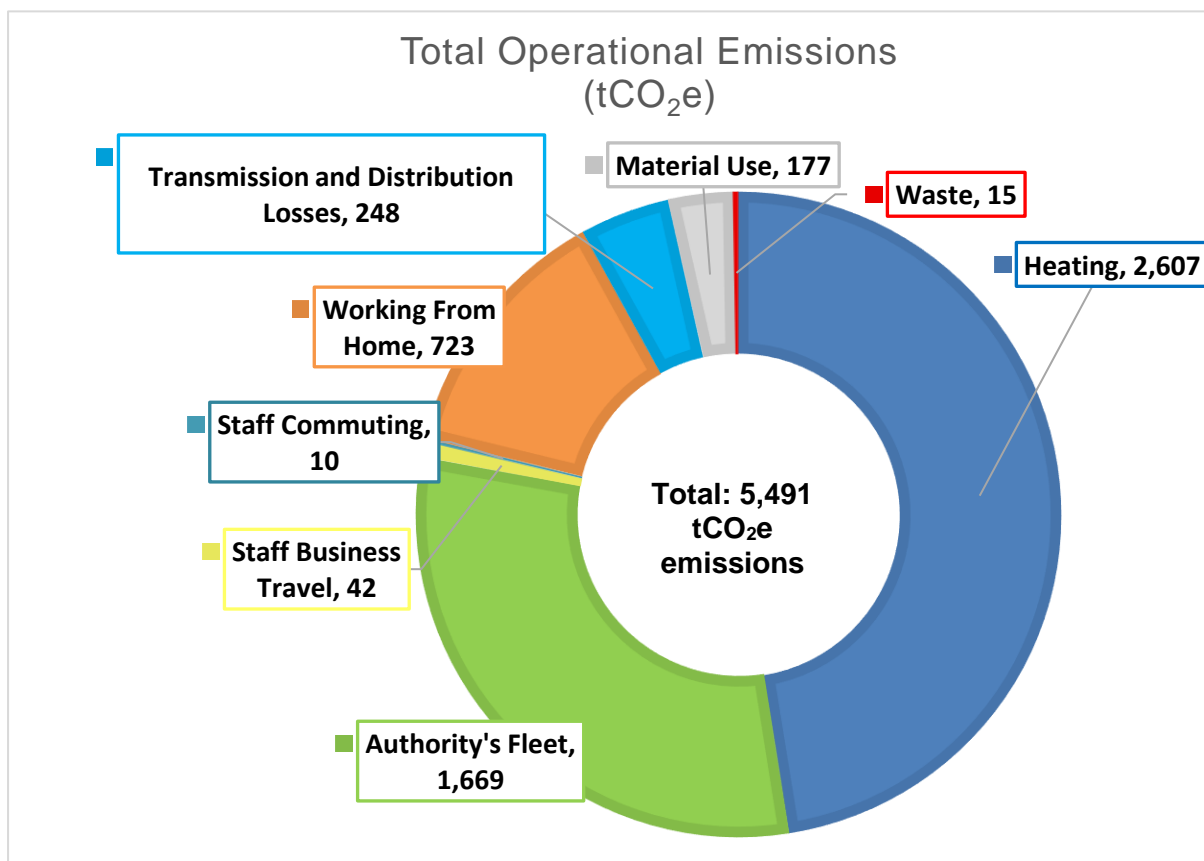


Figure 1: Total emissions produced across the Council's operations 2022/23.

³ Transmission and distribution losses occur during the generation of electricity, steam, heating, and cooling.

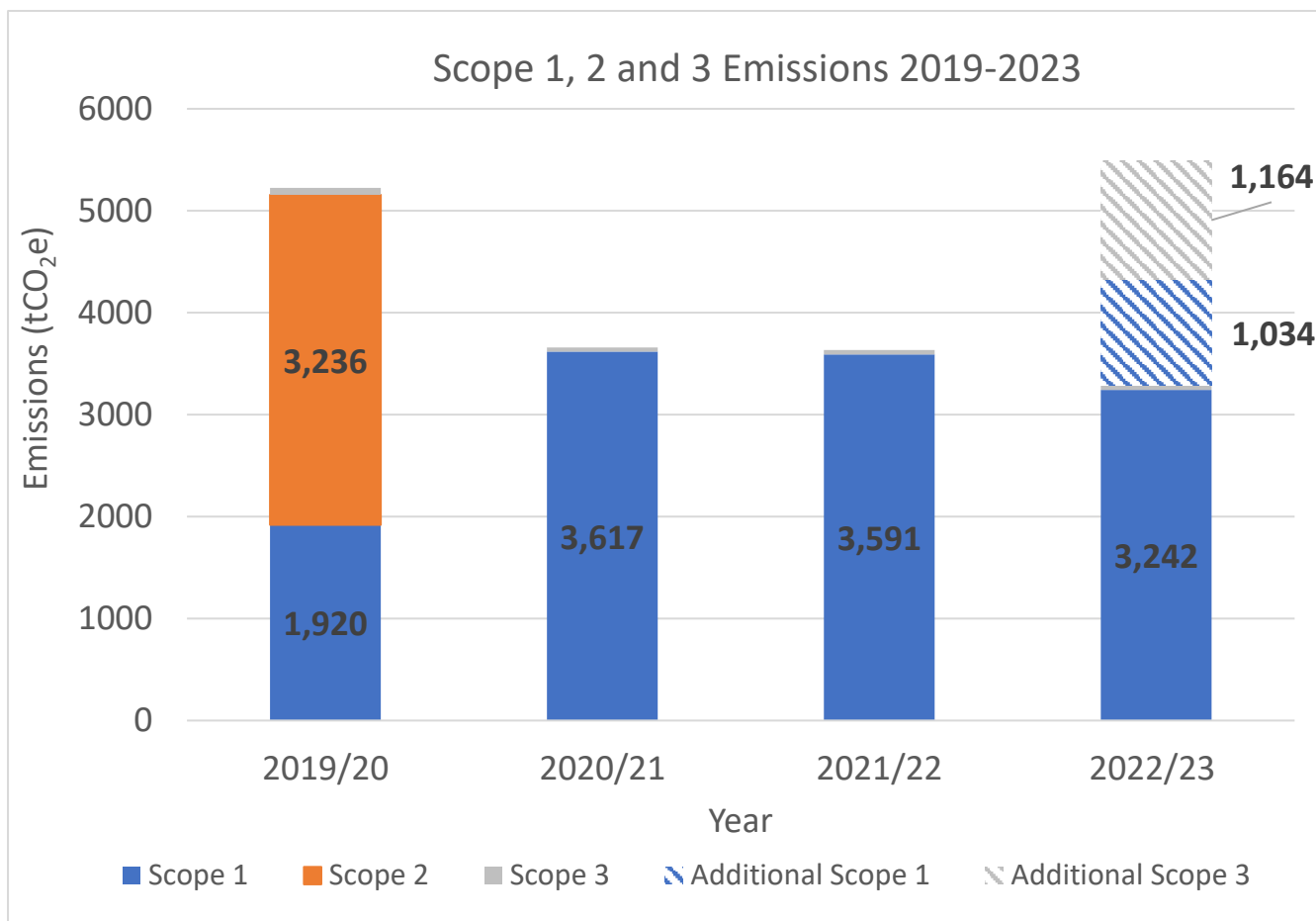


Figure 2: Total Scope 1, 2 and 3 emissions across the Council's operations.

4

Corporate Buildings

Gas and Electricity

17. Gas use from corporate buildings and schools is responsible for over half (55%) of total CO₂e emissions and accounts for annual expenditure of £1,753,583. Gas use from corporate buildings alone is responsible for 33% of emissions and accounts for an annual expenditure of £1,172,073.
18. The Council has purchased 100% renewable electricity since 2020, making our net emissions in this area zero. However, the annual

⁴ Due to our green tariff all Scope 2 emissions total 0tCO₂e from 2020/21 onwards. The hatched lines in 2022/23 illustrate the additional data included in this year's reporting.

cost of our building’s electricity use in 2022/23 was £2,777,953; as such, reducing electricity consumption remains a priority.

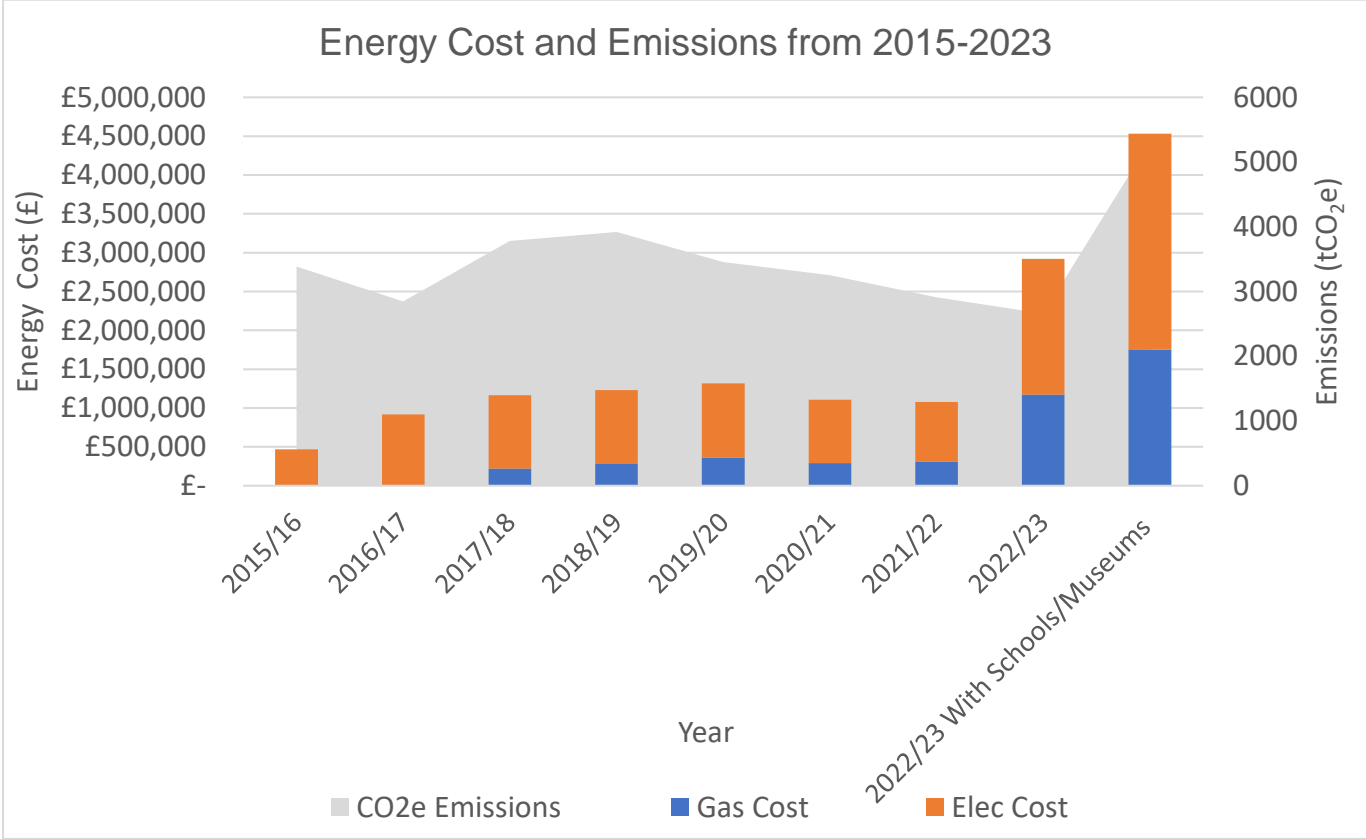


Figure 1: Total energy cost and emissions from Council operations from 2015-2023. (Gas data collection begins in 2017/18).

- 19. The Council adopts the energy hierarchy ‘Be Lean’, ‘Be Clean’, ‘Be Green’ and ‘Be Seen’ approach to use less energy, maximise the efficiency of the existing infrastructure, and encourage low and zero carbon technologies to deliver the best outcomes in emissions reduction from our buildings⁵.
- 20. To implement this hierarchical approach, decarbonisation plans for 21 schools and 5 leisure centres were completed in March 2023 through the Low Carbon Skills Fund, in addition to the plans for our 7 highest-emitting corporate sites that were completed in October 2022. These plans identify key building fabric upgrades and opportunities for low and zero carbon technologies. We aim to

⁵ City of York Local Plan Consolidated Main Modifications January 2023: <https://www.york.gov.uk/downloads/file/8756/proposed-main-modifications-schedule>

progress these plans into capital works through the Public Sector Decarbonisation Scheme.

21. The Council's partnership with Solar for Schools has seen solar panels installed in two CYC schools. Two further schools are due to receive solar panels in 2023/24.
22. The COVID-19 pandemic has altered working patterns in West Offices, with building occupancy approximately 675-800 people less than pre-pandemic levels. This has contributed to the decline in gas and electricity consumption post-pandemic.

Street Lighting

23. Street lighting accounted for 20% of total electricity use in 2022/23. The nature of street lighting means this consumption is unmetered and is estimated by our supplier based on the total number of streetlamps in use.
24. Since 2015/16 estimated electricity consumption for street lighting has decreased by 30%. Electricity consumption for street lighting has decreased by 10% since 2021/22.
25. York has approximately 21,500 lighting columns; approximately 60% of the lamps in these columns have been upgraded to LED, however there are an additional 6,400 which are yet to be replaced.
26. The Council has received funding for a streetlight LED conversion project for 1,200 of these columns through the York and North Yorkshire Net Zero Fund. Replacement of these lamps with LED will reduce annual emissions by over 50%, resulting in a carbon saving of 74tCO₂e/yr.

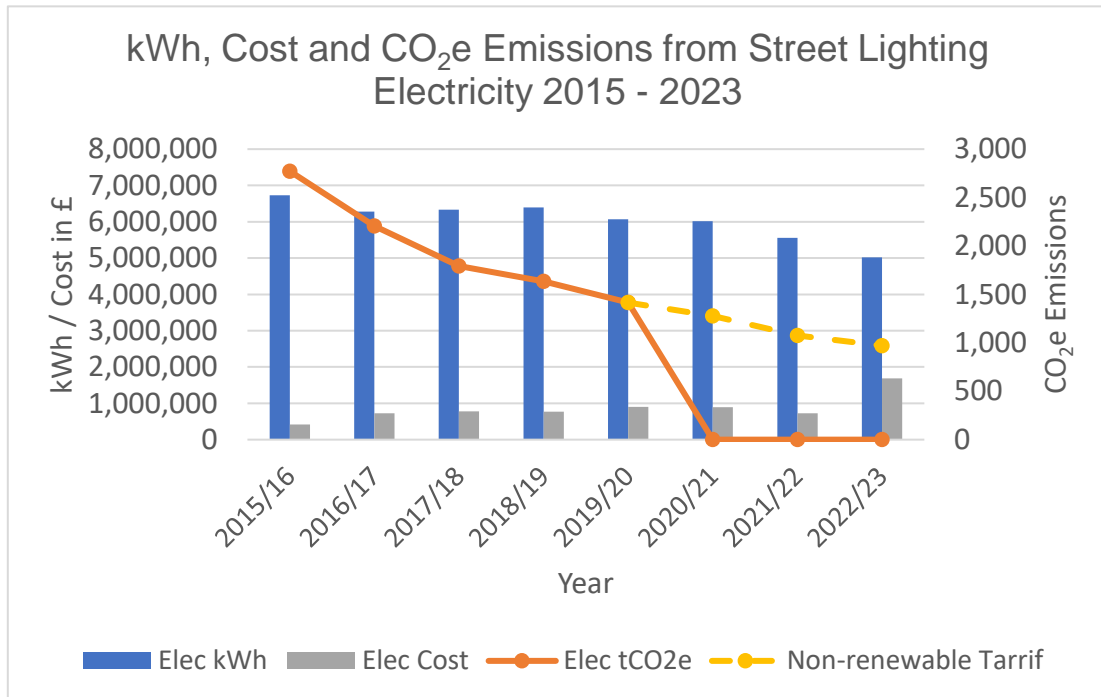


Figure 4: Consumption, cost and emissions associated with street lighting from 2015 to 2023.

Water

27. We were unable to access water consumption data from Yorkshire Water and as a result are unable to calculate emissions for 2022/23. However, the 2020/21 emissions accounted for just 0.6% of our corporate emissions.

Fleet

28. Emissions associated with our fleet reduced by 9% in 2022/23 and reflects the impact of the 4-year fleet replacement programme. As part of this plan, all combustion engine vehicles up to 3.5t will be replaced by electric vehicles. Once complete, emissions associated with our fleet are expected to reduce by around 800tCO₂e.
29. We are also reducing emissions and fuel costs by increasing vehicle efficiency through route planning and driver training.

Business Travel

Staff Travel

30. Business travel data measures emissions linked to the Council's use of hotels, flights, and trains. Emissions associated with business travel have experienced a 27% increase on last year (11CO₂/yr). The increase in emissions was largely due to an increase in train journeys in 2022/23 and one UK domestic flight.
31. While flights were uncommon for business travel pre-pandemic, they significantly increase corporate emissions. During the Covid-19 pandemic there were no flights recorded for business travel purposes and this continued into 2021/22. One corporate flight this year produced 0.5tCO₂/yr.
32. Emissions from train journeys increased by 30% from 2021/22. This is due to the increasing return to in-person meetings following the pandemic. The continuation of remote working and meeting attendance still means that emissions from employee train travel in 2022/23 are 66% lower than pre-pandemic levels (25.5tCO₂/yr).

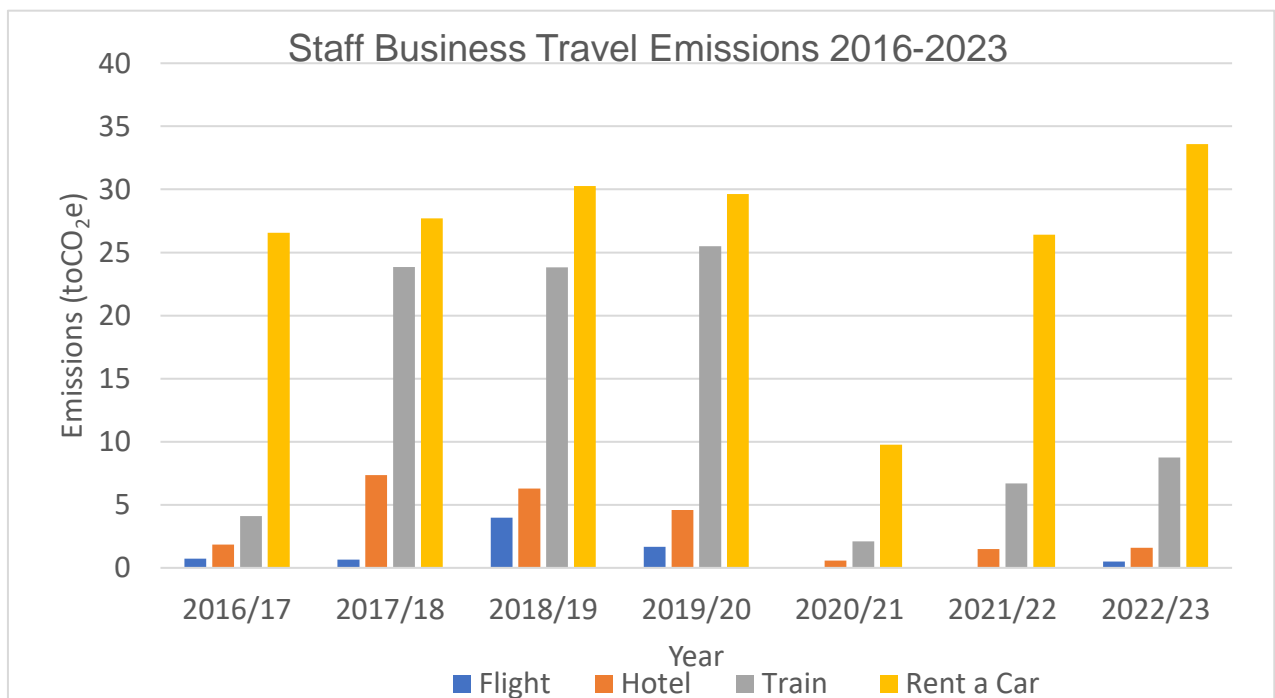


Figure 5: Emissions associated with staff business travel from 2016 to 2023.

Car Club

33. From 2017, the Council began using Enterprise Car Club pool vehicles. The fleet consists of vehicles that run on unleaded petrol, diesel, hybrid electric and full electric. Currently, nearly 60% of journeys have used unleaded petrol, 30% journeys have been with hybrid vehicles and electric and diesel make up less than 10% of journeys.
34. Emissions associated with business travel have experienced a 24% increase on last year (33.6tCO₂/yr). To reduce emissions from the Car Club, the proportion of hybrid and electric vehicles is increasing, and staff are encouraged to use electric and hybrid vehicles rather than petrol or diesel. Enterprise use a preventative maintenance scheme which helps to keep vehicles running more efficiently.

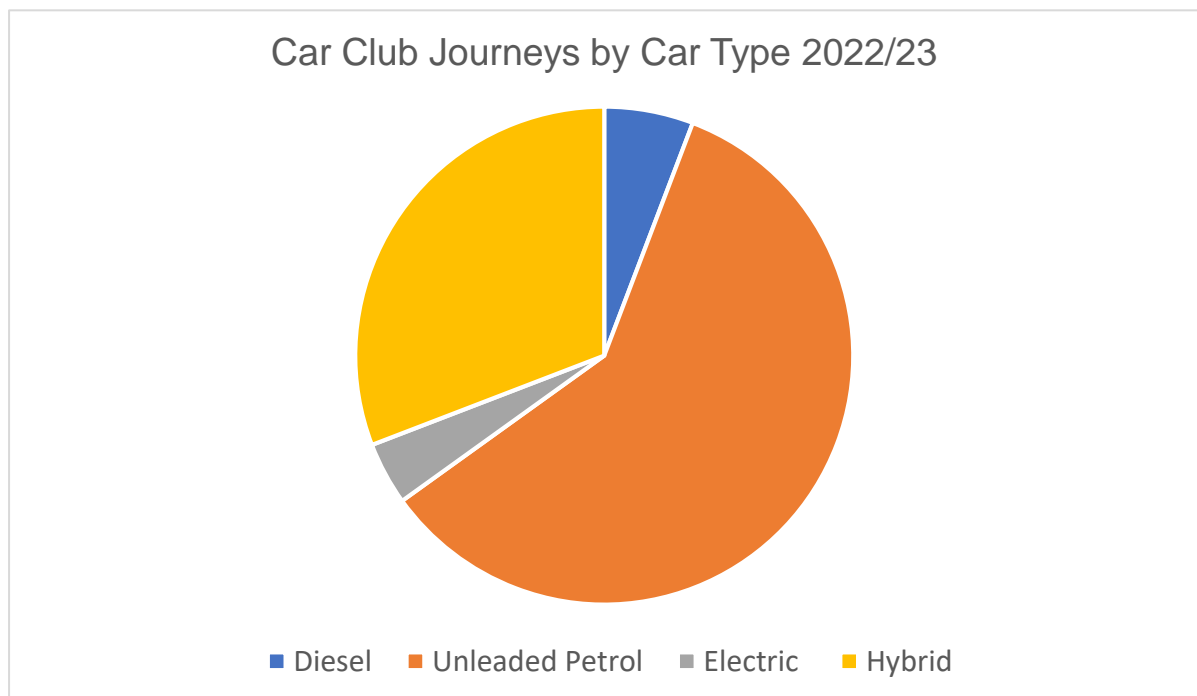


Figure 6: Journeys taken by different car types in the CYC car club during 2022/23.

Waste/Recycling

35. Waste from our corporate buildings accounted for 6.5tCO₂e in 2022/23, a 10% decrease from 2021/22 figures.
36. Waste from our school sites accounted for 7.8tCO₂e of our total emissions in 2022/23.

37. The recycling rate at our corporate sites is 21%, increasing by 2.5% from 2021/22. Additional recyclable materials and food waste may be removed from the general waste during processing at Allerton Waste Recovery Park. Electricity is created from the general waste through incineration as an alternative to landfill.
38. In 2023, the Council formed a Circular Economy group and is set to become a signatory of the York and North Yorkshire LEP's Circular Towns pledge. Emphasising circularity within our waste management practices will help to reduce the amount of waste produced.

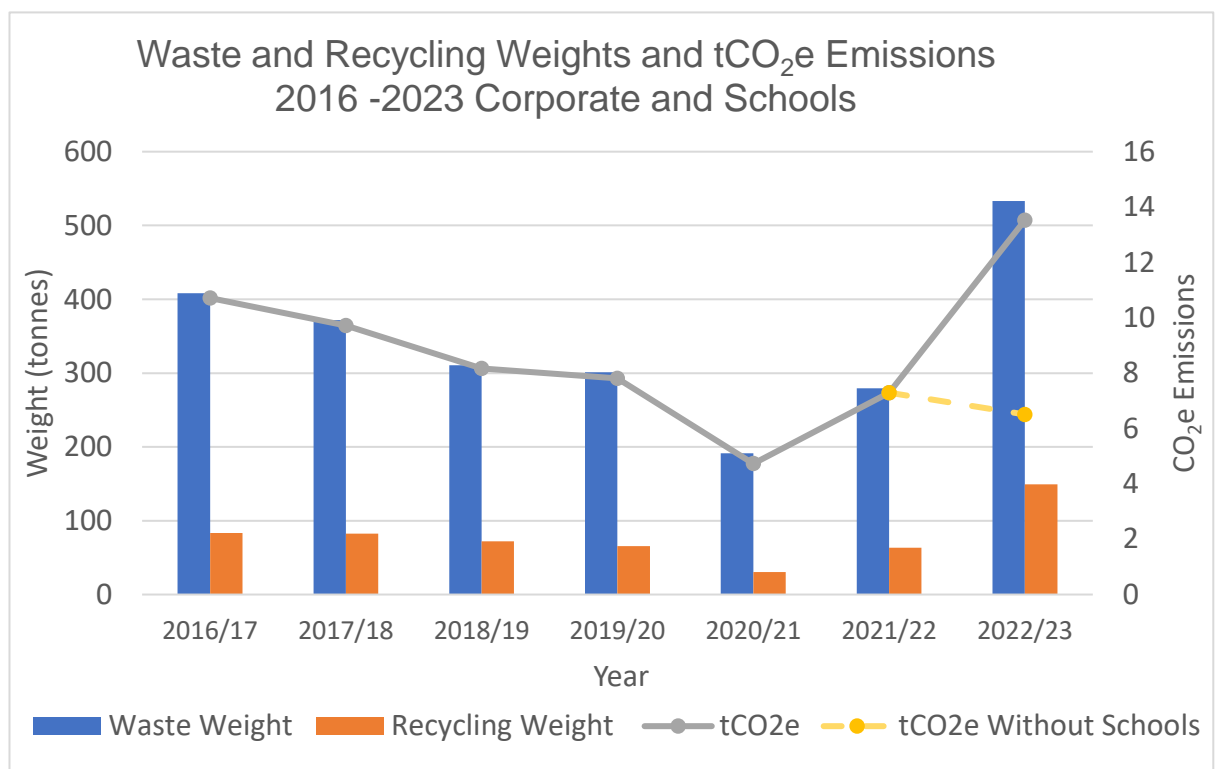


Figure 7 The emissions produced by waste and recycling from 2016-2023.

Procurement

39. Emissions associated with procured goods and services are not included in this report. However, we are working with the York & North Yorkshire LEP to calculate our Scope 3 emissions.
40. As part of this work, a template sustainable procurement policy has been produced. This template will be considered in the next review of our procurement policy.

Material Use

41. Expanding the extent of our reporting to cover a wider range Scope 3 emissions sources allow the Council to build a greater picture of corporate emissions in our wider supply chain. Consequently, we have incorporated the emissions associated with our Building Services.
42. Material usage from our corporate activities accounted for 365tCO₂e in 2022/23. Metals, sanitaryware and boilers represent the Council's most carbon intensive material usage, accounting for 68% of emissions in this area.
43. Data collected for this period accounted for 32% of the products used. We will continue to expand the number of materials accounted for in our supply chain in order to build a more comprehensive picture of our Scope 3 emissions.
44. The Council will reduce Scope 3 emissions from material usage by following its sustainable procurement policy, working with local suppliers and choosing less carbon intensive materials where feasible.

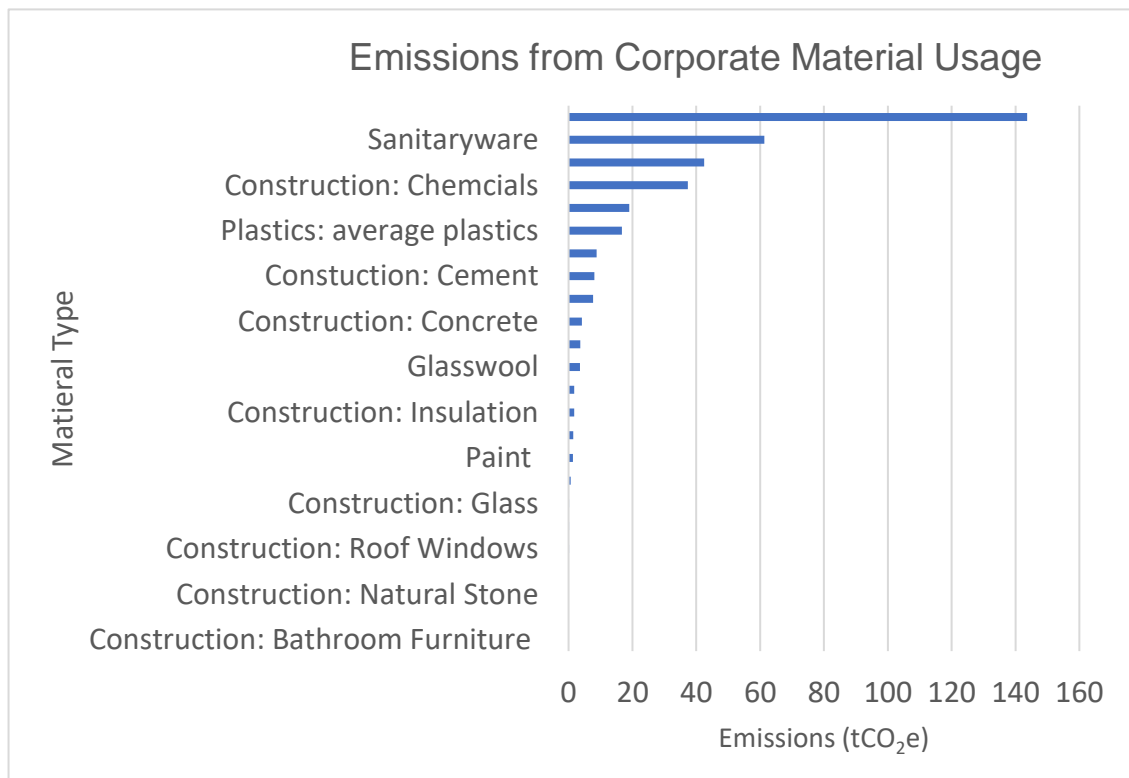


Figure 8: Emissions produced by corporate material usage in 2022/23.

Staff Commuting

45. A survey to assess emissions from staff commuting was distributed in September-October 2023. Emissions generated from staff travelling to and from work accounted for 10tCO₂e in 2022/23.

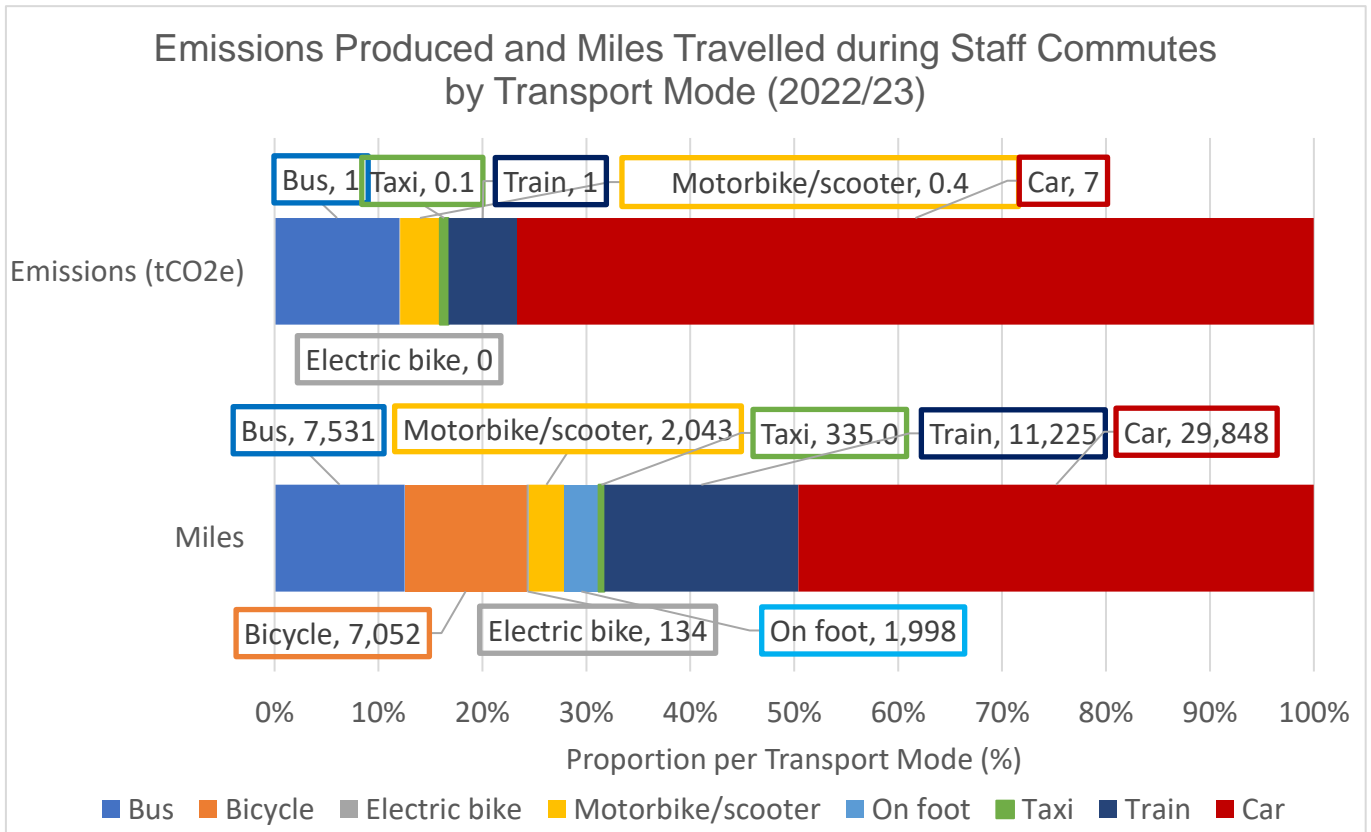


Figure 9: Emissions produced, and miles travelled across different transport types during staff commutes.

46. Car usage accounts for the largest proportion of commuter emissions (77%). These emissions are predominantly from petrol and diesel cars. Public transport (buses and trains) account for 18% of emissions from commuting (1.8tCO₂e).
47. 70% of survey respondents used active travel (cycling or walking), at some point in their commutes to and from work. Increasing the proportion of active travel in commutes would reduce emissions and enhance health outcomes for staff.

48. Nationally, only 2% of people travel to work using cycling as their main transport mode⁶. At the Council, over 16% of commuters cycled as their primary mode of transport. This rises to 36% when considering those who use bikes as a secondary mode of transport).
49. The Council encourage sustainable employee commuting through a car sharing scheme, pool bikes, a cycle scheme, secure cycle-parking and BetterPoints.
50. An updated Council Travel Plan is under development to encourage behaviour change towards active travel and increase uptake of public transport.

Working From Home

51. A survey to assess emissions generated from working from home was conducted in 2023. An estimated 723 tCO₂e were produced as a result of home working in 2022/23. This incorporates the use of office equipment, lighting and heating during the workday.
52. While energy consumption practices when working from home is beyond the Council's direct sphere of influence, we encourage energy saving behaviours amongst staff, and advertise our energy efficiency advice resources.⁷

Actions

53. The City of York Council: Annual Carbon Emissions Report 2021/22 provided several actions for reducing our corporate emissions. Since then, the Carbon Reduction team has worked across the Council and with other service areas to:
 - Produce heat decarbonisation plans for 21 schools, 5 leisure centres and 7 corporate buildings.
 - Work with Solar for Schools to install solar panels on two schools, with a further two schools due to have solar panels installed in 2023/24.

⁶ 2021 Census Data

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/traveltoworkenglandandwales/census2021>

1.1 ⁷ Energy Efficiency <https://www.york.gov.uk/EnergyEfficiency>

- Increased the proportion of hybrid and electric vehicles through the fleet electrification programme.
- Establish a Travel Plan Working Group to increase sustainable travel at the Council's workplaces across the fleet, staff business travel and staff commuting.
- Formed a Circular Economy group and is set to become a signatory of the York and North Yorkshire LEP's Circular Towns pledge.

54. Other actions identified to reduce corporate emissions include:

- Work across the Council and with other service areas to create interim targets towards our goal of net zero by 2030.
- Incorporate sustainable procurement and circular economy principles into our purchasing decisions.
- Work with YNY LEP to develop a methodology to calculate Scope 3 emissions associated with Council activity.
- Review the corporate waste contract and undertake a waste audit.

Consultation Analysis

55. The Council's internal Climate Change Programme Board was consulted to overview the corporate emissions data in its capacity to provide oversight, monitor progress, identify opportunities and manage risk relating to the Climate Change Programme.

56. The Climate Change Programme Board agreed priorities are to ensure increased visibility of the impact the Council is making on reducing carbon emissions and increased awareness of the understanding individual projects make to contribute to reduction in emissions.

Organisational Impact and Implications

57.

- **Financial** - The report identifies a number of actions that the carbon reduction team propose to undertake over the coming year. The majority require officer time and can be contained within agreed budgets. The Council has been successful in sourcing external funding and will continue to maximise such funding to match fund Council contributions.

The Council has set capital funds aside to upgrade the fleet with electric vehicles where practical. There are also budgets set aside for replacing lights in Council buildings with LED.

- **Human Resources (HR)** – No implications
- **Legal** - There are no legal implications linked to the recommendations specifically referred to within this report.

Any issues requiring support from Legal Services will however need to be addressed as and when they arise.

- **Procurement** – No implications
- **Health and Wellbeing** – Public health support the continued policy of reducing carbon emissions in the City. Reducing carbon emissions and addressing climate change has a range of well evidenced and positive impacts on our resident's health and wellbeing. Not only does this impact on improved air quality, reducing carbon emissions it contributes to a reduction in urban heat and therefore potentially impacts on reducing heat-related illnesses. Promoting cycling and walking for commuter journeys promotes increased physical activity and better mental health, cleaner energy sources, enhanced food security, economic benefits, and the development of sustainable communities. These benefits highlight the interconnectedness of environmental improvement and improving human health.
- **Environment and Climate action** – Reducing corporate carbon emissions to net zero represents a key commitment within the council plan. This report represents progress against that ambition.
- **Affordability** – No implications
- **Equalities and Human Rights** - The Council recognises, and needs to take into account its Public Sector Equality Duty under Section 149 of the Equality Act 2010 (to have due regard to the need to eliminate discrimination, harassment, victimisation and any other prohibited conduct; advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it and foster good relations between persons who

share a relevant protected characteristic and persons who do not share it in the exercise of a public authority's functions).

At the time of writing there are no equalities implications identified in respect of the specific matters discussed in this report. However, an Equalities Impact Assessment has been carried out for the York Climate Change Strategy and recommendations in this report will identify any equalities implications on a case-by-case basis, and these will be addressed in future reports.

- **Data Protection and Privacy** – No implications
- **Communications** – No implications
- **Economy**– No implications

Risks and Mitigations

58. There are no known risks associated with the above.

Wards Impacted

59. All wards.

Contact details

For further information please contact the authors of this Decision Report.

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Report approved:	Yes
Date:	10/11/2023

Background papers

Council approve The Climate Change Strategy 2022-2032 [Agenda for Council on Thursday, 15 December 2022, 6.30 pm \(york.gov.uk\)](#) item 36

Council approve the Council Plan 2023-2027 [Agenda for Council on Thursday, 21 September 2023, 6.30 pm \(york.gov.uk\)](#) item 6

Corporate Emissions Report 2021/22

https://modgov.york.gov.uk/documents/s164307/EMDS_Corporate%20Emissions_Dec%202022_.pdf

Corporate Emissions Report 2020/21

https://modgov.york.gov.uk/documents/s153499/EMDS_Corporate%20Emissions%20Report_2021.pdf

Annexes: None