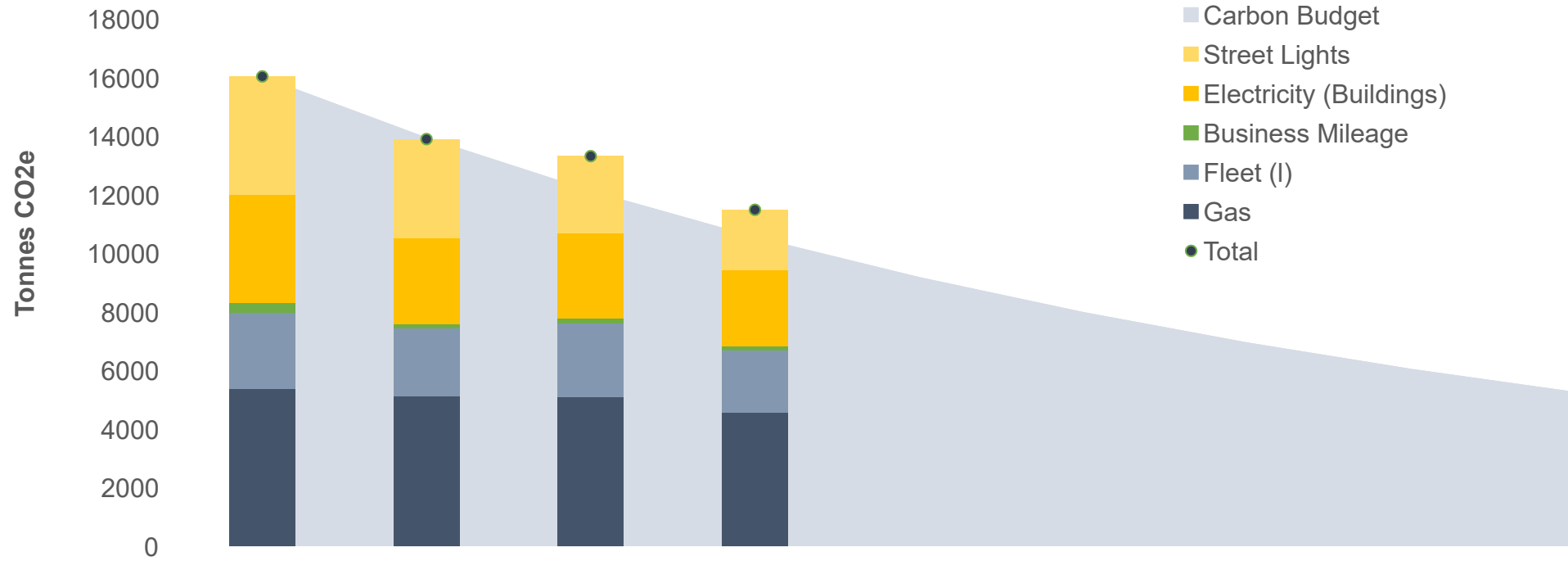


Carbon Monitoring

12 September 2023

CWC Annual Carbon Monitoring Report



Emissions (tCO2e)	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	
Gas	5,383	5,125	5,085	4,556						
Fleet	2,595	2,315	2,535	2,127						
Business Mileage	320	137	168	151						
Electricity (Buildings)	3,708	2,956	2,898	2,599						
Street Lights	4,037	3,374	2,633	2,056						
Total Emissions (tCO2e)	16,043	13,906	13,320	11,489						38,715
Change from Base year (%)	-	-	13	-	17	-	28			
Carbon Budget (tCO2e)	16,043	13,958	12,143	10,565	9,191	7,996	6,957	6,052	5,266	72,128
Emissions Vs CO2 Budget	-	-	52	1,177	924					2,050



Annual Carbon Monitoring Summary

Annual emissions have reduced year on year, year-end 2022/23 emissions are around 11,450 tCo2e compared to 16,780 in the base year 2019/20 – a **reduction of 30% vs baseline**

The Councils carbon budget is 72,000 tonnes between 2020-2028.

- Carbon budget for 2022/23 was 10,500 tCO2e, this year the budget was overshoot by 924 tonnes as a result of previous years overshoot of circa. 1200 tonnes.

Programme Summaries

1. Gas emissions have remained flat since 2019 owing to minimal changes to the asset portfolio.
2. Fleet emissions exhibited a significant reduction in 2022/23 as old vehicles began being replaced with new + EVs.
3. Building electricity emissions reduced primarily from grid decarbonisation, and some asset rationalisation.
4. LED Street Lighting Programme has reduced lighting emissions by 50% since 2019/20 with 15% of lights still to be upgraded.

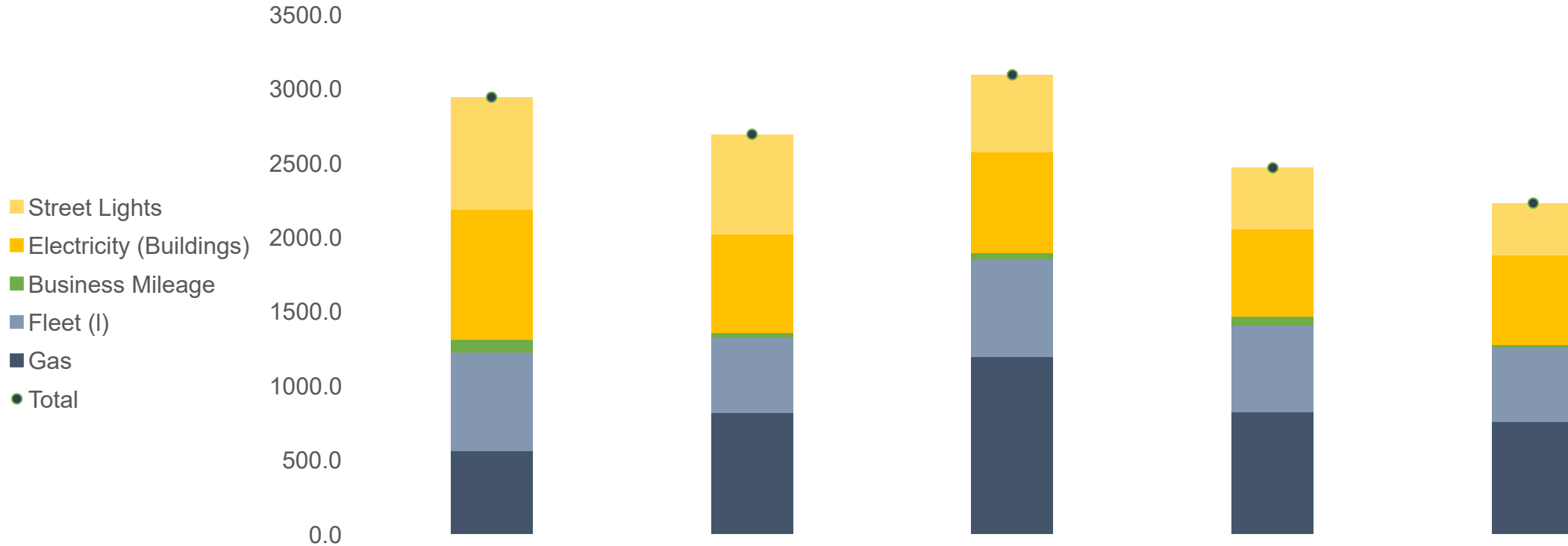
Next Steps

Next year the Council has a carbon budget of 9,200 tonnes; this will be achieved through:

1. Replacing diesel with Hydrogenated Vegetable Oil across the fleet, saving circa 1800 tonnes (subject to trial).
2. Completion of the LED Street Lighting Programme saving circa 300 tonnes.

Other avenues are being explored such as renewable energy deployment, energy optimisation and funding applications e.g., Public Sector Decarbonisation Scheme (PSDS).

CWC Q1 Carbon Monitoring Report



	2019/20 Q1	2020/21 Q1	2021/22 Q1	2022/23 Q1	2023/24 Q1
Gas	561	815	1,191	820	753
Fleet	664	506	662	586	504
Business Mileage	82	33	38	55	16
Electricity (Buildings)	878	663	678	588	606
Street Lights	757	674	522	415	348
Total Emissions (tCO2e)	2,941	2,691	3,091	2,465	2,227
Change from Base year (%)	-	- 9	5	- 16	- 24



Quarterly Carbon Monitoring Summary

- Except for 2021/22, Q1 emissions have reduced year on year, 2023/24 Q1 emissions are around 2200 tCO₂e compared to 3000 tCO₂e in the base year of 2019/20 – a 24% reduction.
- 2020/21 saw the start of Covid and agile working; buildings were still being heated to the same degree during the period.

Programme Summaries

- Gas emissions in 2022/23 remained flat, and only exhibited a negligible reduction in 2023/24. Typically, gas emissions will experience seasonal fluctuations more so than other emission sources due to inconsistencies in weather, which has contributed to the undulations in the data.
- Q1 emissions increased in 2021/22 when people were returning to office. The open-air ventilation that was mandated meant greater use of energy for heating and cooling and drove up emissions. In the same year fleet emissions bounced back due to return to business-as-usual following Covid.
- Fleet continue to demonstrate improvements in Q1 2023/24 and further improvements expected with additional electric vehicles and the introduction of HVO.
- Street lighting exhibited a further 16% reduction against Q1 of the previous year; the remaining units are expected to be delivered by September 2024 due to programme delays due to capacity issues.

Next Steps

Next quarter will look to demonstrate the feasibility of HVO through the trial, for wider roll out across the fleet, over the course of Q3, Q4 and into Q1 of 2024/25.

PSDS funding bid expected to be submitted in the next 2 months to retrofit the Civic Centre, following completion of the energy audit report.