



# **Dover District Council Greenhouse Gas report 2023-2024**



### **COMPANY INFORMATION**

Dover District Council is a local authority constituted under the Local Government Act 1972. The principal office is located at the White Cliffs Business Park, Dover, Kent CT16 3PJ

### **REPORTING PERIOD**

1 April 2023 to 31 March 2024

### **SUMMARY OF CHANGE IN EMISSIONS**

For the council operations both leisure centres contribute over 50% of emissions, the waste fleet a further 25% and the rest of the council activities cover the remaining 25% of emissions.

Overall energy consumption in kWh (Scope 1 and 2 (gas and electricity) has decreased by 2.43% in 2023/24 compared with 2022/23.

Scope 1 Stationary (gas kWh) was 2.4% reduced in 2023/24 compared to 2022/23.

Scope 2 Stationary (electricity kWh) was 2.35% higher in 2023/24 compared to 2022/23.

Scope 3 Stationary Managed Assets (electricity kWh) higher by 11.98% 2023/2024 compared to 2022/23.

Scope 1 Transport (Council owned vehicles) – mileage emissions reduced by 6.9% in 2023/24 compared to 2022/23

Scope 3 Transport (Waste fleet, Business travel by vehicles not owned by the Council/ public transport) – decreased by 0.42% compared to 2022/23.

Overall, there has been a reduction of 49.71% in CO<sub>2</sub>e emissions between the baseline year (2008/09) and current reporting year of 2023/24

### **National and international warming trends**

2023 was the second warmest year on record for the UK, the Mean temperature was 9.97c just behind the 2022 record of 10.03c and above the previous high 9.88c in 2014. 2023 was the warmest year on record globally as confirmed by NASA.



## **Dover District Council's - Greenhouse Gas Emissions (GHG) Report**

### **APPROACH**

Energy usage has been calculated using the NI185 National Performance Indicator data set. CO<sub>2</sub> equivalent (Co<sub>2</sub>e) emission data has been recalculated using the GHG emissions conversion factors published on the Government website. This includes Scope 3 discretionary elements relating to business mileage, transmission and distribution of electricity and electricity consumption of managed assets.

The energy usage/ distance travelled has been totalled under each scope using the appropriate 2023 conversion factors and converted the energy usage to tonnes of CO<sub>2</sub>e. These figures have been carried forward to the table of GHG emissions shown on the following pages.

### **ORGANISATIONAL BOUNDARIES**

The financial control approach has been used.

Dover District Leisure Centre and Tides Leisure Centre and Tennis Hall are leased to private management organisations, and the waste/ recycling collection is contracted out to a private company.

### **BASE YEAR**

The base year is 2008/09. There is not accurate data prior to this date.

### **TARGETS**

The Council's ambition to reduce emissions reflects National targets. Dover District Council declared a Climate Change Emergency in January 2020 with the ambition to become a net zero carbon emitter by 2030.

### **INTENSITY MEASUREMENT**

Tonnes of CO<sub>2</sub>e per square metre (m<sup>2</sup>) of corporate building space is used for the intensity measurement metric as a useful comparator.

The intensity measurement for 2023/24 is 1949.73/27138 – giving a measurement of 0.0718 tonnes CO<sub>2</sub>e per m<sup>2</sup> or 71.8 Kg CO<sub>2</sub>e per m<sup>2</sup>.

The 2008/09 intensity measurement is 3877.65/22163 – giving a measurement of 0.175 tonnes CO<sub>2</sub>e per m<sup>2</sup> or approximately 175.0 Kg CO<sub>2</sub>e per m<sup>2</sup>.

This equates to a decrease of 58.97% in 2023/2024 compared to the baseline year.

### **ASSURANCE STATEMENT**

All data used to calculate the GHG report has been filed and stored and may be audited if necessary.



### Summary of most significant emitters by SCOPE 1, 2 and 3

#### **SCOPE 1 (Gas consumption - all reported buildings - includes all owned and controlled buildings and managed assets)**

Dover District Leisure Centre has increased its gas use this year. The other Council owned assets such as Tides Leisure Centre and the Council Offices Whitfield, Kearsney Abbey Cafe have reduced gas usage across all three sites which has resulted in lower emissions totals for these buildings compared to 2023/24. The consumption at Dover Museum and Bronze Age Boat also fell by 16% in 2023/24 compared to 2022/23. It should again be noted that the Town Hall closure for restoration has increased savings and is expected to reopen in the next year.

#### **SCOPE 2 (Electricity - Council owned and controlled buildings)**

Electricity consumption reduced at Dover Museum, Council Offices and Tides Leisure Centre. Dover Leisure Centre increased its electricity use. This was due to the Solar PV system being offline due to insurance issues.

Since September 2019 electricity purchased for the Council's own estate was via REGOS (Renewable Energy Guarantee of Origins). These certificates are issued to generators for renewable power they put into the grid. The REGO graph below explains the assets using REGOs.

#### **SCOPE 3 (Transmission and Distribution emissions from electricity used for Council controlled buildings and Electricity Consumption in buildings owned but managed by outside organisations).**

There was a 3.24% decrease in Transmission and Distribution emissions in 2023/24 compared to 2022/23 – this is due to the national energy grid continuing to decarbonise each year.

Emissions from Managed Assets increased by 11.97% compared to 2023/24. Energy usage increased due to the Dover Leisure Centre Solar PV system being inactive due to building insurance checks.

#### **SCOPE 1 Transport (Council owned & controlled vehicles - own fleet)**

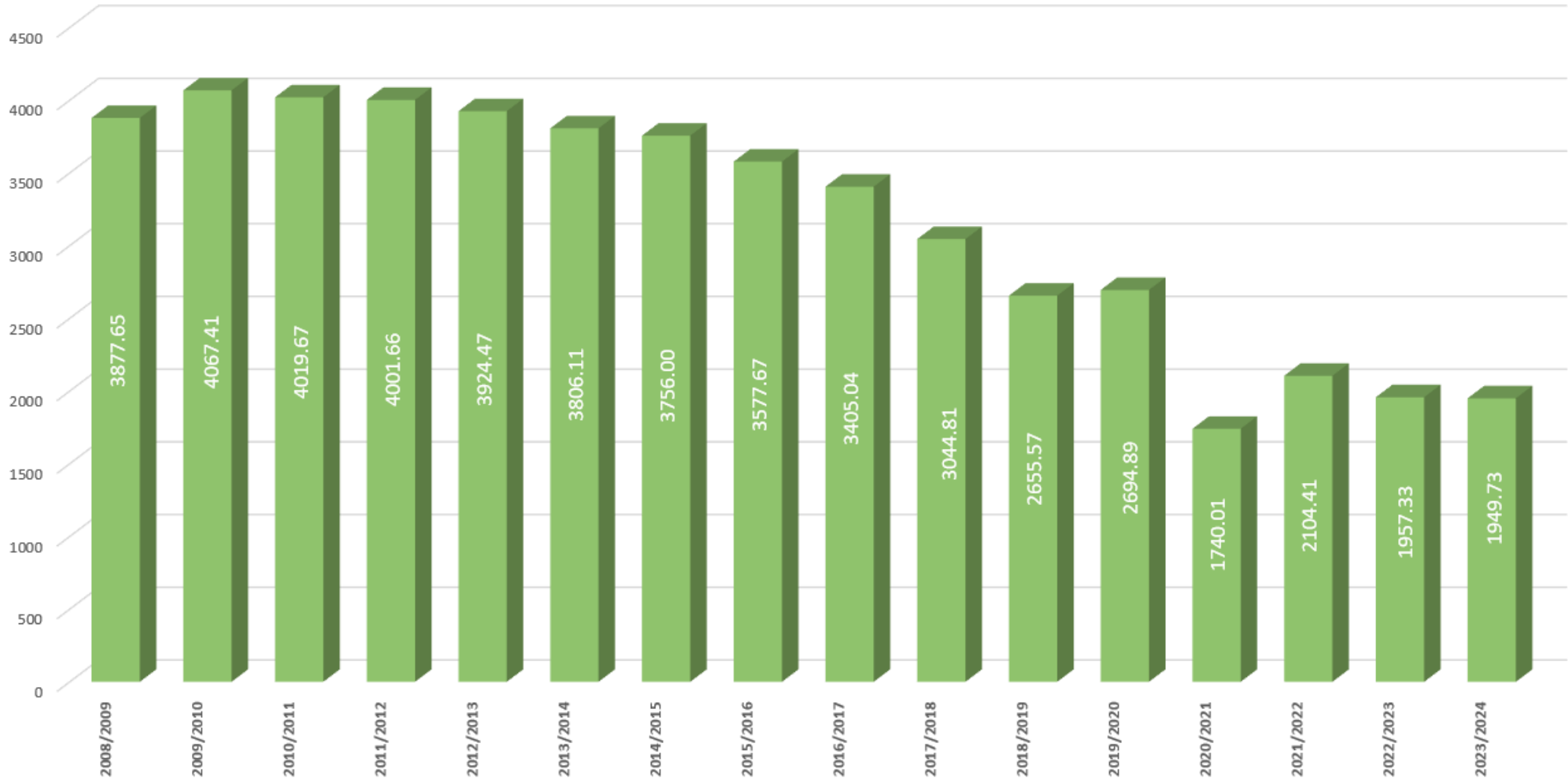
There was an 7.3% reduction in emissions council owned vehicles in 2023/2024. This is a result of a transition to EV vehicles from the parking services team and other departments.

#### **SCOPE 3 Transport (vehicles not owned or controlled by the Council)**

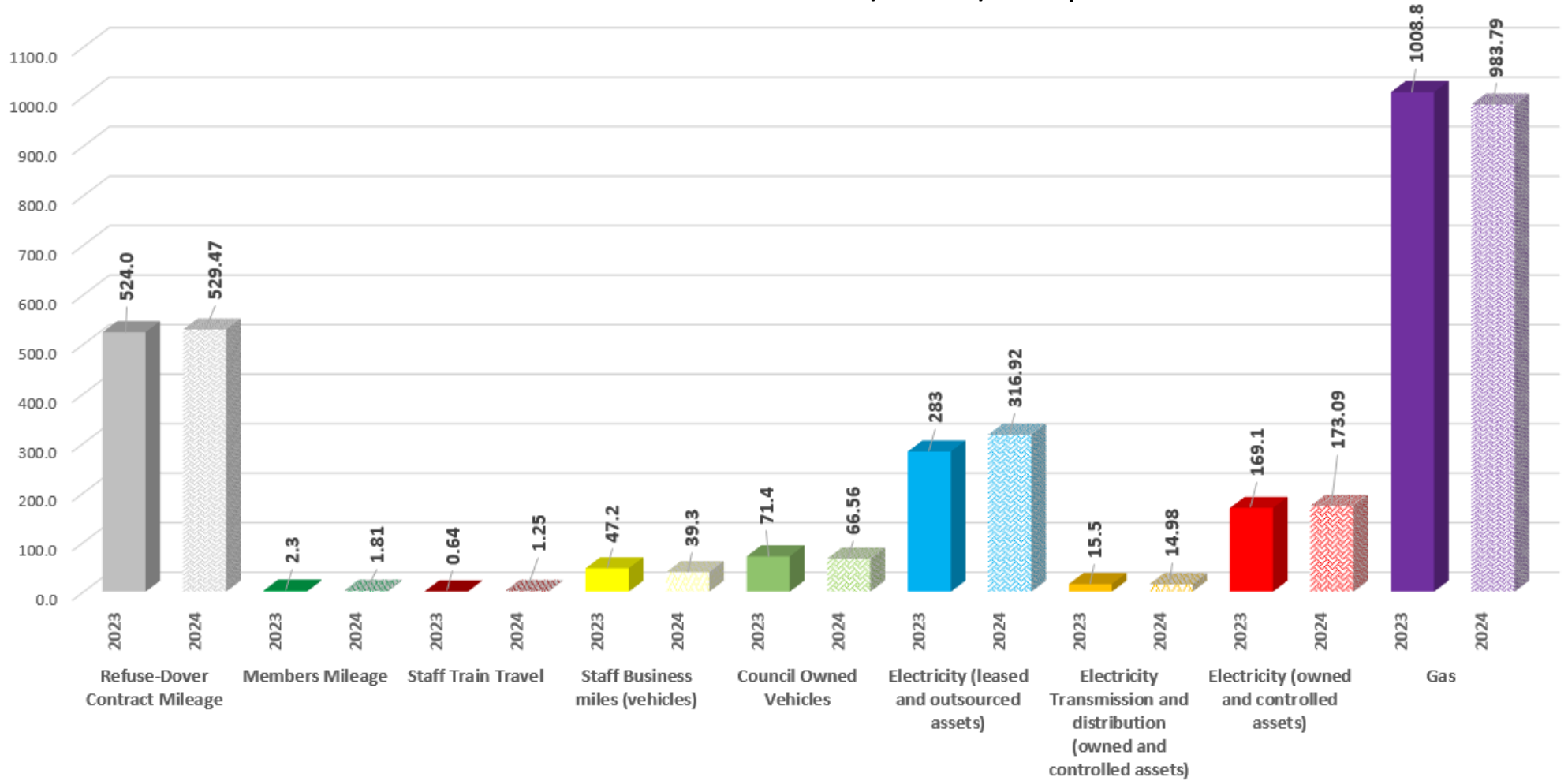
There was an overall 0.43% increase in emissions for scope 3 emissions mostly due the waste Fleet RCV route demands, this was offset by reductions in staff travel and an increase in train travel use.

| GHG EMISSIONS DATA FOR PERIOD 1ST APRIL 2008 to 31st MARCH 2024 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Global Tonnes of CO2e   |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|   | 2023 - 2024    | 2022 - 2023    | 2021 - 2022    | 2020 - 2021    | 2019 - 2020    | 2018 - 2019    | 2017 - 2018    | 2016 - 2017    | 2015 - 2016    | 2014 - 2015    | 2013 - 2014    | 2012 - 2013    | 2011 - 2012    | 2010 - 2011    | 2009 - 2010    | 2008 - 2009    |
| Scope 1   | 1050.36        | 1084.02        | 1233.98        | 811.26         | 1260.51        | 1171.30        | 1210.00        | 1190.96        | 1200.50        | 1177.00        | 1206.81        | 1206.81        | 1221.01        | 1212.43        | 1169.31        | 1130.47        |
| Scope 2   | 173.09         | 169.19         | 194.68         | 347.47         | 434.16         | 502.67         | 641.00         | 783.13         | 872.84         | 976.00         | 944.67         | 1630.04        | 1796.70        | 1970.60        | 2036.55        | 2039.06        |
| Scope 3   | 903.73         | 872.80         | 856.31         | 786.97         | 1014.89        | 991.60         | 1193.81        | 1430.95        | 1504.33        | 1603.00        | 1655.14        | 1087.62        | 986.18         | 839.44         | 863.60         | 710.94         |
| Total Gross Emissions   | 2127.18        | 2126.02        | 2291.50        | 1945.70        | 2709.56        | 2665.57        | 3044.81        | 3405.04        | 3577.67        | 3756.00        | 3806.47        | 3924.47        | 4003.89        | 4022.47        | 4069.41        | 3880.47        |
| <b>Carbon Offsets</b>   |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| REGO purchased electricity (scope 2)                            | 172.85         | 157.43         | 173.63         | 202.66         | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              |
| Wind Turbine  | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | 2.23           | 2.80           | 2.00           | 2.82           |
| Solar PV generation   | 4.59           | 11.26          | 6.93           | 3.03           | 14.67          | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              | -              |
| Total annual net emissions                                      | <b>1949.74</b> | <b>1957.32</b> | <b>2104.41</b> | <b>1740.01</b> | <b>2694.89</b> | <b>2655.57</b> | <b>3044.81</b> | <b>3405.04</b> | <b>3577.67</b> | <b>3756.00</b> | <b>3806.11</b> | <b>3924.47</b> | <b>4001.66</b> | <b>4019.67</b> | <b>4067.41</b> | <b>3877.65</b> |

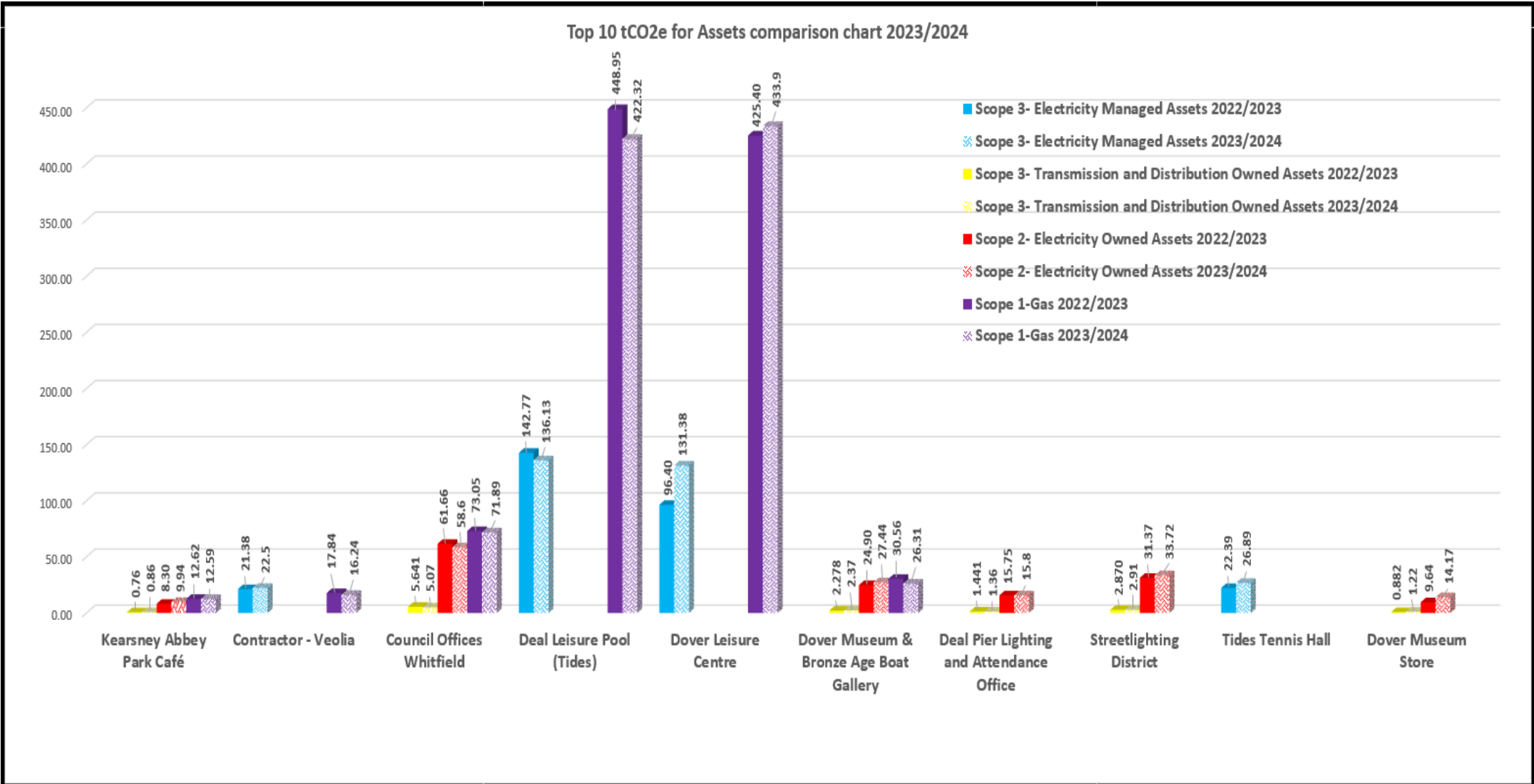
### DDC Total global Tonnes of CO2e annual comparison 2008/9 to 2023/24



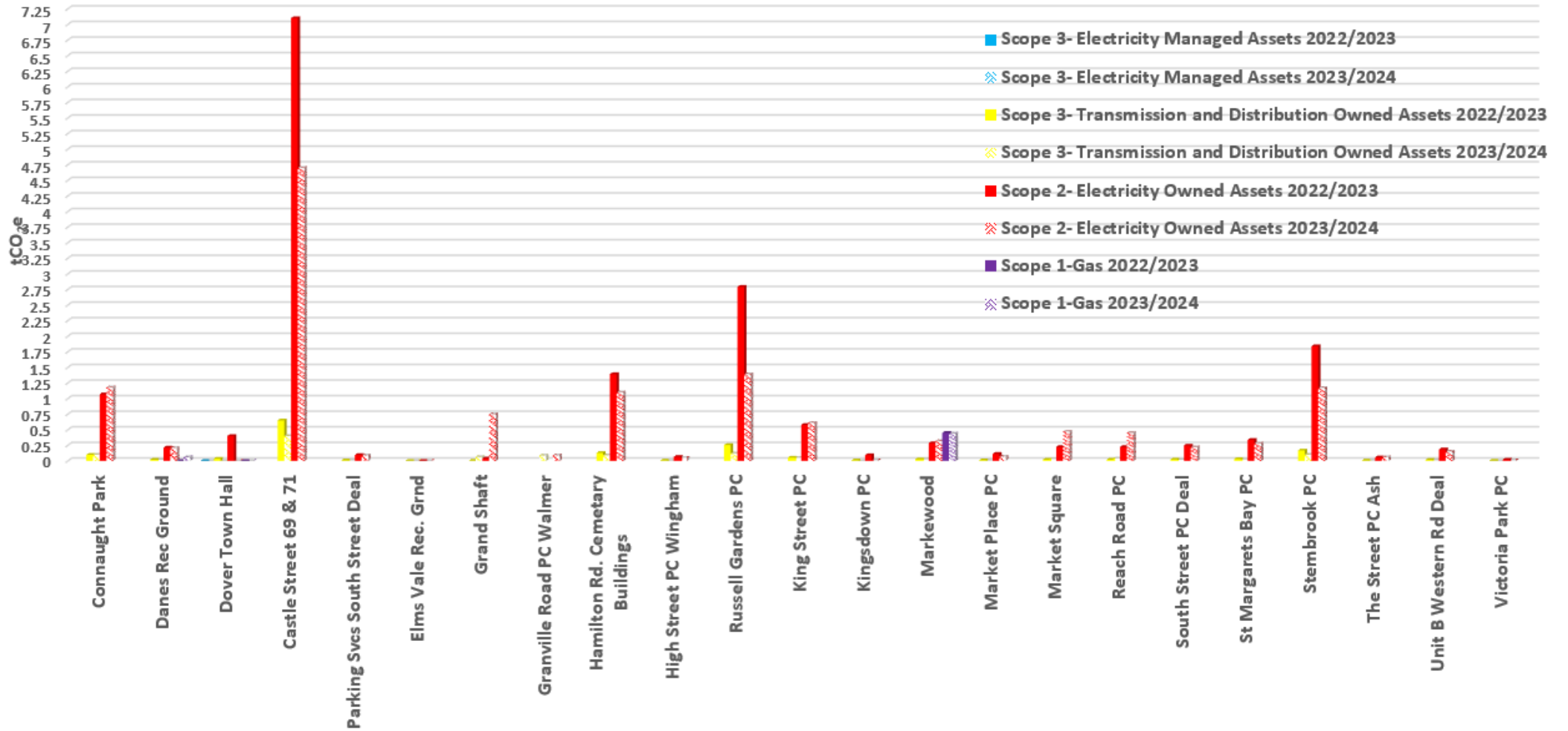
Greenhouse Gas Emissions Tonnes of CO<sub>2</sub>e 2022/23 - 2023/24 Comparison Chart

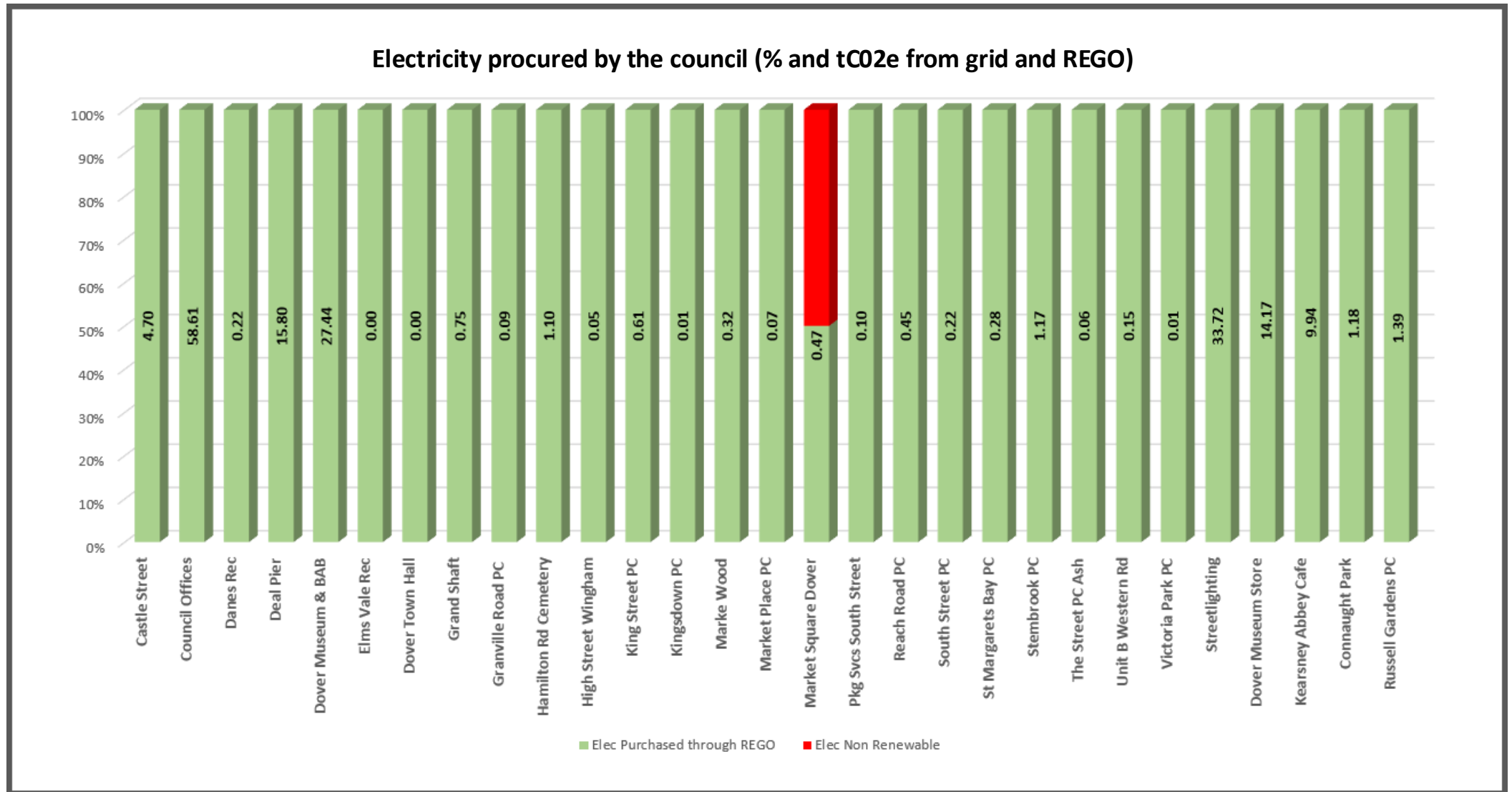


Top 10 tCO2e for Assets comparison chart 2023/2024

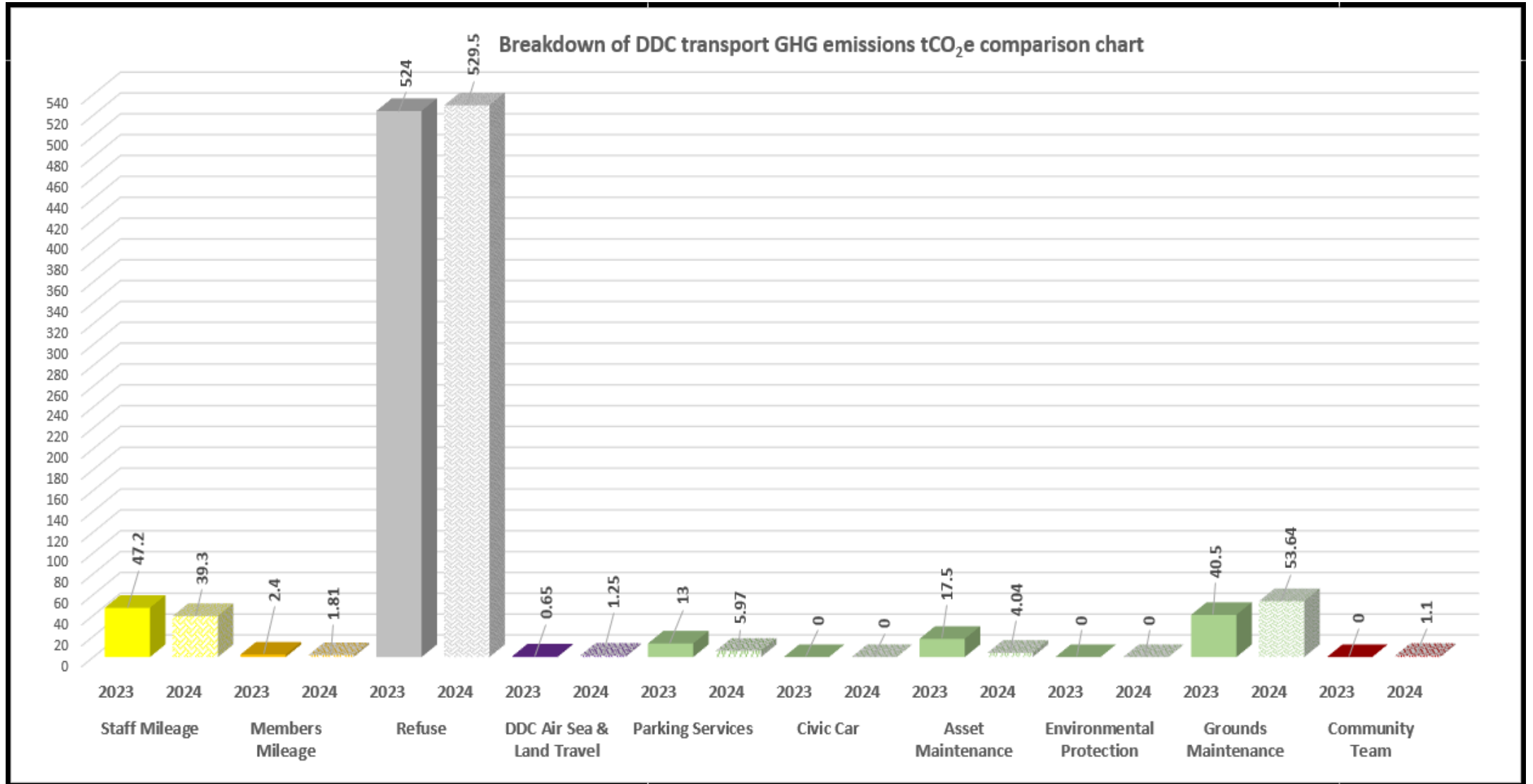


Remaining tCO<sub>2</sub>e emissions for assets comparison chart

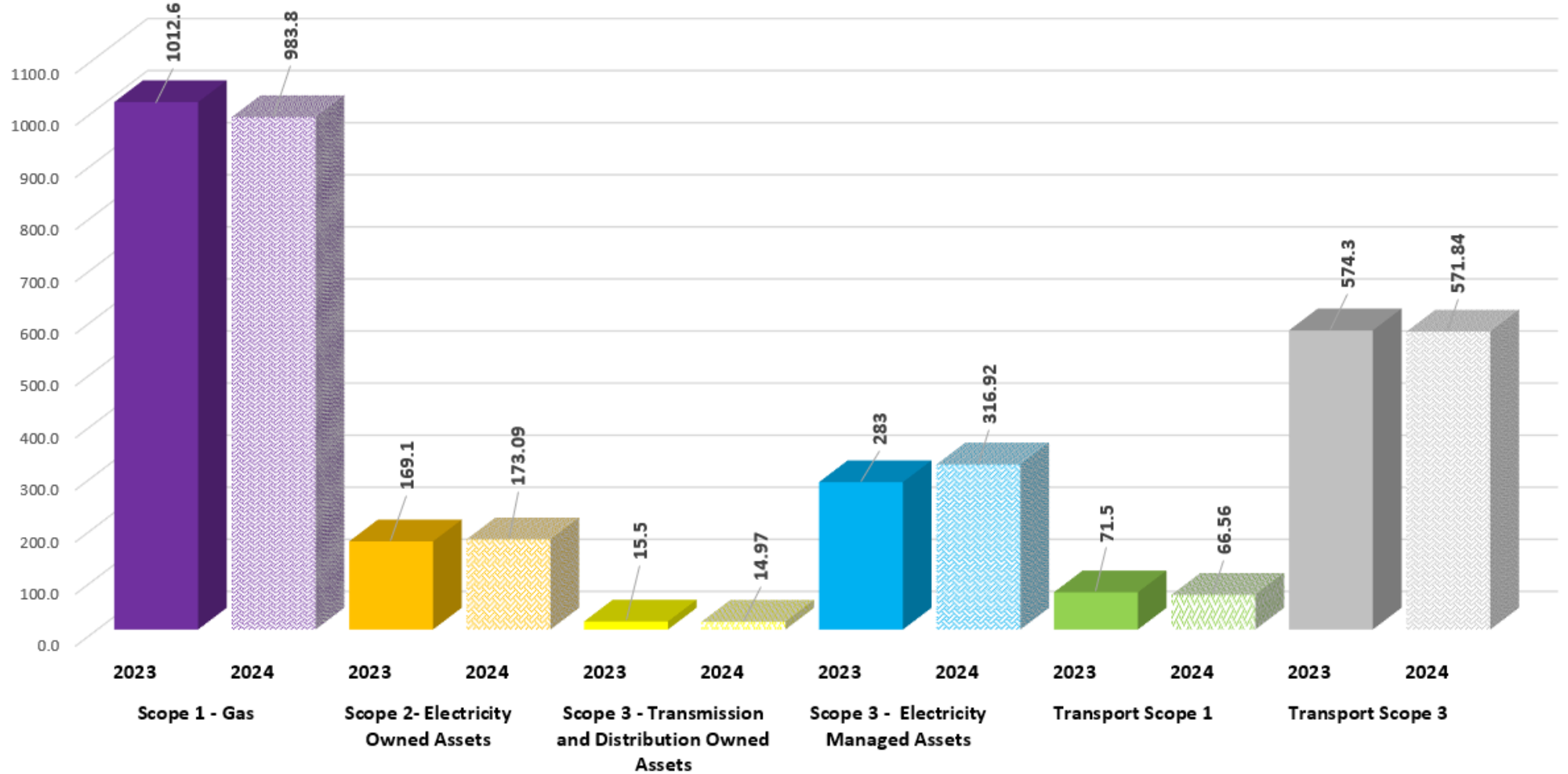




Note: Dover Leisure Centre and Tides Leisure Centre electricity is procured by the operators.



Breakdown of individual scopes tCO<sub>2</sub>e comparison chart





# Glossary

|                          |   |
|--------------------------|---|
| <b>GHG</b>               | Green House Gas – Carbon dioxide, Methane, Nitrous oxide  |
| <b>CO2e</b>              | Carbon dioxide equivalent   |
| <b>kWh</b>               | Kilowatt-hour   |
| <b>REGO</b>              | This scheme provides certificates called REGOs which demonstrate electricity has been generated from renewable sources.   |
| <b>Scope 1 emissions</b> | Scope 1 covers emissions from sources that an organisation owns or controls directly, for example from burning fuel in our fleet of vehicles (if they're not electrically-powered). <a href="#">What are scope 1, 2 and 3 carbon emissions?   National Grid Group</a>   |
| <b>Scope 2 emissions</b> | Scope 2 are emissions that a company causes indirectly and come from where the energy it purchases and uses is produced. <a href="#">What are scope 1, 2 and 3 carbon emissions?   National Grid Group</a>  |
| <b>Scope 3 emissions</b> | Scope 3 encompasses emissions that are not produced by the company itself and are not the result of activities from assets owned or controlled by them, but by those that it's indirectly responsible for up and down its value chain. Scope 3 emissions include all sources not within the scope 1 and 2 boundaries. <a href="#">What are scope 1, 2 and 3 carbon emissions?   National Grid Group</a> |
| <b>Intensity Measure</b> | Carbon emissions intensity refers to the emissions attributed to a facet of an organization's operations. It's calculated by dividing the total emissions by a metric of an operation, such as the number of products/units produced, the number of full-time equivalent employees, or the square footage of building(s). <a href="#">Carbon Emissions Intensity Explained - CarbonBetter</a>           |