	GHG EMISSIONS DATA FOR PERIOD 1 <sup>ST</sup> APRIL 2021 TO 31 <sup>ST</sup> MARCH 2022													
	Global Tonnes of CO2e													
	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	1233.98	811.26	1260.51	1171.30	1210.00	1190.96	1200.50	1177.00	1206.30	1206.81	1221.01	1212.43	1169.31	1130.47
Scope 2	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	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	2291.50	1945.70	2709.56	2665.57	3044.81	3405.04	3577.67	3756.00	3806.11	3924.47	4003.89	4022.47	4069.41	3880.47
Carbon Offsets REGO purchased electricity (scope 2) Solar PV generation	173.63 6.93	202.66	14.67	-	-	-	-	-	-	-	Wind turbine 2.23	Wind turbine 2.80	Wind turbine 2.00	Wind turbine 2.82
Total annual net emissions	2104.41	1740.01	2694.89	2655.57	3044.81	3405.04	3577.67	3756.00	3806.11	3924.47	4001.66	4019.67	4067.41	3877.65

#### **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 2021 to 31 March 2022

### **CHANGE IN EMISSIONS**

Using Degree Day analysis for establishing weather corrected data for the South East region (heating base temperature 15.5°C) there has been a 18% decrease in Heating Degree Days compared to the baseline year (2008/09) and a 3% increase compared to 2020/21.

Overall energy consumption in kWhs (Scope 1 and 2 (gas and electricity) has increased by 31% in 2021/22 compared with 2020/21.

Scope 1 Stationary (gas kWhs) was 56% higher in 2021/22 compared to 2020/21

Scope 2 Stationary (electricity kWhs) was 38% lower in 2021/22 compared to 2020/21

Scope 3 Stationary Managed Assets (electricity kWhs) increased by 46% 2021/2022 compared to 2020/21.

Overall distance travelled has reduced by 4% in 2021/22 compared to 2020/21

Scope 1 Transport (Council owned vehicles) - mileage increased by 22% in 2021/22 compared to 2020/21

Scope 3 Transport (Business travel by vehicles not owned by the Council/ public transport) – decreased by 8%

There has been a reduction of 46% in CO<sub>2</sub>e emissions compared to the baseline year (2008/09), however compared to 2020/21 there has been a 21% increase in emissions overall.

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

Reopening post COVID lockdown has resulted in increased gas consumption at the Dover District Leisure Centre, Tides Leisure Centre and the Council Offices Whitfield resulting in higher emissions totals for these buildings compared to 2020/21. The increase in heating degree days in 2021/22 compared to 2020/21 could also be a contributory factor.

The consumption at Dover Museum and Bronze Age Boat fell by 22% in 2021/22 compared to 2020/21. This was as a result of consumption based on accurate meter reads in 2021/22, whereas in 2020/21 when it was based estimates, thereby providing a more accurate reflection of usage and emissions.

## Scope 2 (Electricity - Council owned and controlled buildings)

Electricity consumption at all of the largest owned assets show some increases in 2021/22 compared to 2020/21 which again is reflective of easing of COVID restrictions. However, the completion of the LED streetlighting project has resulted in a significant decrease (77.6%) in the emissions from this 'asset'.

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. 90% of the electricity purchased is via REGO (shown on the table on the first page of this report), but some of the new additions to the portfolio have not been included in the REGO bundle. A review of the process has taken place to ensure that REGO is a requirement for new additions at the time the properties are added to the contract with Laser, rather than waiting until renewal (annually in October).

The solar pv array on the Dover District Leisure Centre has enabled 6.93 tonnes of carbon offsets to be deducted from 2021/2022 total emission figure (as shown on first page of this report).

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 42% decrease in Transmission and Distribution emissions in 2021/22 compared to 2020/21 – this is as a result of decrease in electricity consumption in our buildings and a lower conversion factor in 2021/22 (0.01) compared to 2020/21 (0.02).

Emissions from Managed Assets increased by 33% compared to 2020/21. Increased opening during 2021/22 and the consequential increase in electricity consumption at all three Leisure Sites (Dover District Leisure Centre, Tides Leisure Centre and the Tides Tennis Hall) was in the main responsible for this change, however, was still lower than pre-covid (2019/20).

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

The impact of easing of lockdown and travel restrictions is reflected in higher mileage reported across Scope 1 in 2021/22 (22% increase compared to 2020/21). This increase is not just down to any one service area, as most areas show small increases in miles travelled.

Both the Civic Car and Environmental crime team vehicles are now electric. Whilst there was an increase in the mileage travelled by the Environmental crime team's vehicles in 2021/22 compared to 2020/21 emissions are recorded as nil due to the fact that vehicles are charged in the main at the Whitfield Offices, and emissions from electricity are already accounted for under Scope 2 and Scope 3 Transmission and Distribution – this avoids double-counting of emissions as per guidance in 2021 conversion factors.

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

Mileage for the waste contract was lower than in 2020/21 (due possibly to the withdrawal of green waste collections for part of the year), however due to changes in the emission conversion factors there is a 0.1% increase in emissions equating to 0.38 tCO2e.

Staff mileage decreased by 2849 miles in 2021/22 compared to 2020/21 – changes in conversion table emission factors have resulted in a 5.75% increase in emissions equating to 3.14 tCO<sub>2</sub>e.

Members mileage increased compared to 2020/21 reflective in the increase in emissions of 704%. Whilst this may sound alarming it equates to an additional (additional 2 tCO<sub>2</sub>e). However there has been an actual decrease of 32% (1.08 tCO<sub>2</sub>e) compared to pre-Covid/ lockdown 2019/20 emissions.

Increased digitalisation has enabled greater connectivity and the ability to attend more meetings remotely which should also help reduce 'business travel' and consequently lower emissions in future years.

## **APPROACH**

We have used 2008/09 as our base year because we do not have accurate data prior to this date. Our baseline data has been recorded in accordance with the Government's NI185 spreadsheet and includes Scope 3 discretionary elements relating to business mileage, transmission and distribution of electricity and electricity consumption of managed assets.

We have totalled our energy usage/ distance travelled under each scope, using the appropriate 2021 conversion factors. We have converted our 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 previous page.

## **ORGANISATIONAL BOUNDARIES**

We have used the financial control approach.

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.

OPTIONAL SCOPE  We have measured our scope 1, 2 and the significant scope 3 emissions							
	GHG emissions 2020/21 in tonnes of CO <sub>2</sub> e	Specific exclusions and where known the % this represents					
Scope 1							
Gas Consumption	1174.14						
Owned Transport	59.84						
Fugitive Emissions		Emissions from AHU's in office buildings are excluded due to the cost of data collection. Losses are estimated to be <1% of Scope 1					
Total Scope 1	1233.98						
Scope 2							
Purchased electricity	194.68						
REGO purchased electricity	173.63 -	Did not include solar pv generation at Dover District Leisure Centre as this is a managed asset – see Scope 3					
Total Scope 2	21.05						
Scope 3							
Business travel	60.43						
Freight	472.54						
Electricity Transmission & Distribution	17.23						
Managed Assets Electricity	306.11						
Solar pv generation – Dover District Leisure Centre	-6.93						
Total Significant Scope 3	849.38						

#### **BASE YEAR**

Our base year is 2008/09. We calculated our energy usage using the NI185 National Performance Indicator data set. CO₂e data has been recalculated using the GHG emissions conversion factors published on the Government website.

### **TARGETS**

Our 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

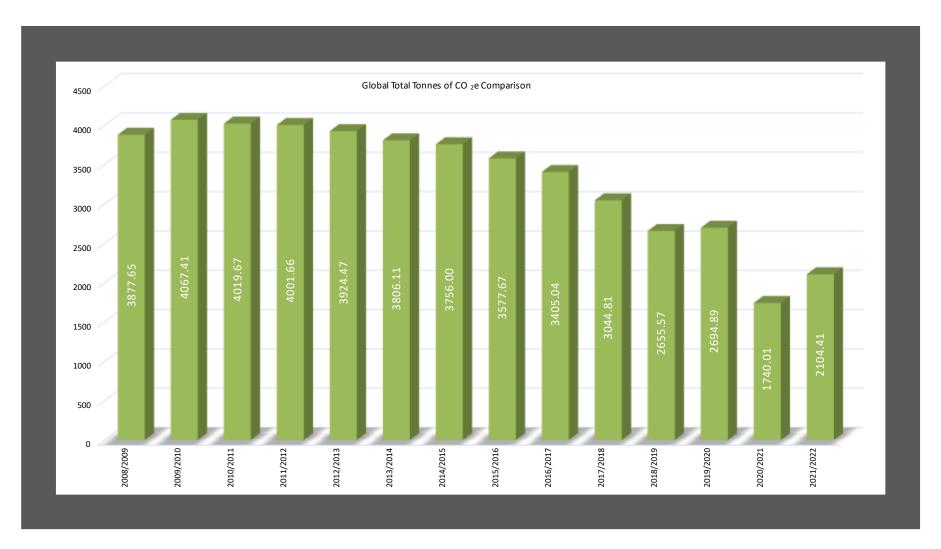
We have chosen Tonnes of  $CO_2e$  per square metre of corporate building space as this metric will be a valuable comparator. Our intensity measurement is 2104.41/26941 - giving a measurement of 0.0781 tonnes  $CO_2e$  per  $m^2$  78.10 Kg  $CO_2e$  per  $m^2$ . The 2008/09 intensity measurement is 3877.65/22163 - giving a measurement of 0.175 tonnes  $CO_2e$  per  $m^2$  or approximately 175.0 Kg  $CO_2e$  per  $m^2$ . This equates to a decrease of 55% in 2021/2022 compared to the baseline year.

#### **ASSURANCE STATEMENT**

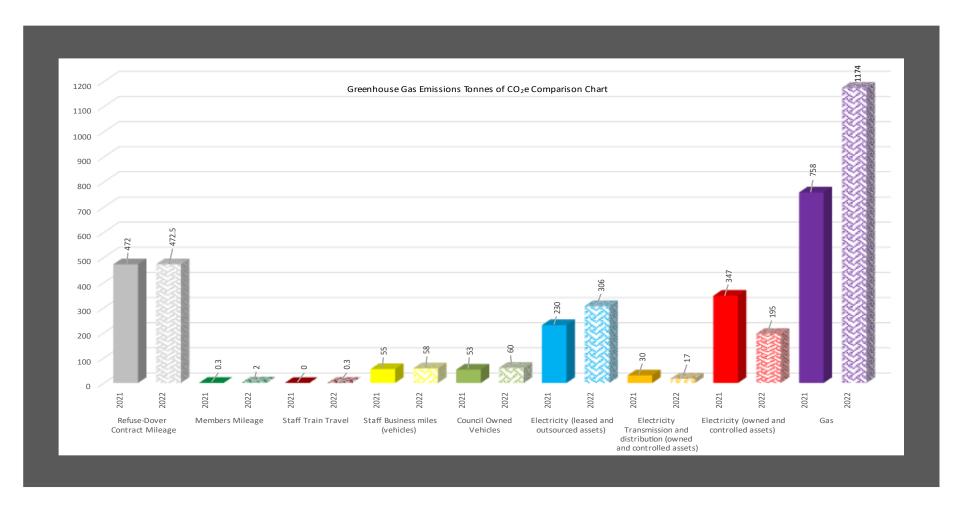
All data used to calculate our GHG report has been carefully filed and stored and may be audited if necessary.

#### **Amanda Martin**

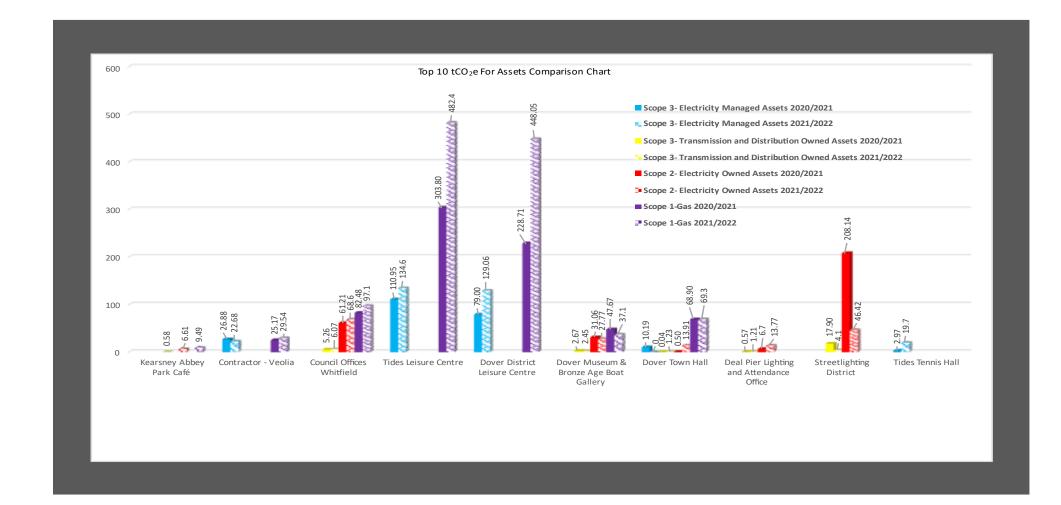
Principal Climate Change and Sustainability Officer Dover District Council July 2022



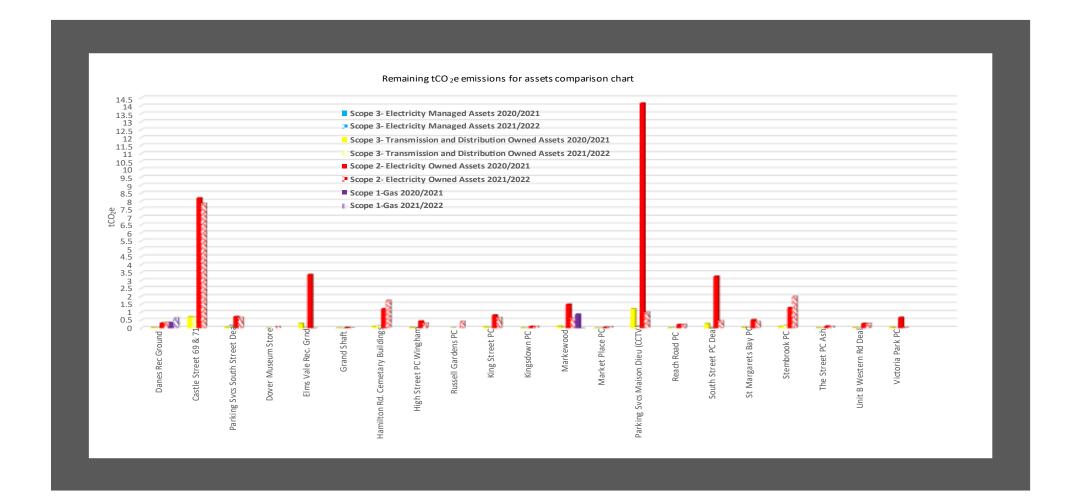
Year on year comparison of Dover District Council GHG emissions

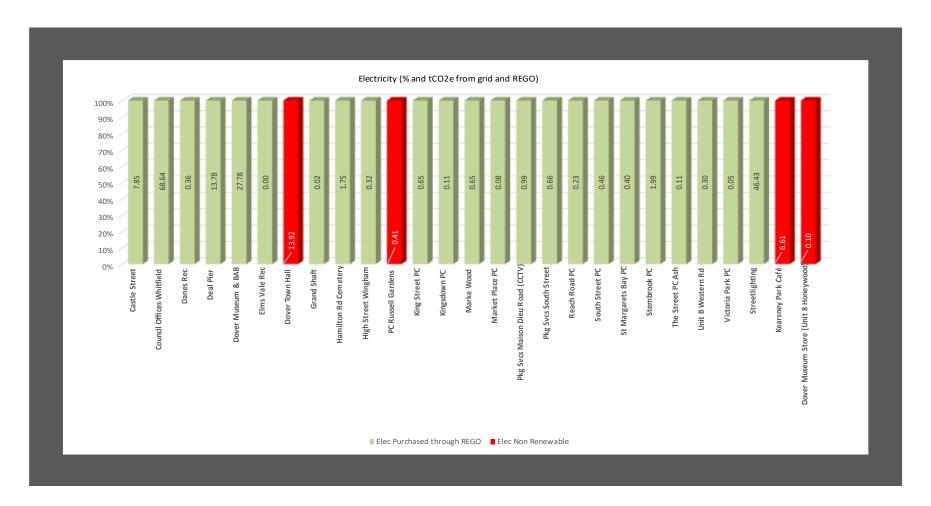


Comparison of Council Transport and Stationary GHG emissions between 2020/21 and 2021/22

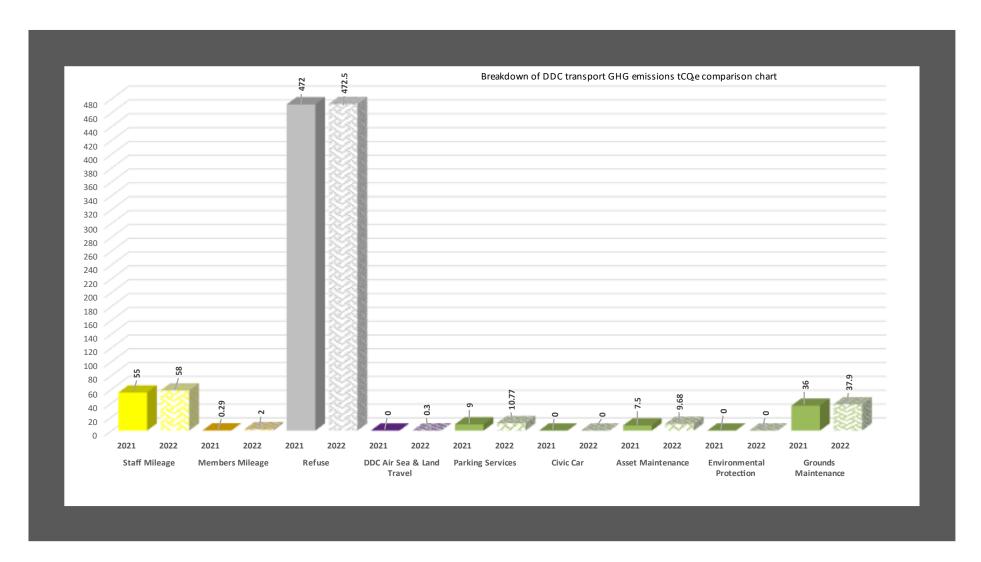


2020/21 and 2021/22 comparison of the buildings responsible for the highest emissions.





Grid purchased electricity and electricity purchased through Renewable Energy Guarantee of Origin (REGO) certificates



Comparison of Council Transport GHG emissions between 2020/21 and 2021/22