

Runnymede Borough Council Greenhouse Gas Emissions Annual Report 2021/2022



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Purpose of the report

The Greenhouse Gas Emissions (GHG) Report details carbon emissions resulting from the operations of the authority during 2021/2022. This annual report is a requirement of the Department for Business, Energy, and Industrial Strategy (BEIS).

Background

The then Department of Energy and Climate Change signed a Memorandum of Understanding (MOU) with the Local Government Association on 9 March 2011 to recognise the pivotal role local authorities have in reducing emissions at the local level.

Local Authorities in England are required by the Department for Business, Energy and Industrial Strategy to measure and report on their Greenhouse Gas Emissions from their own estate and operations.

This report outlines the Authority's GHG emissions for the past twelve years. It presents the energy that is consumed as a result of the authority's operations and the results of the measures introduced to strive to reduce those emissions of the authority.

Key organisational statistics

Runnymede Borough Council currently serves a population of approximately 89,400 (Source: ONS population estimates from NOMIS July 2020) residents and 2,780 businesses. There were 445 FTE employees during this reporting period.

Baseline year and reporting period

The baseline year used for carbon reporting is the financial year 2008/2009.

Gas, water, and electricity consumption data has been gathered by Runnymede Borough Council since 1995 to monitor and target consumption within their portfolio of public buildings quickly identifying any pipeline losses i.e. gas and water and excessive electricity consumption. Emissions are monitored against the baseline year annually and published within this report. The reporting period coincides with the financial year from 1st April to 31st March.

The reporting requests data from natural gas and electricity consumption, electricity transmission and distribution losses, fuel usage including our grey fleet emissions (i.e. business mileage incurred via officers' own vehicle usage), water supply and waste water treatment.

Approach

The authority has followed the Government's guidance on how to measure and report greenhouse emissions. This format follows the internationally

recognised GHG protocol and is recommended by Government for adoption by all local authorities and the private sector.

Operational Scopes

- Scope 1 - To calculate emissions from the use of fuels including natural gas, diesel, and petrol
- Scope 2 - To calculate emissions from the use of electricity
- Scope 3 - To calculate emissions from electricity transmission and distribution losses, water supply and treatment and our fuel consumption via our grey fleet

Scope 1 – Natural Gas consumption is measured in kWh net CV (Gross CV or higher heating value is the Calorific Value under laboratory conditions. Net CV or lower heating value is the useful Calorific Value in typical real-world conditions e.g. boiler plant) from corporate properties over 250 sqm. gross internal area (GIA). GIA is a method of measurement that measures the whole enclosed area of a building within the external walls. Properties include:

- Civic Centre
- Chertsey Hall
- Woodham Lodge IRL Centre
- Chertsey DSO
- Eileen Tozer IRL Centre
- Manor Farm IRL Centre
- Chertsey Museum
- The Hythe Centre

Diesel and petrol fuel use measured in litres from The Direct Services Organisation (DSO) includes DSO operational vehicles, recycling vehicles, community services vehicles. Parks and amenities contractor vehicles and machinery.

Scope 2 – Electricity consumption measured in kWh from our corporate properties over 250 sqm GIA that again includes:

- Civic Centre
- Chertsey Hall
- Woodham Lodge IRL Centre
- Chertsey DSO
- Eileen Tozer IRL Centre
- Manor Farm IRL Centre
- Chertsey Museum
- The Hythe Centre

Scope 3 – Electricity transmission and distribution losses measured against kWh consumed on the following properties:

- Civic Centre
- Chertsey Hall
- Woodham Lodge IRL Centre
- Chertsey DSO
- Eileen Tozer IRL Centre
- Manor Farm IRL Centre
- Chertsey Museum
- The Hythe Centre

Scope 3 – Water Supply and Treatment measured in cubic metres at the following sites:

- Civic Centre
- Chertsey Hall
- Woodham Lodge IRL Centre
- Chertsey DSO
- Eileen Tozer Day Centre
- Manor Farm IRL Centre
- Chertsey Museum
- The Hythe Centre

Scope 3 – Business mileage 'Grey Fleet' measured in miles travelled

Emissions Data from 2017-2018 to present:

Emission Source	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Natural Gas Consumption	306.7	276.7	294.37	251.15	246.05
Fuel Use - Direct Services Diesel	695.7	655.5	673.47	589.26	587.44
Fuel Use - Direct Services Petrol	5.3	18.1	11.82	6.17	3.03
Electricity Consumption	310.1	279.5	280.29	235.68	219.37
Electricity T&D Losses	26.4	23.7	23.80	20.27	25.24
Water Supply	2.4	2.7	3.59	2.66	1.74
Water Treatment	4.8	5.6	7.39	5.47	3.19
Managed Assets - Grey Fleet Vehicles	40.4	38.7	36.04	15.39	24.86
Total tonnes CO₂e emissions per annum	1391.9	1300.5	1330.77	1126.05	1110.92
Annual percentage decrease/increase	13.91% decrease	7.01% decrease	2.27% increase	18.18% decrease	1.34% decrease

Carbon Emissions Reduction Strategy

On the 26 January 2022, Runnymede Borough Council committed to tackling Climate Change and adopted the target to achieve operational 'Net Zero Carbon' emissions from its own services and operations by 2030. Net Zero Carbon is achieved when the total operational carbon emissions released on an annual basis average to be zero or negative i.e., the amount of emitted carbon balances with those removed or offset. The public declaration of a 2030 operational Net Zero Carbon target commits us to tackling climate change across every aspect of our service provision and estate.

(Runnymede Borough Council Climate Change Strategy 2022-2030).

Annual Carbon Savings

The total annual tonnes of CO₂e emissions have decreased by 15.13 metric tonnes on the previous year. This represents a 1.34% annual decrease.

The measure of carbon dioxide emissions in the national grid electricity system has gradually been centrally decarbonised in recent years. Significant periods of coal-free electricity generation and record-breaking levels of power from zero-carbon sources were key factors in achieving this.

The UK electricity factor is prone to fluctuate from year to year as the fuel mix consumed in UK power stations (and auto-generators) and the proportion of net imported electricity changes. These annual changes can be large as the factor depends very heavily on the relative prices of coal and natural gas as well as fluctuations in peak demand and renewables.

This report reflects a large period of post-coronavirus pandemic Most Day Centres have now been re-opened to the public with The Hythe Day Centre and Chertsey Hall being taken over by the NHS to be used as Covid vaccination centres, resulting in longer daily use. Other services such as refuse collection etc., continued but business mileage rates have reduced due to changes in procedures introduced to reduce the number of site visits being carried out by staff.

Annual Cost Savings

Because of the decrease in carbon emissions during 2021/2022 annual cost savings, based on £150 benchmark per tonne of CO₂e, was £2,269.50.

Total Carbon Savings Achieved On Baseline

The original baseline figure in 2009 was 2,683.59 tonnes CO₂e of greenhouse gas emissions. In 2021-2022 the total figure of 1110.92 tonnes CO₂e of greenhouse gas emissions represents a 59% reduction on this figure.

Total Avoided Cost Savings Achieved On Baseline

The total avoided cost savings to the authority based on £150 benchmark per tonne of CO₂e, is therefore £235.9k over the 2021/2022 year period of reporting.

References

Sharing information on greenhouse gas emissions from local authority own estate and operations (the successor to National Indicator 185)'. Full information and requirements at:

<https://www.gov.uk/measuring-and-reporting-environmental-impacts-guidance-for-businesses>