Test Valley Borough Council's Annual Greenhouse Gas Report 2023/24

1. Introduction

1.1 Test Valley Borough Council declared a climate emergency in September 2019. In June 2020, the council approved its Climate Emergency Action Plan (CEAP), which focuses on actions that will help reduce the council's greenhouse gas emissions and work towards becoming carbon neutral as soon as possible. An updated action plan (2024) is being prepared which further encourages the reduction in greenhouse gas emissions for both the council emissions and borough wide emissions.

1.2 This greenhouse gas (GHG) report covers the period of 1 April 2023 to 31 March 2024.

2. Emissions summary

2.1 Table 1 summarises the council's greenhouse gas (GHG) emissions (tCO_2e[1]) for the past year against the baseline year of 2018/19 based on the Environmental Reporting Guidelines 2019 methodology.

2.2 The current reporting reflects greenhouse gas emissions from some of our own buildings, as well as all our fleet and plant (scopes 1[2] and 2[3]). It does not include wider indirect emissions (scope 3[4] e.g., business travel).

Table 1: Test Valley Borough Council's annual GHG emissions summary

	2023/24 tCO_2e	2022/23 tCO_2e	2021/22 tCO_2e	2020/21 tCO_2e	2019/20 tCO_2e	2018/19 tCO_2e
Scope 1	415	1,403	1,431	1,342	1,326	1,276
Scope 2	245	234	248	273	385	434
Total gross emissions	660	1,638	1,679	1,615	1,712	1,710
Carbon Credits	199	193	222	153	7	8
Total net emissions	461	1,444	1,457	1,462	1,705	1,702

3. Company Information

3.1 Test Valley Borough Council is a borough council within Hampshire providing a range of public sector services to a resident population of about 130,500[5].

[1] Tonnes of carbon dioxide equivalent
[2] Direct emissions from owned or controlled sources i.e., fleet fuel use and gas use for heating buildings.
[3] Indirect emissions from the purchase and use of electricity, steam, heating and cooling. By using the energy, an organisation is indirectly responsible for the release of these greenhouse gas emissions.
[4] Includes all other indirect emissions that occur in the upstream and downstream activities of an organisation.
[5] Office for National Statistics – Census 2021.

The borough covers an area of just over 62,700 hectares and contains a mixture of urban, semi-urban and rural areas.

4. Reporting Period

4.1 This report is for the financial year 1 April 2023 to 31 March 2024.

5. Changes in Emissions

5.1 The council's total gross greenhouse gas emissions decreased by 60% for this period, compared to 2022/23.

5.2 The council's total net greenhouse gas emissions decreased by 68% for this period, compared to 2022/23.

5.3 This decrease has originated from the reduction of emissions in the scope 1 emissions. This includes fleet fuel, and gas use, as outlined in Table 2.

5.4 The council's scope 1 emissions have reduced by 70% compared to those in the 2022/23 period. This is largely due to the transition from diesel to HVO fuel amongst the council's fleet vehicles.

5.5 The council's scope 2 emissions, for electricity, have increased by 5% compared to 2022/23. One of the factors that is likely to have influenced this is an increase in the electricity consumption associated with streetlighting. An additional site was added to the reporting part way through 2022/23, that was reflected in the electricity consumption for the whole of 2023/24, which is likely to have contributed this increase too.

5.6 The council purchases electricity from a Renewable Energy Guarantees of Origin (REGO) certificate backed electricity tariff. This combined with our solar photovoltaic (PV) generation shows that the council's total net greenhouse gas emissions are continuing in a downward trajectory for 2023/24.

6. Measuring and Reporting Approach

6.1 The information for this report is based on Department for Environment, Flood and Rural Affairs (DEFRA) 2009 *Guidance on* how to measure and report your greenhouse gas emissions and the government's 2019 Environmental Reporting Guidelines.

6.2 The current data reporting reflects emissions from some of our own buildings, as well as our fleet and plant (within scopes 1 and 2). At present, this includes 34 assets for electricity use, 16 assets for gas use, fuel used for fleet, hand plant, and electricity for street lighting (provided by Hampshire County Council on our behalf). It does not include wider indirect emissions (scope 3, such as business travel).

7. Organisational Boundary

7.1 Our annual greenhouse gas report more closely aligns with operational control approach as per the government's 'Environmental Reporting Guidelines'.

8. Operational Scope

8.1 The table below shows what is included in each scope measure in tonnes of carbon dioxide equivalent (CO_2e).

Table 2: Test Valley Borough Council's annual GHG emissions breakdown[6]

Scope	Source	2023/24 tCO_2e	2022/23 tCO_2e	2021/22 tCO_2e	2020/21 tCO_2e	2019/20 tCO_2e	2018/19 tCO_2e
1 (Direct Emissions)	Fleet Fuel Use	90	1,077	1,087	1,078	1,053	1,010
	Small Machinery	18	13	15	12	14	15
	Gas Use	308	313	329	251	260	251
Total Scope 1		415	1,403	1,431	1,342	1,326	1,276
2 (Indirect Emissions)	Electricity	245	234	248	273	385	434
Total gross emissions		660	1,637	1,679	1,615	1,712	1,710
	Credits						
Green Tariff		195	191	217	147	n/a	n/a
PV Export Only		4	2	5	6	7	8
Offsets		n/a	n/a	n/a	n/a	n/a	n/a
Total Credits		199	193	222	153	7	8
Total net emissions		461	1,444	1,457	1,462	1,705	1,702

9. Baseline

9.1 The baseline year for the council's Climate Emergency Action Plan is 2018/19.

10. Targets

10.1 The council aims to be carbon neutral by as soon as possible.

11. Carbon Offsetting

11.1 The council has not purchased or delivered any carbon offset projects. The council have, however, planted over 33,000 trees between the period of 2021

[6] Please note, some of the figures may not add up due to rounding.

and 2024. A carbon sequestration calculation has been undertaken to estimate the potential impact of the tree planting on the council's net greenhouse gas emissions. Research into carbon sequestration is a new science. Therefore, while we have recognised the estimated impact in our Climate Emergency Action Plan, it is not possible to be precise and this impact has not been discounted from the net greenhouse gas emissions figure for 2023/2024.

12. Green Tariffs

12.1 Since October 2020, the council has purchased electricity supply through a green tariff via a REGO backed tariff. We have multiplied the amount of electricity, which is backed by REGOs, by the grid average emissions factor and deducted the emissions from our gross figure as allowed under the UK government guidance.

13. Electricity Generation

13.1 The council has a 60kWp solar photovoltaic system at Portway Depot in Andover as well as a solar photovoltaic system at the Ganger Farm Sports Pavilion in Romsey that is in the order of 50kWp. A portion of the electricity generated at Portway Depot is exported to the grid.