Test Valley Borough Council's Annual Greenhouse Gas Report 2022/23

1. Introduction

1.1 Test Valley Borough Council (TVBC) 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.

1.2 This greenhouse gas (GHG) report covers the period of 1 April 2022 to 31 March 2023.

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 and 2). It does not include wider indirect emissions (scope 3[2] e.g., business travel).

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

	2022 / 23 tCO2e	2021 / 22 tCO2e	2020 / 21 tCO2e	2019 / 20 tCO2e	2018 /19 tCO2e
Scope 1[3]	1,403	1,431	1,342	1,326	1,276
Scope 2[4]	234	248	273	385	434
Total gross emissions	1,638	1,679	1,615	1,712	1,710
Carbon Credits	193	222	153	7	8
Total net emissions	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]. The borough covers an area of just over 62,700 hectares and contains a mixture of urban, semi-urban and rural areas.

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[1] Tonnes of carbon dioxide equivalent
[2] Includes all other indirect emissions that occur in the upstream and downstream activities of an organisation.
[3] Direct emissions from owned or controlled sources i.e., fleet fuel use and gas use for heating buildings.
[4] 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 GHG emissions.
[5] Office for National Statistics – Census 2021.

4. Reporting Period

4.1 This report is for the financial year 1 April 2022 to 31 March 2023.

5. Changes in Emissions

5.1 The Council's total gross greenhouse gas emissions decreased by 2.4% for this period, compared to 2021/22.

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

5.3 The Council's scope 1 emissions have reduced by 1.9% compared to those in the 2021/22 period. Part of the reason for the reduction relates to reduced fuel use in the reporting period as a result of a drier summer, reducing the mowing requirements as part of grounds maintenance. Additionally, five refuse collection vehicles were replaced with vehicles with better fuel efficiencies.

5.4 The Council's scope 2 emissions, for electricity, have reduced by 5.6% compared to 2021/22. Some of the factors that are likely to have influenced this include changes to lighting arrangements for Hampshire County Council streetlighting and the change in electricity GHG conversion factors due to the continued decarbonisation of the electricity grid.

5.5 The Council purchased its electricity from a REGO[6] backed electricity tariff. This combined with our solar photovoltaic (PV) generation shows that the Council's total net GHG emissions are continuing in a downward trajectory for 2022/23.

5.6 In April 2023, the Council switched the fuel used for its fleet from diesel to Hydrotreated Vegetable Oil (HVO). While not affecting the reporting for the year covered by this report, it is expected to have a significant effect on the scope 1 emissions for 2023/24, due to be reported next year. The current Government conversion factors indicate that the scope 1 net GHG emissions are about 95% lower for HVO than diesel per litre of fuel used.

6. Measuring and Reporting Approach

6.1 The information for this report is based on 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 sites for electricity use, 16 sites for gas use, 143 fleet assets, along with fuel used for hand plant and electricity for street lighting (provided by

[6] Renewable Energy Company Obligation

Hampshire County Council on our behalf). It does not include wider indirect emissions (scope 3 e.g., business travel).

7. Organisational Boundary

7.1 Our annual GHG 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 tCO_2e.

Table 2: Test Valley Borough Council's annual GHG emissions breakdown[7]

Scope	Source	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	1,077	1,087	1,078	1,053	1,010
	Small Machinery	13	15	12	14	15
	Gas Use	313	329	251	260	251
Total Scope 1		1,403	1,431	1,342	1,326	1,276
2 (Indirect Emissions)	Electricity	234	248	273	385	434
Total gross emissions		1,637	1,679	1,615	1,712	1,710
Credits						
Green Tariff		191	217	147	n/a	n/a
PV Export Only		2	5	6	7	8
Offsets		n/a	n/a	n/a	n/a	n/a
Total Credits		193	222	153	7	8
Total net emissions		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.

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

12. Green Tariffs

12.1 Since October 2020, Test Valley Borough Council has purchased its 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.