West Devon Borough Council Greenhouse Gas Inventory 2018/19

Company Information

West Devon Borough Council

Kilworthy Park, Drake Road, Tavistock, Devon, PL19 0BZ.

Reporting Period

1st April 2018 to 31st March 2019

Reasons for Change in Emissions

This is the first year that an organisational greenhouse gas (GHG) footprint has been undertaken for the organisation following this method. Future annual updates will include a running commentary of the key drivers for changes in GHG emissions in this section.

Quantification and Reporting Methodology

The quantification of emissions has been undertaken in accordance with Chapter 3 of HM Government 2019, Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance¹.

The 2018 UK Government GHG Conversion Factors for Company Reporting (version 1.01) were used in the calculations².

Organisational Boundary

The financial control approach has been used.

Operational Scopes

Scopes 1, 2 and certain Scope 3 emissions (as described in the detailed inventory) have been measured in metric tonnes of carbon dioxide equivalent (tCO_2e).

Summary Inventory

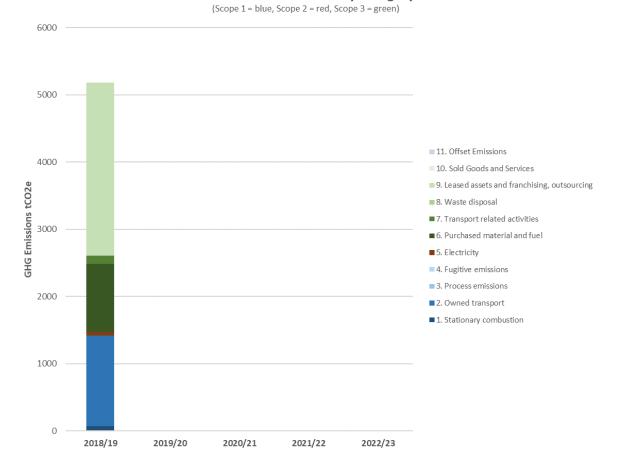
Emissions by scope measured in tCO_2e are shown in the inventory and graph below.

Total gross emissions in 2018/19 were 5,199 tCO₂e.

¹ https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance

² https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

No. Category	2018/19
SCOPE 1: Direct GHG emissions and removals	1435.2
1. Stationary combustion	73.3
2. Owned transport	1361.9
3. Process emissions	0.0
4. Fugitive emissions	0.0
SCOPE 2: Energy GHG indirect emissions	51.0
5. Electricity	51.0
SCOPE 3: Other indirect GHG emissions	3713.2
6. Purchased material and fuel	1017.1
7. Transport related activities	123.8
8. Waste disposal	0.0
9. Leased assets and franchising, outsourcing	2572.4
10. Sold Goods and Services	0.0
TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)	5199.4
11. Offset Emissions	0.0
TOTAL NET FOOTPRINT (SCOPES 1, 2 and 3 and Offsets)	5199.4



Annual GHG Emissions by Category

Base Year

The base year is taken as this year, namely 2018/19. Subsequent years will report progress against the base year.

Targets

West Devon Borough Council is in the process of considering an appropriate target for GHG reduction, including potentially to achieve net zero emissions by 2030.

Intensity Measurement

Emissions have been quoted in absolute terms only.

External Assurance Standard

The inventory has been complied by the Centre for Energy and the Environment at the University of Exeter.

Carbon Offsets

No carbon credits have been purchased.

Detailed Inventory

Scope 1

Scope 1 includes four emission categories. The assumptions made for each of these were as follows:

- Stationary Combustion: Emissions associated with combustion of fuels in stationary equipment (typically boilers in buildings). Consumption data provided for three buildings. Kilworthy Park data from a Display Energy Certificate, Tavy and Okehampton Business Park from metered data and fuel purchases. Note, periods not aligned to reporting period so extrapolation was necessary.
- 2. Owned Transport: Emissions associated with mobile equipment, typically transport equipment e.g. localities vehicles, maintenance vans and LA owned cars etc. Emissions were from fuel bought on forecourts data available on volume of fuel. This is split 66:34 between South Hams and West Devon. Note, fuel consumption from Waste and Cleansing vehicles has been calculated under category 9 (data collected from outsourced service FCC). Fuel use from mobile machinery was calculated based on estimates of fuel use for tools, lawnmowers and tractors.
- 3. Process Emissions: Waste collection is part of the Council's obligations those emissions are included within transport based emissions (2. Owned Transport). Waste processing is a function of upper tier authorities and so are out of scope for second tier authorities. There are no other process emissions.
- 4. Fugitive Emissions: Emissions due to leakage of refrigerant from air conditioning systems. There are only a few small localised air conditioning and whilst data on leakage does not exist, it is likely to be very low.

The results are shown in the Table below.

No.	Category	2018/19
SCOPE	1: Direct GHG emissions and removals	1435.2
1. Stati	onary combustion	73.3
1	Kilworthy Park	37.0
1	Tavy Business Centre	13.1
1	Okehampton Business Centre LPG	22.4
1	Okehampton Business Centre biomass	0.8
2. Owned transport		1361.9
2	Fuel in own vehicles from forecourts	1345.9
2	Mobile Machinery	16.0
3. Process emissions		0.0
3	Not applicable	0.0
4. Fugitive emissions		0.0
4	Not applicable	0.0

Scope 2

Scope 2 includes one emission category. The assumptions made were as follows:

5. Electricity: Emissions associated with purchased electricity. This includes all owned buildings including leased out buildings as these are on an Operating Lease. Calculations undertaken for the same buildings and on the same basis as those in category 1.

The results are shown in the Table below.

No.	Category	2018/19
SCOPE	2: Energy GHG indirect emissions	51.0
5. Elect	ricity	51.0
5	Kilworthy Park	33.3
5	Tavy Business Centre	1.9
5	Okehampton Business Centre	12.2
5	20 Plymouth Road	3.6

Scope 3

Scope 3 includes five emission categories. The assumptions made for each of these were as follows:

- 6. Purchased material and fuel: Embedded emissions of all purchased materials and fuels. Materials emissions were taken to be emissions associated with the purchase of goods. These were established by identifying the "top 10" contracts from the council's procurement records and allocating these to a sector (within goods or services). Emissions were calculated using a conversion factor from Annex E of Environmental Reporting Guidelines. Well to Tank (WTT) emissions from fuels and processes were calculated from all the other sections in the inventory with the exception of sections 3, 4, 8, 9 and 10.
- 7. Transport related activities: Emissions from grey fleet, business travel and commuting: Grey fleet: Based on mileage at 45p/mile. Business travel (road/rail/air): Based on spend on

train/plane/taxi. Commuting: Based on provided distances from employee to office, assumed number of journeys (260 for FT), split of FT to PT, and assume average car unknown fuel. Councillor mileage: Based on supplied annual mileage and assume unknown car size and fuel.

- 8. Waste disposal: Emissions associated with disposal of the Council's own waste e.g. from its offices (as opposed to waste produced by constituents). No data was available, though from past projects it is expected that this would be a very small number in the context of the overall footprint.
- 9. Leased assets and franchising, outsourcing: This covers all emissions from outsourced services. Emissions from energy use at the leisure centres (based on metered fuel consumption data) was calculated in the same manner as for categories 1 and 5. Emissions from waste and cleansing vehicles were calculated based on litres of fuel (data provided by FCC). Emissions from procured services were calculated in the same manner as for goods in category 6. As the contracts for the leisure centres and waste collection were already included in the procurement spend, only the balance of emissions from procured services were added.
- 10. Sold goods and services: The council state that no additional sold goods or services have been identified.

The results are shown in the Table below.

No.	Category	2018/19
SCOPE	3: Other indirect GHG emissions	3713.2
6. Purcl	hased material and fuel	1017.1
6	Well to Tank Emissions fuels	376.4
6	Procured Goods	640.7
7. Transport related activities		123.8
7	Commuting	100.0
7	Councillor mileage	12.6
7	Car travel/parking/ferry/toll expenses	11.1
7	Air Travel	0.0
7	Rail Fares	0.1
7	Taxi Fares	0.0
8. Waste disposal		0.0
8	Not applicable	0.0
9. Lease	ed assets and franchising, outsourcing	2572.4
9	Meadowlands Leisure Centre	335.7
9	Parklands Leisure Centre	308.7
9	Fuel from refuse collection (outsourced to FCC)	498.4
9	Procured services balance	1429.7
10. Sol	Goods and Services	0.0
10	Not applicable	0.0

Net Footprint

As well as the headline gross footprint, the net footprint can be reported as a secondary output. This can include reductions in GHG emissions associated with the generation of renewable energy, and the purchase of carbon offsets. Neither of these were present for the period considered.