

South Hams District Council Greenhouse Gas Inventory 2018/19

Company Information

South Hams District Council (SHDC)

Follaton House, Plymouth Rd, Totnes TQ9 5NE.

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 guidance*¹.

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 (tCO₂e).

Summary Inventory

Emissions by scope measured in tCO₂e are shown in the inventory and graph below.

Total gross emissions in 2018/19 were 8,014 tCO₂e.

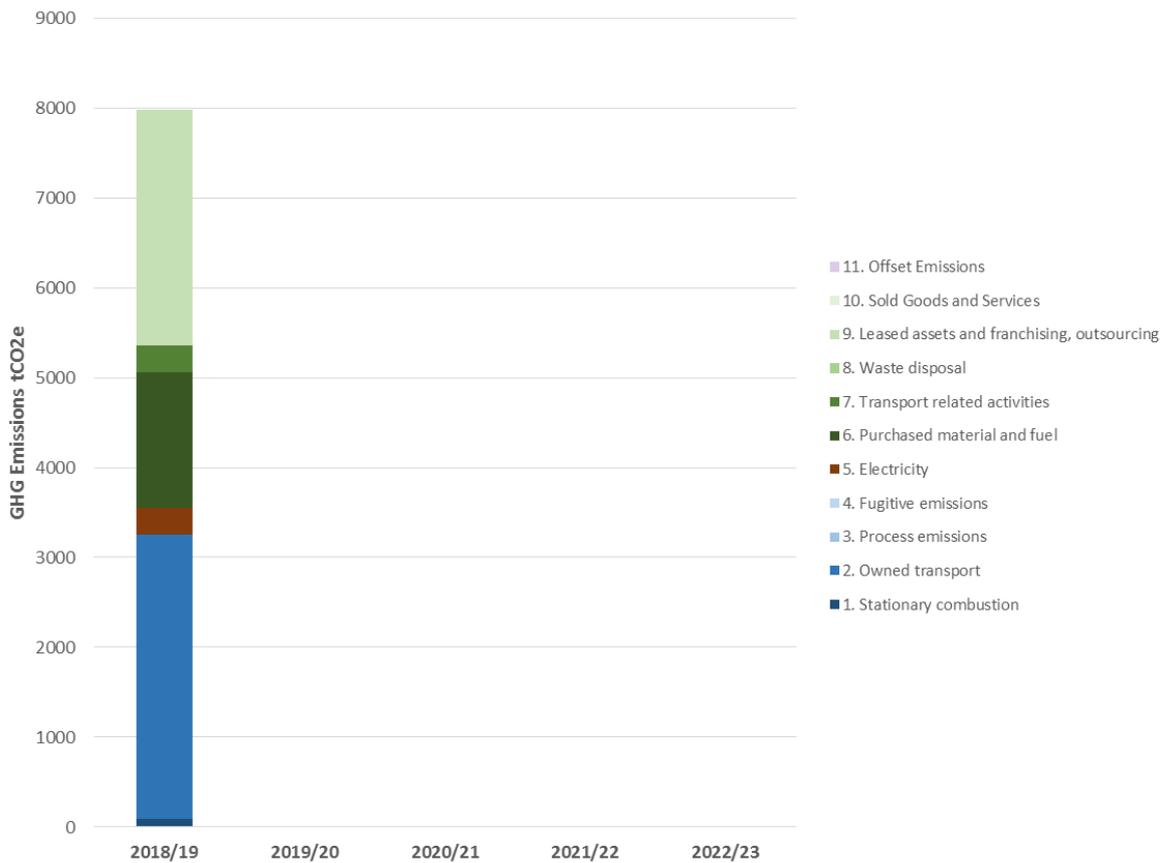
¹ <https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance>

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

No.	Category	2018/19
SCOPE 1: Direct GHG emissions and removals		3285.2
1.	<i>Stationary combustion</i>	85.9
2.	<i>Owned transport</i>	3199.4
3.	<i>Process emissions</i>	0.0
4.	<i>Fugitive emissions</i>	0.0
SCOPE 2: Energy GHG indirect emissions		290.9
5.	<i>Electricity</i>	290.9
SCOPE 3: Other indirect GHG emissions		4438.1
6.	<i>Purchased material and fuel</i>	1515.1
7.	<i>Transport related activities</i>	305.7
8.	<i>Waste disposal</i>	0.0
9.	<i>Leased assets and franchising, outsourcing</i>	2617.2
10.	<i>Sold Goods and Services</i>	0.0
TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)		8014.2
11.	<i>Offset Emissions</i>	0.0
TOTAL NET FOOTPRINT (SCOPES 1, 2 and 3 and Offsets)		8014.2

Annual GHG Emissions by Category

(Scope 1 = blue, Scope 2 = red, Scope 3 = green)



Base Year

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

Targets

South Hams District 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 compiled 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:

1. Stationary Combustion: Emissions associated with combustion of fuels in stationary equipment (typically boilers in buildings). Consumption data provided for three buildings. Note, the period was not an exact year and does not align with the footprint reporting year so steps should be taken next year to gather better data.
2. Owned Transport: Emissions associated with mobile equipment, typically transport equipment e.g. Localities vehicles, waste collection vehicles, maintenance vans, LA owned cars etc. Emissions were calculated from two sources. Firstly, fuel bought on forecourts data available on volume of fuel. This is split 66:34 between South Hams and West Devon. Secondly, fuel consumption from Waste and Cleansing vehicles is from fuel stored in bunkers at the depots. This was calculated based on mileage of the fleet. For future years FCC will take over this service and will capture the amount of fuel used. 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 associated with refrigerant leaks from cooling equipment. The council state that this is minimal, and so has been taken as zero in the footprint.

The results are shown in the Table below.

No.	Category	2018/19
SCOPE 1: Direct GHG emissions and removals		3285.2
1. Stationary combustion		85.9
1	Follaton House	73.0
1	Harbour Workshop	0.2
1	Acorn Centre	12.7
2. Owned transport		3199.4
2	Fuel in own vehicles from forecourts	2612.6
2	Fuel in own vehicles from fuel bunker (e.g. Refuse Collection Vehicles)	559.2
2	Mobile Machinery	27.6
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:

- Electricity: Emissions associated with purchased electricity. This includes all owned buildings including leased out buildings as these are on an Operating Lease. Calculations undertaken based on metered electricity consumption. In some cases the years' worth of data did not align with the period of the footprint, and in other cases the data was not for exactly one year, and in these cases the consumption data was pro-rated to estimate consumption for a year.

The results are shown in the Table below.

No.	Category	2018/19
SCOPE 2: Energy GHG indirect emissions		290.9
5. Electricity		290.9
5	Follaton House	91.4
5	Bourke Road Willis Way	3.5
5	Emissions from 79 metered sites from Swalec billing report	186.8
5	Unmetered Supplies	9.2

Scope 3

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

- 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 ex 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 procured services were calculated in the same manner as for goods in category 6. As the contract for the leisure centres was 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		4438.1
6. Purchased material and fuel		1515.1
6	Well to Tank Emissions fuels	916.2
6	Procured Goods	598.9
7. Transport related activities		305.7
7	Commuting	243.0
7	Councillor mileage	8.7
7	Car travel/parking/ferry/toll expenses	52.0
7	Air Travel	1.0
7	Rail Fares	1.1
7	Taxi Fares	0.0
8. Waste disposal		0.0
8	Not applicable	0.0
9. Leased assets and franchising, outsourcing		2617.2
9	Dartmouth Leisure Centre	30.8
9	Dartmouth Indoor Pool	145.3
9	Ivybridge Leisure Centre	250.2
9	Quayside Leisure Centre	343.1
9	Totnes Leisure Centre	238.5
9	Procured services ex. leisure centre energy use	1609.3
10. Sold 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.