Mid Devon District Council Greenhouse Gas Inventory 2018/19

Company Information

Mid Devon District Council (MDDC)

Phoenix House, Phoenix Ln, Tiverton EX16 6PP

Reporting Period

 1^{st} April 2018 to 31^{st} 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 tCO₂e are shown in the inventory and graph below.

Total gross emissions in 2018/19 were 20,372 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	6493.3
1. Stationary combustion	5624.8
2. Owned transport	868.5
3. Process emissions	0.0
4. Fugitive emissions	0.0
SCOPE 2: Energy GHG indirect emissions	3542.9
5. Electricity	3542.9
SCOPE 3: Other indirect GHG emissions	10335.7
6. Purchased material and fuel	7565.8
7. Transport related activities	431.7
7. Transport related activities 8. Waste disposal	431.7 2.1
7. Transport related activities 8. Waste disposal 9. Leased assets and franchising, outsourcing	431.7 2.1 2336.1
7. Transport related activities 8. Waste disposal 9. Leased assets and franchising, outsourcing 10. Sold Goods and Services	431.7 2.1 2336.1 0.0
7. Transport related activities 8. Waste disposal 9. Leased assets and franchising, outsourcing 10. Sold Goods and Services TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)	431.7 2.1 2336.1 0.0 20371.8
7. Transport related activities 8. Waste disposal 9. Leased assets and franchising, outsourcing 10. Sold Goods and Services TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3) 11. Offset Emissions	431.7 2.1 2336.1 0.0 20371.8 0.0

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

Mid Devon District Council has committed to achieving 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

Emissions by type and in detail measured in tCO_2e are shown in the inventory below.

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). This includes all owned buildings including leased out buildings as these are on an Operating Lease. Calculations were undertaken following an information hierarchy with consumption or metered data (in some cases extrapolated to give 12 months of data) being used first, or if this was unknown to use area based benchmark data. Emissions from Council Owned housing has been taken to be a Scope 1/2 emission as it is assumed they are let on an "operating lease" as per Appendix F of the Greenhouse Gas Protocol. Emissions were calculated based on main heating fuel together with national average energy consumption per dwelling.
- 2. Owned Transport: Emissions associated with mobile equipment, typically transport equipment. The calculation is based on provided fuel consumption (litres of diesel) for a range of departments, and also for pool cars (based on amount spent on fuel and average annual fuel prices) taken as being owned transport.
- 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. MDDC state that this is minimal, and so has been taken as zero in the footprint.

The results are shown in the Table below.

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No.	Category	2018/19	2019/20	2020/21	2021/22	2022/23
SCOPE	1: Direct GHG emissions and removals	6493.3	0.0	0.0	0.0	0.0
1. Stati	onary combustion	5624.8	0.0	0.0	0.0	0.0
1	Letting Units	10.6	0.0	0.0	0.0	0.0
1	HRA shops (letted out)	0.0	0.0	0.0	0.0	0.0
1	Residential lettings	4.1	0.0	0.0	0.0	0.0
1	Miscallaneous (letted out)	17.8	0.0	0.0	0.0	0.0
1	Sports and Leisure Centres	453.4	0.0	0.0	0.0	0.0
1	Industrial Units (letted out)	37.2	0.0	0.0	0.0	0.0
1	Public Conveniences	0.0	0.0	0.0	0.0	0.0
1	Council Offices/Buildings	91.0	0.0	0.0	0.0	0.0
1	Cemeterys/Chapels	3.2	0.0	0.0	0.0	0.0
1	Council Houses	5007.5	0.0	0.0	0.0	0.0
2. Owne	ed transport	868.5	0.0	0.0	0.0	0.0
2	District Officer	8.8	0.0	0.0	0.0	0.0
2	Grounds Maintenance	62.8	0.0	0.0	0.0	0.0
2	Property Services	10.3	0.0	0.0	0.0	0.0
2	Recycling	210.2	0.0	0.0	0.0	0.0
2	Refuse	454.0	0.0	0.0	0.0	0.0
2	Street	70.4	0.0	0.0	0.0	0.0
2	Trade Waste	46.1	0.0	0.0	0.0	0.0
2	From fuel use unallocated to department	3.5	0.0	0.0	0.0	0.0
2	Pool Cars	2.5	0.0	0.0	0.0	0.0
3. Proce	ess emissions	0.0	0.0	0.0	0.0	0.0
3	Not applicable	0.0	0.0	0.0	0.0	0.0
4. Fugit	ive emissions	0.0	0.0	0.0	0.0	0.0
4	Not applicable	0.0	0.0	0.0	0.0	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 using the same principles as for 1. Stationary Combustion.

The results are shown in the Table below.

No.	Category	2018/19	2019/20	2020/21	2021/22	2022/23
SCOPE	2: Energy GHG indirect emissions	3542.9	0.0	0.0	0.0	0.0
5. Electi	ricity	3542.9	0.0	0.0	0.0	0.0
5	Letting Units	262.3	0.0	0.0	0.0	0.0
5	HRA shops (letted out)	27.4	0.0	0.0	0.0	0.0
5	Residential lettings	5.0	0.0	0.0	0.0	0.0
5	Miscallaneous (letted out)	23.0	0.0	0.0	0.0	0.0
5	Sports and Leisure Centres	255.8	0.0	0.0	0.0	0.0
5	Industrial Units (letted out)	38.1	0.0	0.0	0.0	0.0
5	Public Conveniences	12.6	0.0	0.0	0.0	0.0
5	Council Offices/Buildings	15.0	0.0	0.0	0.0	0.0
5	Cemeterys/Chapels	0.1	0.0	0.0	0.0	0.0
5	Council Houses	2903.6	0.0	0.0	0.0	0.0

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. Emissions from bought goods were estimated by examining total procurement spend by the council and allocating each line of spend to a sector within the economy (comprised mainly of goods and services). These were then multiplied by emission factors from Annex E of Environmental Reporting Guidelines. It should be noted that these factors are from 2009 and so result in a large area of uncertainty. 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 emissions were calculated based on mileage claims with the assumption that journeys were in an average car with unknown fuel. Business travel (road/rail/air) emissions were estimated for rail journeys based on known spend on rail travel and a generic cost per km factor. Commuting emissions were estimated based on number of staff and national annual average commuting distances, with the assumption that journeys were in an average car with unknown 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). Emissions have been calculated based on the known annual waste produced by the council at each of its sites.
- 9. Leased assets and franchising, outsourcing: Embedded emissions of all purchased services. These have been estimated in the same way as goods have in 6. Purchased material and fuel.
- 10. Sold goods and services: MDDC state that no additional sold goods or services have been identified.

The results are shown in the Table below.

No.	Category	2018/19	2019/20	2020/21	2021/22	2022/23
SCOPE	3: Other indirect GHG emissions	10335.7	0.0	0.0	0.0	0.0
6. Purch	ased material and fuel	7565.8	0.0	0.0	0.0	0.0
6	Procured Goods	5594.6	0.0	0.0	0.0	0.0
6	Well to Tank Emissions fuels	1971.2	0.0	0.0	0.0	0.0
7. Trans	port related activities	431.7	0.0	0.0	0.0	0.0
7	Grey Fleet (business travel in own cars)	45.7	0.0	0.0	0.0	0.0
7	Business travel train	0.9	0.0	0.0	0.0	0.0
7	Commuting	385.0	0.0	0.0	0.0	0.0
8. Wast	e disposal	2.1	0.0	0.0	0.0	0.0
8	Recycled waste	0.6	0.0	0.0	0.0	0.0
8	Residual wate	1.5	0.0	0.0	0.0	0.0
9. Lease	ed assets and franchising, outsourcing	2336.1	0.0	0.0	0.0	0.0
9	Procured Services	2336.1	0.0	0.0	0.0	0.0
10. Sola	Goods and Services	0.0	0.0	0.0	0.0	0.0
10	Not applicable	0.0	0.0	0.0	0.0	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.