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Mid Devon District Council's Organisational Carbon Footprint 2025/26

CENTRE FOR ENERGY AND THE ENVIRONMENT

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Management Summary

The Centre for Energy and the Environment at the University of Exeter was commissioned by Mid Devon District Council (MDDC) through the South West Energy and Environment Group (SWEEG) to develop and produce their annual carbon footprint for 2025/26. The footprint produced was based on BS EN ISO 14064-1 and the Greenhouse Gas Protocol. The inventory was produced for both traditional Scope 1 – 3 categories, and for a set of alternative categories.

Total net emissions for the 2025/26 period were 21,057 tCO_2e. Most emissions are Scope 3 (62%) with Scope 1 representing 29% of the total, and Scope 2 accounting for 9%. Net emissions in 2025/26 are 14% higher than in the previous year. Emissions from the alternative categories are broken down as follows:

- Buildings (excluding housing) 1,240 tCO_2e / 6% gross emissions: 41% of these emissions are from the leisure centres with a further 14% from the corporate estate (mainly council offices). Energy used by staff when working from home was estimated to be 6%. Emissions from this category went up by 41 tCO_2e (3%) with emissions mainly driven by changes in leisure centre emissions (increases at Exe Valley and Lords Meadow being greater than the drop at Culm Valley).
- Social Housing 7,583 tCO_2e / 36% gross emissions: Whilst this is the most significant source of emissions within the footprint, it is not based on metered data and MDDC does not have direct control over energy use within these buildings. Emissions from this category decreased by 192 tCO_2e mainly due to a drop in the electricity emission factor. The estimate from this category could be improved in future years by looking to match consumption data for each property using post codes.
- Transport 1,541 tCO_2e / 7% gross emissions: Most transport emissions were from MDDC's fleet, with the majority of these associated with waste disposal. Emissions from this category went up by 21 tCO_2e (1%) compared to the previous year mainly due to increased fuel consumption by the fleet (in particular refuse collection and kerbside recycling).
- Procurement 11,051 tCO_2e / 52% gross emissions: Procurement represents a significant proportion of the footprint, of which over half is associated with construction activities. Estimation of emissions from procurement is inaccurate as it is based purely on spend data and coarse emission factors. Focussing on large areas of spend and looking to quantify GHG emissions using specific activity data would improve the quality of the calculations. Emissions from this category increased by 2,631 tCO_2e (31%) compared to the previous year. This has been driven mainly by significantly higher emissions from activities assigned to a construction category (£19.3 million of spend in 2024/25 compared to £30.6 million in 2025/26).
- Offsets -358 CO_2e / -2% gross emissions: Offsets are responsible for only a small reduction in overall emissions, with almost all this due to the purchase of REGO backed electricity. These offsets decreased by 62 tCO_2e mainly due to the change in grid emission factor (the offsetting value of 1 kWh of electricity was greater in 2024/25 compared to 2025/26).

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1 Introduction

Mid Devon District Council (MDDC) commissioned the Centre for Energy and the Environment at the University of Exeter through the South West Energy and Environment Group (SWEEG) to quantifying their greenhouse gas (GHG) emissions (sometimes referred to as a carbon footprint) based on the most relevant standards. The Centre has produced MDDC's footprint every year since 2018/19.

There are two main standards in use that provide methods for quantifying organisational GHG emissions. The first of these is BS EN ISO 14064-1 [1] (referred to from here as ISO 14064) and the accompanying ISO/TR 14069 [2] which provides specific guidance on applying ISO 14064. The second is the Greenhouse Gas Protocol (referred to from here as the GHG Protocol) [3] which was revised in 2015 and has accompanying documents [4] and [5] which provide more detail on quantifying emissions from supply chains. In addition, there is the UK's Environmental Reporting Guidelines (ERG) [6] (specifically Chapter 3), which is broadly based on 14064 and the GHG Protocol, but is a lot less detailed. Finally, PAS 2060 [7] enables organisations to demonstrate carbon neutrality. Within PAS 2060 (Annex C Table C.1) it lists ISO 14064, the GHG Protocol, and the ERG as the three standards that can be used by organisations to provide methods to quantify GHG emissions. In general, there is significant overlap between ISO 14064 and the GHG Protocol. It can be said that in meeting the ISO 14064 criteria, the GHG Protocol criteria and ERG will also be met.

2 General Approach

2.1 Definition of "Carbon Footprint"

A "carbon footprint" is taken here to be the net emissions of carbon dioxide equivalent by an organisation over a year (i.e., an annual GHG inventory), with the full boundaries of the organisation discussed in the sections below. The net emissions are established by calculating emissions from all sources (processes that release GHGs into the atmosphere), sinks (processes that remove GHGs from the atmosphere) and reservoirs (components other than the atmosphere that have the capacity to accumulate GHGs).

GHGs that contribute to anthropogenic climate change include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6). These each have a different contributory impact to climate change for the same fixed mass. The total impact of all GHGs resulting from the activities of an organisation is measured by multiplying the mass of each gas emitted by its Global Warming Potential (GWP) to an equivalent mass of carbon dioxide termed "carbon dioxide equivalent" (measured in tCO_2e). Typically, GHG emission factors will already be based on carbon dioxide equivalents and so no additional calculations will be necessary. Section 5.2.2 of ISO 14064 states that direct emissions should be quantified separately for each GHG. However, it is recommended here the carbon footprint is reported as carbon dioxide equivalent only (i.e., in tCO2e) with no disaggregation into the separate GHGs.

2.2 Guiding Principles

As per Section 4 of ISO 14064 the footprint should be developed with the following principles:

- Relevance: GHG sources (and sinks and reservoirs) and methodologies should be appropriate
- Completeness: All relevant GHG emissions and removals should be included
- Consistency: Meaningful comparison in GHG-related information should be enabled
- Accuracy: Bias and uncertainty should be reduced as much as is practicable
- Transparency: Information should be sufficiently disclosed.

2.3 Organisational Boundaries

Confirming the organisational boundary is an important step at the outset of the production of the footprint. This is covered in Section 5.1 and Annex A of ISO 14064 and in more detail and with examples in Chapter 3 of the GHG Protocol. The two standards align in their approach. It is stated that organisations can comprise one or more facilities, and that at each of these GHG emissions may be produced from one or more sources or sinks. A facility is defined as a single installation, set of installations or production processes (stationary or mobile), which can be defined within a single geographical boundary, organizational unit or production process.

Facility-level emissions should then be consolidated by one of the following approaches:

- Control: The organisation accounts for all emissions over which it has either financial or operational control.
- Equity: The organisation accounts for its proportion of GHG emissions from respective facilities. This is more likely to be relevant for joint ventures (JVs)

The control approach is likely to be the most relevant here. Under the control approach 100% of GHG emissions are accounted for operations over which it has control. Emissions from operations where the organisation owns an interest but has no control are not included. Control is defined in one of two ways, and a choice must be made between them:

- Financial control: An organisation has financial control over the operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. For example, financial control usually exists if the company has the right to the majority of benefits of the operation, however these rights are conveyed. Similarly, a company is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets.
- Operational control: An organisation has operational control over an operation if it, or one of its subsidiaries, has the full authority to introduce and implement its operating policies at the operational level.

It is stated in the GHG Protocol that in most cases, whether an operation is controlled by the company or not does not vary based on whether the financial control or operational control criterion is used (though the oil and gas sector is a notable exception). In practice here, using either approach is likely to result in the same total emissions within the inventory. There may however be some differences in categorisation. For example, Annex F of the GHG Protocol outlines in detail how to account for emissions from leased assets. For each scenario emissions will fall within the footprint, though whether they are Scope 1/2 or Scope 3 (scopes will be discussed in the next section) will depend on the type of lease. There are two types of leases which are:

- Finance or Capital lease: This type of lease enables the lessee to operate an asset and also gives the lessee all the risks and rewards of owning the asset. Assets leased under a capital or finance lease are considered wholly owned assets in financial accounting and are recorded as such on the balance sheet. Under this lease the lessee is considered to have ownership and both financial and operational control of the leased asset. Conversely, the lessor does not have ownership or financial or operational control of these assets.
- Operating lease: This type of lease enables the lessee to operate an asset, like a building or vehicle, but does not give the lessee any of the risks or rewards of owning the asset. Any lease that is not a finance or capital lease is an operating lease. Under this lease the lessee is considered not to have ownership or financial control but to have operational control of the

leased asset. Conversely, the lessor has ownership and financial control of these assets but not operational control.

The allocation of emissions depending on the lease type and whether the asset is being leased or let out using the Financial Control approach is shown in Table 1. If an Operational Control approach is used instead, then the values for the Operating lease column are swapped (i.e., Scope 1/2 becomes Scope 3 and vice-versa).

Table 1: Allocating emission from leased assets under using an organisation's Financial Control boundary for lessee and lessor scenarios (adapted from Annex F GHG Protocol)

Perspective	Finance/Capital Lease	Operating Lease
MDDC are the lessee e.g., tenant	Lessee does have ownership and financial control, therefore emissions associated with fuel combustion are scope 1 and with use of purchased electricity are scope 2.	Lessee does not have ownership or financial control, therefore emissions associated with fuel combustion are scope 3 and with use of purchased electricity are scope 3.
MDDC are the lessor e.g., landlord	Lessor does not have ownership or financial control, therefore emissions associated with fuel combustion are scope 3 and with use of purchased electricity are scope 3.	Lessor does have ownership and financial control, therefore emissions associated with fuel combustion are scope 1 and with use of purchased electricity are scope 2.

It is recommended that the footprints should be produced based on a Financial Control organisational boundary.

2.4 Reporting Boundaries

Organisations should establish reporting boundaries and sources and sinks of GHG emissions within each. These are separated into direct and indirect emissions with sub-categories as discussed in the next section. This results in Scopes 1, 2 and 3 emissions as follows and shown in Figure 1:

- Scope 1 (direct emissions): Activities owned or controlled by the organisation that release emissions straight into the atmosphere, e.g., combustion in owned boilers or vehicles.
- Scope 2 (energy indirect): Emissions released into the atmosphere associated with the consumption of purchased electricity, heat, steam, and cooling.
- Scope 3 (other indirect): Emissions that are a consequence of the organisation's actions, which occur at sources which are not in ownership or control of the organisation, e.g., business travel by means other than company vehicles, waste disposal, or purchased materials.

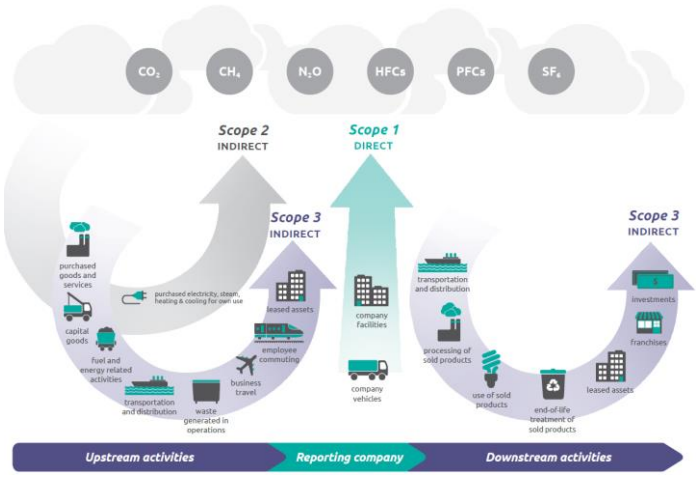


Figure 1: The relationship of direct and indirect emissions [Source: GHG Protocol]

Scope 3 emissions can occur upstream, downstream, or be designated as out of stream. This is helpful to avoid double-counting between organisations. The inclusion of indirect emissions (Scope 3) with discussion of this in Annex H of ISO 14064. Here it is stated that these criteria should be based on those stated in Section 2.2 of this report and that significance should be based on magnitude, level of influence, business risk or opportunity, sector-specific guidance, outsourcing and employee engagement. These should be assessed for significance with the help of external experts, sector-specific guidance, literature reviews or third-party databases. Often, a significance test will be clear, but where it is not (for example where data is qualitative) then a "deeper analysis of the criteria may be helpful". An example is given where it is estimated that a source is estimated to be approximately 10% of an organisation's total indirect emissions but that relevant data would be very expensive to obtain, and the resulting accuracy would be poor. In all cases where sources of emissions are not included this should be stated in a transparent manner. The next section discusses categories in more detail.

2.5 Inventory Categories

Categories within each of the three scopes are provided by ISO 14064 and the GHG Protocol and their secondary documents respectively. These two standards were cross-referenced and in general they align, with some minor differences. These include slight category name differences, ISO 14064 having a "Client and Visitor" category and the GHG Protocol having a "Processing of Sold Products" category exclusively of one another. ISO 14064 does however have a catch-all "Other Indirect Emissions" category so in that sense is more comprehensive and has been chosen as the basis for selection of sub-categories here. A list of categories and whether they have been scoped in and out for the footprints based on initial assessments and discussions is shown in Table 2. Specific explanation of what is included within each of these together with data collection and calculation approaches is provided in Section 3.

Table 2: Inventory categories and their recommended inclusion or not within the footprint

Scope	Upstream/ Downstream	No.	Category ISO 14064-1	Include/ Exclude
Scope 1: Direct GHG emissions and removals				
1	Direct	1	Direct emissions from stationary combustion	Include
		2	Direct emissions from mobile combustion	Include
		3	Direct process related emissions	Exclude
		4	Direct fugitive emissions	Include
		5	Direct emissions and removals from Land Use, Land Use Change and Forestry (LULUCF)	Exclude
Scope 2: Energy GHG indirect emissions				
2	Upstream	6	Indirect emissions from imported electricity consumed	Include
		7	Indirect emissions from consumed energy imported through a physical network	Exclude
Scope 3: Other indirect GHG emissions				
3	Upstream	8	Energy-related activities not included in direct emissions and energy indirect emissions	Include
		9	Purchased goods and services[1]	Include
		10	Capital equipment	Include
		11	Waste generated from organisational activities	Include
		12	Upstream transport and distribution	Exclude

[1] This category is called "Purchased products" in ISO 14064 but the equivalent GHG Protocol category "Purchased goods and services" is deemed more appropriate.

		13	Business travel	Include
		14	Upstream leased assets	Exclude
		15	Investments	Exclude
	Downstream	16	Client and visitor transport	Exclude
		17	Downstream transport and distribution	Exclude
		18	Use stage of the product	Exclude
		19	End of life of the product	Include
		20	Downstream franchises	Exclude
		21	Downstream leased assets	Exclude
		22	Employee commuting	Include
	Varies	23	Other indirect emissions not included in the other 22 categories	Exclude

In addition to the above categories, there is value in reporting against categories that better align with the internal organisation of MDDC. For example, emissions from buildings may arise from stationary combustion (category 1 in Table 2), imported electricity (6), energy related activities (8), capital equipment (10) i.e., the construction of new buildings, and upstream leased assets (14) i.e., buildings that MDDC are tenants in. Reporting emissions under a "buildings" category with additional sub-categories as required, may be more informative. A secondary reporting category list can be produced by mapping all the categories (including splitting categories where necessary) into the new list. Following discussions with MDDC, a secondary category list has produced as follows:

1. Buildings (exc. housing)
    1. Corporate Estate
    2. Leisure Centres
    3. Other Non-Domestic
    4. Waste from Buildings
    5. Homeworking Energy
2. Social Housing
    1. Operational emissions
3. Transport
    1. Own Vehicles
    2. Grey Fleet
    3. Business Travel
    4. Commuting
4. Procurement
    1. Goods
    2. Construction
    3. Services
5. Offsets
    1. Exported Renewable Energy
    2. REGO Electricity
    3. Land Use Change
    4. Purchased Offsets

2.6 Reporting Periods

The carbon footprint should be undertaken for a period covering one year and should be updated on an annual basis. Here, the footprint will be aligned to the financial year April 2024 to March 2025.

The underlying data and emission factors used in the calculations should be based on the chosen reporting period. Where there is no data available covering the full reporting period, the following hierarchical approach should be taken:

1. If data is available for part of the period, then it should be used to provide an average value for that period of time and then multiplied up to estimate the total for a year. For example, if consumption data is only available for half of the year, then it should be doubled to estimate consumption for a full year. In the case of data that is sensitive to the time of year (for example gas consumption in buildings), then efforts should be made to normalise the consumption for the time of year (for example degree day data can be used in this case).
2. If partial data is not available, then data from the previous year's footprint should be used.
3. If no data from previous years are available, then estimates should be made using secondary sources of data e.g., benchmark data in the case of building energy consumption.

In all cases, if data is not available for a full year, then measures should be put in place to enable the data to be available for the next year's footprint. In addition, it should be clearly stated where estimates have been made in the absence of data being available.

2.7 Quantifying Emissions and Removals

Calculation methodologies should be selected to minimise uncertainty and yield accurate, consistent, and reproducible results. This should consider technical feasibility and cost of data gathering. Within each category, sources and sinks should be identified. Annex C of ISO 14064 provides detailed supplementary guidance on selecting data and developing models and methods for quantifying emissions and removals. It is stated that data that is typically uses includes:

- Activity data e.g., mass, volume, energy or monetary value
- Calorific values
- Emission factors, usually expressed as tCO_2e/quantity of activity data
- Composition data, usually expressed as carbon content, often used for higher accuracy and primary and site-specific emission factor calculations
- Oxidisation factors
- Conversion factors
- Emissions, usually on a mass basis per a reference period (e.g., hourly);
- Monetary values, usually amounts spent on certain products, materials or services

Some of the above are likely to be more relevant than others here. In general, calculating emissions from an activity will depend on the data available from the organisation. As it is not practicable to directly measure the actual mass of GHGs emitted from an activity, the calculation will take the form of multiplying some input activity data with an emission factor.

The choice of activity data will depend on what is available, but in principle a data hierarchy approach should be taken that priorities primary data (i.e., that collected by the organisation) and site-specific data over secondary data and other estimates. For example, for emissions from vehicles, it would be preferable to use the actual amount of fuel used to the amount spent on fuel, which in turn would be more accurate than knowing the distance travelled. Where a mix of data is available within a category then the hierarchy approach should still be followed. For example, if fuel consumption data exists for

some vehicles and mileage data exists for all vehicles, then the fuel consumption data should be used for those vehicles, and the mileage data for the remainder. In addition, steps should be put in place to capture fuel consumption data for all vehicles for the following year's inventory. Specific guidance on the expected hierarchy for each category identified in Section 2.5 is provided in Section 3.

Emission factors may come from a range of sources, however the most extensively used will be the UK GHG Conversion Factors for Company Reporting [8] (referred to from here as the "Government EFs"). These provide consistent emission factors to be used for a range of activities and are updated annually.

In all cases, as a minimum an aggregate value should be quantified for each category. However, there will be benefits to maintaining as fine a level of granularity as the source data enables within the calculations and reporting. For example, for buildings this would include calculating emissions on a per-building basis if metered data is available for each building, rather than just as the sum-total of all buildings within the estate. For reporting it may be preferable to only separate out the most significant sources within the category to avoid long unmanageable lists e.g., for large buildings, with smaller buildings or sites aggregated together. The full detail should however be retained within calculation tools or spreadsheets to enable onward analysis.

Any emissions offset using carbon credits should be separately reported and the guidance in Section 9 and Annex C of PAS 2060 should be used to ensure the integrity of those offsets.

It is stated in ISO 14064 that uncertainty in the outputs should be quantified and documented, and guidance for doing so is given in ISO/TR 14069. However, this approach relies on knowing in quantified terms the uncertainty associated with each part of the calculation (activity data and emission factors), and as this will not be known it is recommended that at this time, quantifying of uncertainty will not be possible and should not be pursued.

2.8 Intensity Ratios

The headline inventory should be reported in absolute terms as tCO_2e. In addition, normalising the emissions (either totals, sub-totals, or for individual categories) by some common variable to produce "intensity-based" emissions enables the result to be contextualised, and some comparison between different organisations to be made. This has not been done here.

3 Data Collection and Analytical Approach by Category

3.1 Scope 1: Direct Emissions

3.1.1 Direct emissions from stationary combustion

Description

Direct emissions arising from the combustion of fuels (for example, natural gas or oil) on-site in plant (for example boilers or generators) within the organisational boundaries of the reporting organisation. In practice, this is likely to be predominantly gas boilers in owned buildings.

Approach Taken for Footprint

MDDC own both non-domestic buildings, and social housing. The non-domestic building is a mix of council offices, leisure centres, other council buildings, and buildings that are owned but leased out to others. Metered data was generally available for the offices and leisure centres, and a small number of the other buildings. For the remainder, annual energy consumption was estimated based on floor area

and the CIBSE TM41 [11] benchmarks. These were then combined with the Government EFs to calculate GHG emissions.
Metered data from social housing was not available. Social housing emissions were calculated based on estimated energy consumption from a dwelling asset list. The dwelling heating system was used to establish the fuel type. Ofgem average metered consumption for gas heated dwellings was assumed for all non-electric heating systems. For electrically heated buildings (Scope 2), electricity profile class 2 was assumed for electricity consumption. For dwellings heated by heat pumps, the same energy use as for a gas heated home was assumed, though adjusted for an ASHP with an assumed efficiency of 2.5. Adjustments were made for any PV (based on a derived generation of 892 kWh/kWp from MDDC data and a presumption of 50% self-consumption) or SWH systems (assumed 1,439 kWh saving for gas heated dwellings or 428 kWh savings for electrically heated dwellings, inferred from an Energy Savings Trust guide). All energy consumption was combined with the Government EFs to calculate GHG emissions.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Corporate Estate > *By Site*
- Buildings (exc. housing) > Leisure Centres > *By Site*
- Buildings (exc. housing) > Other Non-Domestic > *By Site*
- Social Housing > Operational Emissions > *Aggregate Total*

3.1.2 Direct emissions from mobile combustion

Description

Direct emissions arising from fuel burnt in transport equipment within the organisational boundaries of the reporting organisation. In practice, this will be emissions from owned vehicles. Emissions from other transport will be accounted for within Scope 3 categories.

Approach Taken for Footprint

Total litres of diesel for each of District Officer, Grounds Maintenance, Property Services, Recycling, Refuse, Street and Trade Waste was provided. This was combined with the Government EFs to calculate GHG emissions.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Transport > Own Vehicles > *By Service*

3.1.3 Direct process related emissions

This category has been taken to be out of scope as it is not relevant.

3.1.4 Direct fugitive emissions

Description

These are direct uncontrolled emissions of GHG, with any process that directly utilises GHG being a potential source of emissions. In practice, this will mean emissions of refrigerants for space conditioning systems in buildings (e.g., cooling or heat pumps) and potentially vehicles owned by the organisation.

Approach Taken for Footprint

It was stated that there were no leaks or refills in the period.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Corporate Estate > *By Site*
- Buildings (exc. housing) > Leisure Centres > *By Site*
- Buildings (exc. housing) > Other Non-Domestic > *By Site*

3.1.5 Direct emissions and removals from Land Use, Land Use Change and Forestry (LULUCF)

This category has been taken to be out of scope.

3.2 Scope 2: Energy Indirect Emissions

3.2.1 Indirect emissions from imported electricity consumed

Description

These are indirect emissions associated with the import of electricity by the organisation. It excludes upstream emissions associated with the production of fuels feeding power stations, embodied emission associated with the production of generation plant, and the transmission and distribution network (these are captured within Scope 3). In practice, this will be electricity consumption from buildings, and increasingly vehicles.

Approach Taken for Footprint

For buildings, the same process as described in Section 3.1.1 was followed. Exported renewable energy (metered at Phoenix House, Exe Valley Leisure Centre, Lords Meadow Leasure Centre, and Carlu Close waste depot) and REGO purchased electricity was also reported separately as offsets.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Corporate Estate > *By Site*
- Buildings (exc. housing) > Leisure Centres > *By Site*
- Buildings (exc. housing) > Other Non-Domestic > *By Site*
- Social Housing > Operational Emissions > *Aggregate Total*
- Offsets > Exported Renewable Electricity > *Aggregate Total*
- Offsets > REGO Electricity > *Aggregate Total*

3.2.2 Indirect emissions from consumed energy imported through a physical network

This category has been taken to be out of scope as it is not relevant.

3.3 Scope 3: Other Indirect Emissions

3.3.1 Energy-related activities not included in direct emissions and energy indirect emissions

Description

These are indirect emissions associated upstream activities associated with fuel and electricity consumption by the reporting organisation. Examples include the extraction, production, transport, and distribution of fuel and energy. In practice, this will be an additional well to tank (WTT) uplift on all fuel use from stationary and mobile construction (Sections 3.1.1 and 3.1.2), imported electricity

(Section 3.2.1), business travel (Section 3.3.6), upstream leased assets (Section 3.3.7) and employee commuting (Section 3.3.15).

Approach Taken for Footprint

These were calculated automatically in the spreadsheet created for the analysis by establishing these emissions in parallel to the main emission source, as described above.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Corporate Estate > *By Site*
- Buildings (exc. housing) > Leisure Centres > *By Site*
- Buildings (exc. housing) > Other Non-Domestic > *By Site*
- Social Housing > Operational Emissions > *Aggregate Total*
- Transport > Own Vehicles > *By Service*
- Transport > Grey Fleet > *Aggregate Total*
- Transport > Business Travel > *By Mode*
- Transport > Commuting > *Aggregate Total*

3.3.2 Purchased products and services

Description

These are emissions associated with the consumption of goods and services by the reporting organisation that are not otherwise included elsewhere in the inventory. For example, capital equipment, business travel, or electricity consumption are all examples of goods and services that are consumed, but they are already accounted for within specific sub-categories in the inventory that have been created within the standards to improve transparency and consistency. These scope of these emissions are “cradle to gate” i.e., all emissions that occur up to the point of sale by a producer e.g., raw material extraction, transport to a manufacturing facility, processing etc., but not including onward transport to the customer (the reporting organisation here), which is covered in Section □ “upstream transport and distribution”. In practice, this category will rely heavily on engagement with both procurement departments, and supply chain partners.

Approach Taken for Footprint

Spend data broken down into detailed account codes was provided. These account codes were cross referenced against the list of codes provided in past footprint exercises. The previous years’ allocations were then used to allocate a sector to all account codes in the current period. Any spend that was being included using a more specific method (e.g. energy use), or that was outside of the scope of the footprint, was excluded from the calculations. The spend in each sector was multiplied by the emission factor given in the UK Carbon Footprint. As these are always available only two years in arrears, these emissions factors were adjusted for inflation.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Procurement > Goods > *Aggregate Total*
- Procurement > Construction > *Aggregate Total*
- Procurement > Services > *Aggregate Total*

3.3.3 Capital equipment

Description

These are emissions associated with the purchase of capital goods. There is the potential for overlap in the categorisation of either purchased goods/products, and capital goods and so it is important that they are only accounted for in one place. The GHG Protocol states that *"Capital goods are final products that have an extended life and are used by the company to manufacture a product; provide a service; or sell, store, and deliver merchandise. In financial accounting, capital goods are treated as fixed assets or as plant, property, and equipment (PP&E). Examples of capital goods include equipment, machinery, buildings, facilities, and vehicles"*. Whilst purchased products are sometimes referred to as "consumables" and are used over a short period of time (e.g., days or usually less than a year), capital goods are used for much longer periods (e.g., 5 to 50 years). Whether a good is classified as a "purchased product" or "capital good", the reporting should make clear which category it is being accounted for in.

In practice this is likely to include:

- The construction of new buildings: Emissions should be reported on a per building basis.
- Major refurbishment of existing buildings, including replacement of major plant: Emissions should be reported on a per building basis for refurbishment, whilst major plant can be aggregated.
- New vehicles: Emissions can be reported as aggregated values with descriptions e.g., 20 new cars for Division X etc.

Approach Taken for Footprint

The procurement spend from Section 3.3.2 was used to capture capital spend i.e. no distinction was made in the source data between capital and revenue spend. All emissions were reported within Section 3.3.2.

Alternative Categorisation and Mapping

See section 3.3.2.

3.3.4 Waste generated from organisational activities

Description

Waste can impact on organisational GHG emissions in several ways, including:

- The use of recycled materials in the products the organisation purchases (already potentially accounted for in the purchase of those materials).
- The transport and subsequent processing of waste generated by the organisation. This is what is covered within this section. Technically, the transport of waste from the organisation to the waste treatment facility would constitute "upstream transport and distribution", however as the Government EFs combine the transport and waste processing impact, they are assumed to be included within this section.
- The onward disposal of waste from products sold by the organisation. This is not applicable here.

For waste generated by the organisation that is recycled, this has two potential GHG reducing benefits, firstly the reuse of material can lower embodied emissions from purchased products (this is accounted for in the purchase of those products), and secondly by avoiding sending that waste to be processed (e.g., preventing material from entering landfill sites). The second of these can be optionally reported as

"avoided emissions", however as the supporting data is likely to be hard to obtain and the overall impact minimal, it is recommended that this is not reported.

Approach Taken for Footprint

An estimate of waste produced by MDDC was made by multiplying the capacity of the bins at each site by an assumed collection frequency. It was assumed that all waste was either recycled or processed at an energy from waste plant.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Waste from Buildings > *Recycled/Residual waste aggregates.*

3.3.5 Upstream transport and distribution

This category has been taken to be out of scope as it was not meaningfully possible to establish these emissions, for example associated with purchased goods.

3.3.6 Business travel

Description

This section includes emissions from business travel in vehicles owned or operated by third parties and also includes emissions associated with hotel stays on business trips. The aim should be to report emissions by mode of transport and for hotel stays as follows.

- Cars – hire cars
- Cars – "grey fleet" (employee-owned vehicles other than employee commuting)
- Taxis
- Air travel
- Rail travel
- Bus and coach travel
- Hotel stays

Emissions associated with travel in vehicles owned or leased by the organisation, or from commuting, are covered in other sections.

Approach Taken for Footprint

Data was available as total annual mileage for each of 'grey fleet' and 'councillor'. This was combined with the Government's EF for an 'average car with unknown fuel' to estimate emissions.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Transport > Grey Fleet > *Aggregate Total*

3.3.7 Upstream leased assets

This category has been taken to be out of scope as it is not relevant.

3.3.8 Investments

This category has been taken to be out of scope.

3.3.9 Client and visitor transport

This category has been taken to be out of scope as it is not relevant.

3.3.10 Downstream transport and distribution

This category has been taken to be out of scope as it is not relevant.

3.3.11 Use stage of the product

This category has been taken to be out of scope as it is not relevant.

3.3.12 End of life of the product

This category has been taken to be out of scope as it is not relevant.

3.3.13 Downstream franchises

This category has been taken to be out of scope as it is not relevant.

3.3.14 Downstream leased assets

This category has been taken to be out of scope as it is not relevant. Any buildings that are owned by MDDC but leased to others (downstream) would be accounted for in sections 3.1.1 and 3.2.1 as under financial control reporting and an operating lease, these would be Scopes 1 and 2 respectively.

3.3.15 Employee commuting

Description

This includes transport of employees between their homes and workplaces. This can cover a range of modes but in practice will be mainly driving (either single driver or car sharing) as well as potentially public transport modes and walking/cycling. Also included in this section is 'home working' i.e., emission arising from energy used to heat homes and operate work equipment whilst staff are home working.

Approach Taken for Footprint

No specific staff travel survey was available. MDDC provided staff numbers as FTE of either 'non-hybrid' and 'hybrid' staff. Non-hybrid staff were assumed to travel to work every day. Hybrid staff were assumed to work at home for 50% of the time with the rest at their place of work. The National Travel Survey provides average annual commuting distances by mode. These were used with the FTE data to estimate total mileage by mode. These were combined with the Government's EFs to establish commuting emissions.

Homeworking emissions were calculated by multiplying the hybrid FTE number by 50% assumed worked at home by annual hours worked (based on 230 days/year, 7.5 hours/day) to establish total annual homeworking hours and then multiplying this by the Government EF for homeworking.

Alternative Categorisation and Mapping

For the alternative categories, emissions from this category should be allocated to:

- Buildings (exc. housing) > Homeworking Energy > *Aggregate Total*
- Transport > Commuting > *Aggregate Total*

3.3.16 Other indirect emissions not included elsewhere

No other sources of emissions have been identified.

3.4 Offset Carbon

Description

This includes any GHG offsets, for example purchased voluntary offsets, or exported renewable energy.

Approach Taken for Footprint

There were no purchased offset carbon credits in this year. Offsetting associated with export of renewable energy and purchase of REGO backed electricity are discussed in Section 3.2.1.

Alternative Categorisation and Mapping

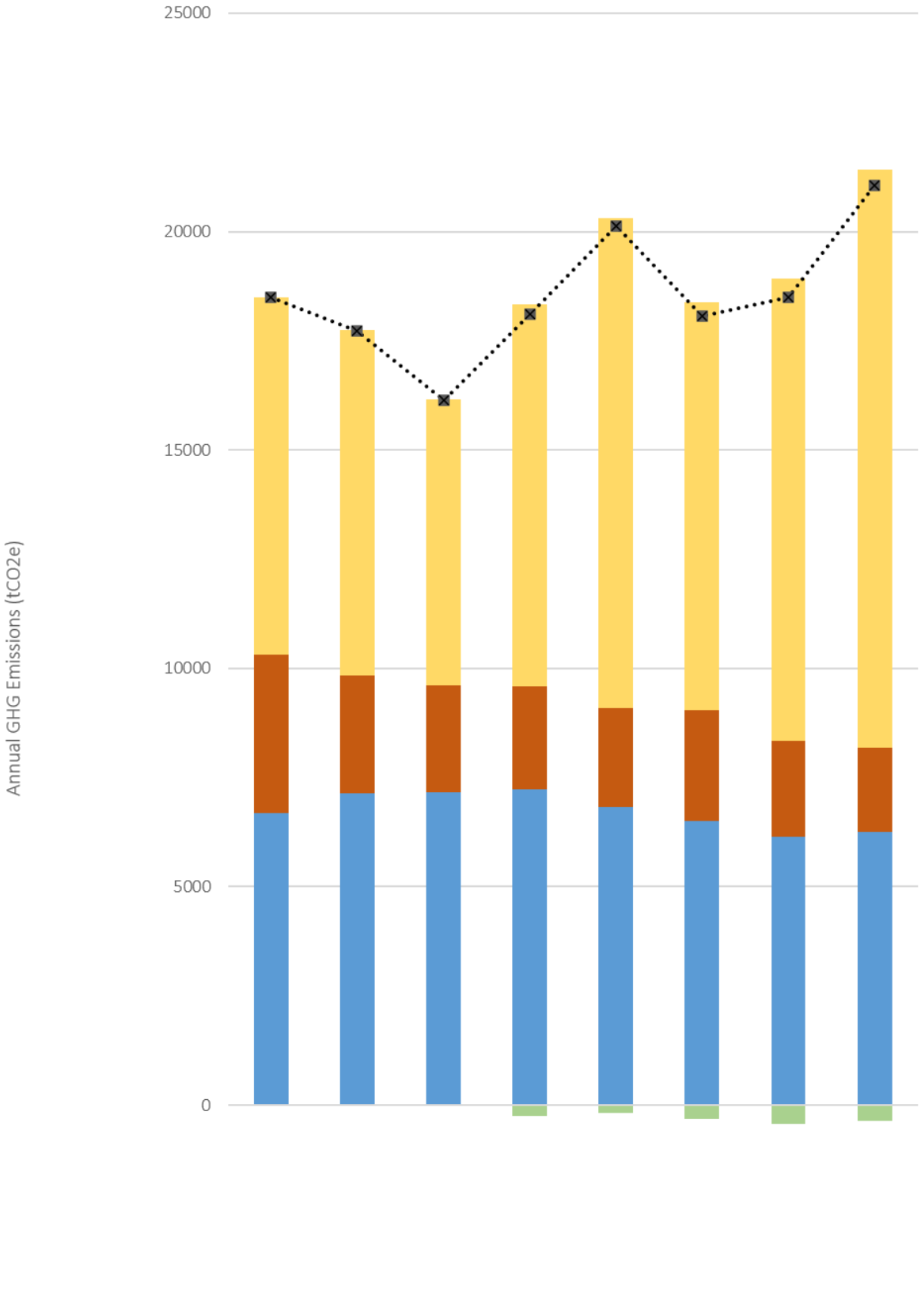
For the alternative categories, emissions from this category should be allocated to:

- Offsetting > Exported Renewable Energy
- Offsetting > Purchased voluntary offsets

4 Results

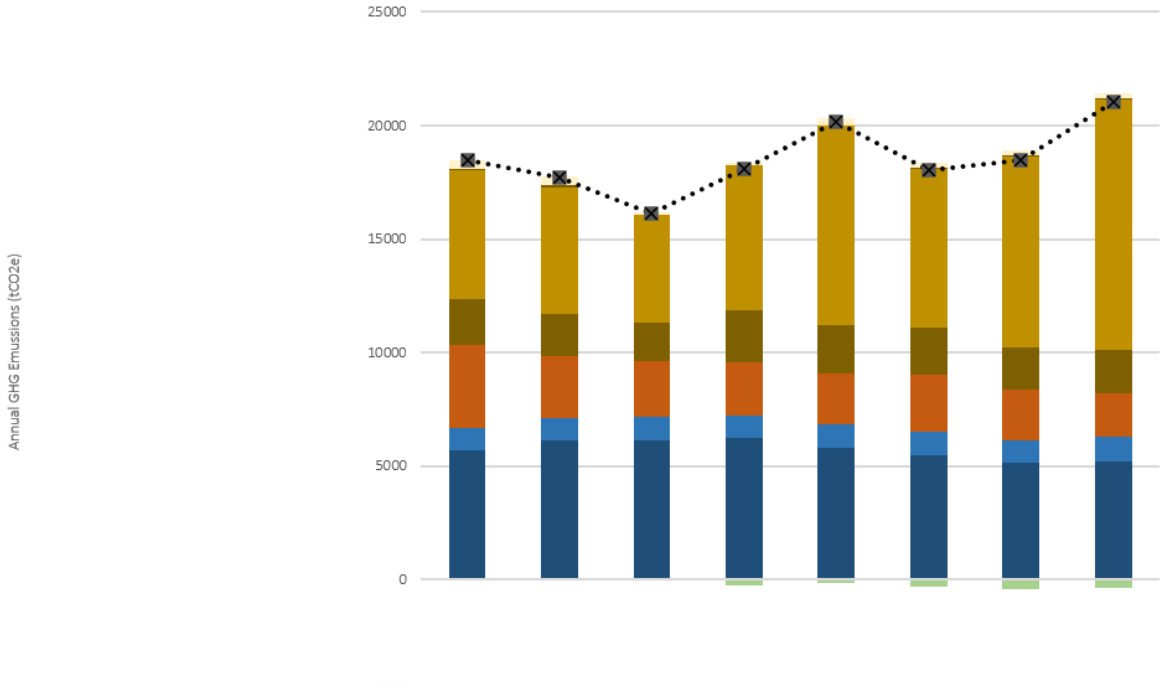
The results of the calculations for the ISO 14064 categories are shown in Figure 2 and Figure 3. The results for the alternative categories are shown in Figure 4 and Figure 5. Total net emissions for the 2025/26 period were 21,057 tCO_2e. Most emissions are Scope 3 (62%) with Scope 1 representing 29% of the total, and Scope 2 accounting for 9%. Net emissions in 2025/26 are 14% higher than in the previous year. Emissions from the alternative categories are broken down as follows:

- Buildings (excluding housing) 1,240 tCO_2e / 6% gross emissions: 41% of these emissions are from the leisure centres with a further 14% from the corporate estate (mainly council offices). Energy used by staff when working from home was estimated to be 6%. Emissions from this category went up by 41 tCO_2e (3%) with emissions mainly driven by changes in leisure centre emissions (increases at Exe Valley and Lords Meadow being greater than the drop at Culm Valley).
- Social Housing 7,583 tCO_2e / 36% gross emissions: Whilst this is the most significant source of emissions within the footprint, it is not based on metered data and MDDC does not have direct control over energy use within these buildings. Emissions from this category decreased by 192 tCO_2e mainly due to a drop in the electricity emission factor. The estimate from this category could be improved in future years by looking to match consumption data for each property using post codes.
- Transport 1,541 tCO_2e / 7% gross emissions: Most transport emissions were from MDDC's fleet, with the majority of these associated with waste disposal. Emissions from this category went up by 21 tCO_2e (1%) compared to the previous year mainly due to increased fuel consumption by the fleet (in particular refuse collection and kerbside recycling).
- Procurement 11,051 tCO_2e / 52% gross emissions: Procurement represents a significant proportion of the footprint, of which over half is associated with construction activities. Estimation of emissions from procurement is inaccurate as it is based purely on spend data and coarse emission factors. Focussing on large areas of spend and looking to quantify GHG emissions using specific activity data would improve the quality of the calculations. Emissions from this category increased by 2,631 tCO_2e (31%) compared to the previous year. This has been driven mainly by significantly higher emissions from activities assigned to a construction category (£19.3 million of spend in 2024/25 compared to £30.6 million in 2025/26).
- Offsets -358 CO_2e / -2% gross emissions: Offsets are responsible for only a small reduction in overall emissions, with almost all this due to the purchase of REGO backed electricity. These offsets decreased by 62 tCO_2e mainly due to the change in grid emission factor (the offsetting value of 1 kWh of electricity was greater in 2024/25 compared to 2025/26).



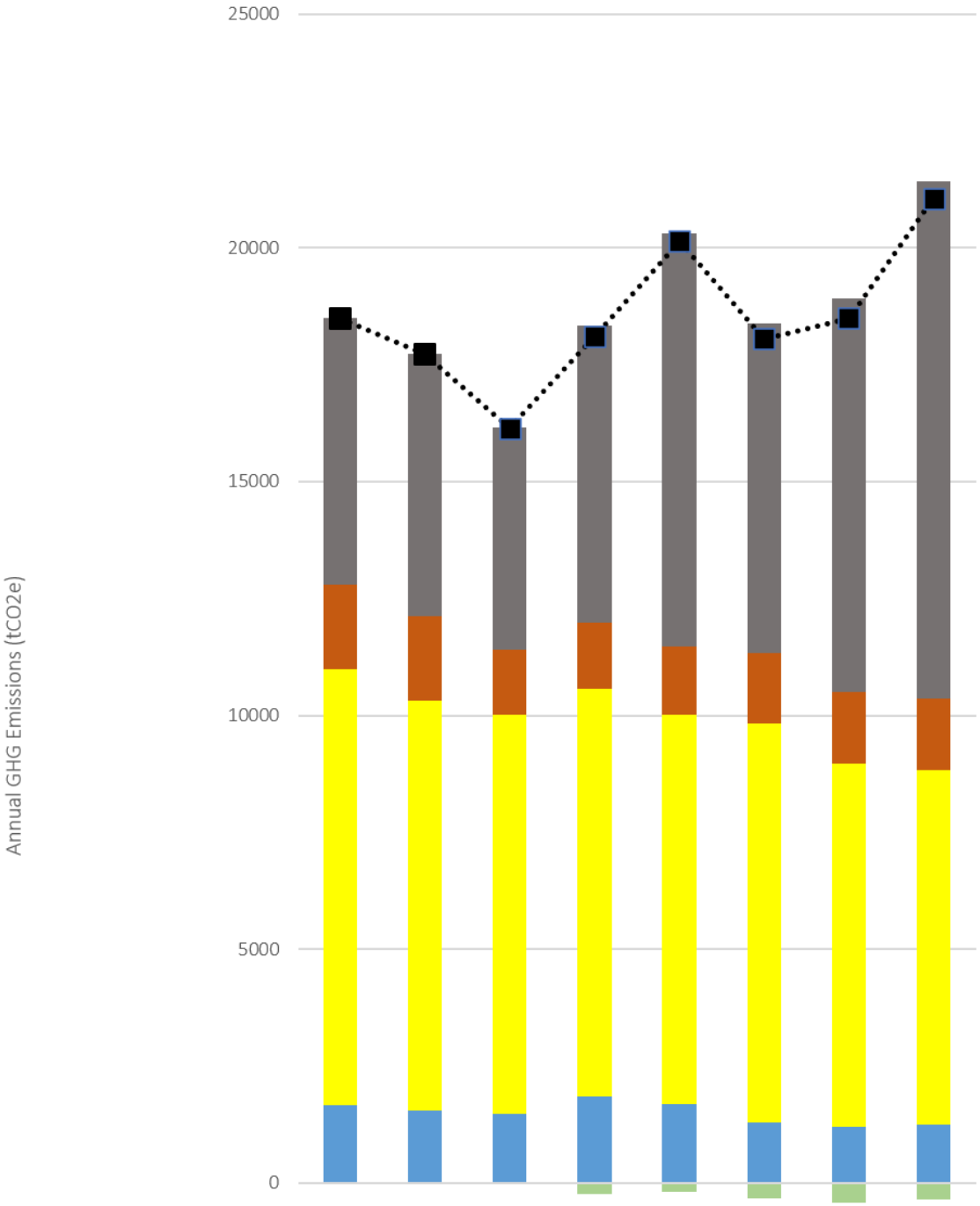
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Offset Carbon	0	-9	-8	-241	-181	-324	-420	-358
Scope 3	8181	7896	6531	8759	11223	9334	10575	13229
Scope 2	3625	2705	2460	2364	2268	2535	2202	1921
Scope 1	6685	7134	7160	7222	6825	6509	6137	6265
GRAND TOTAL (net)	18491	17726	16144	18104	20134	18053	18494	21057

Figure 2: Breakdown of emissions by Scope 1, 2 and 3 from ISO 14064-1



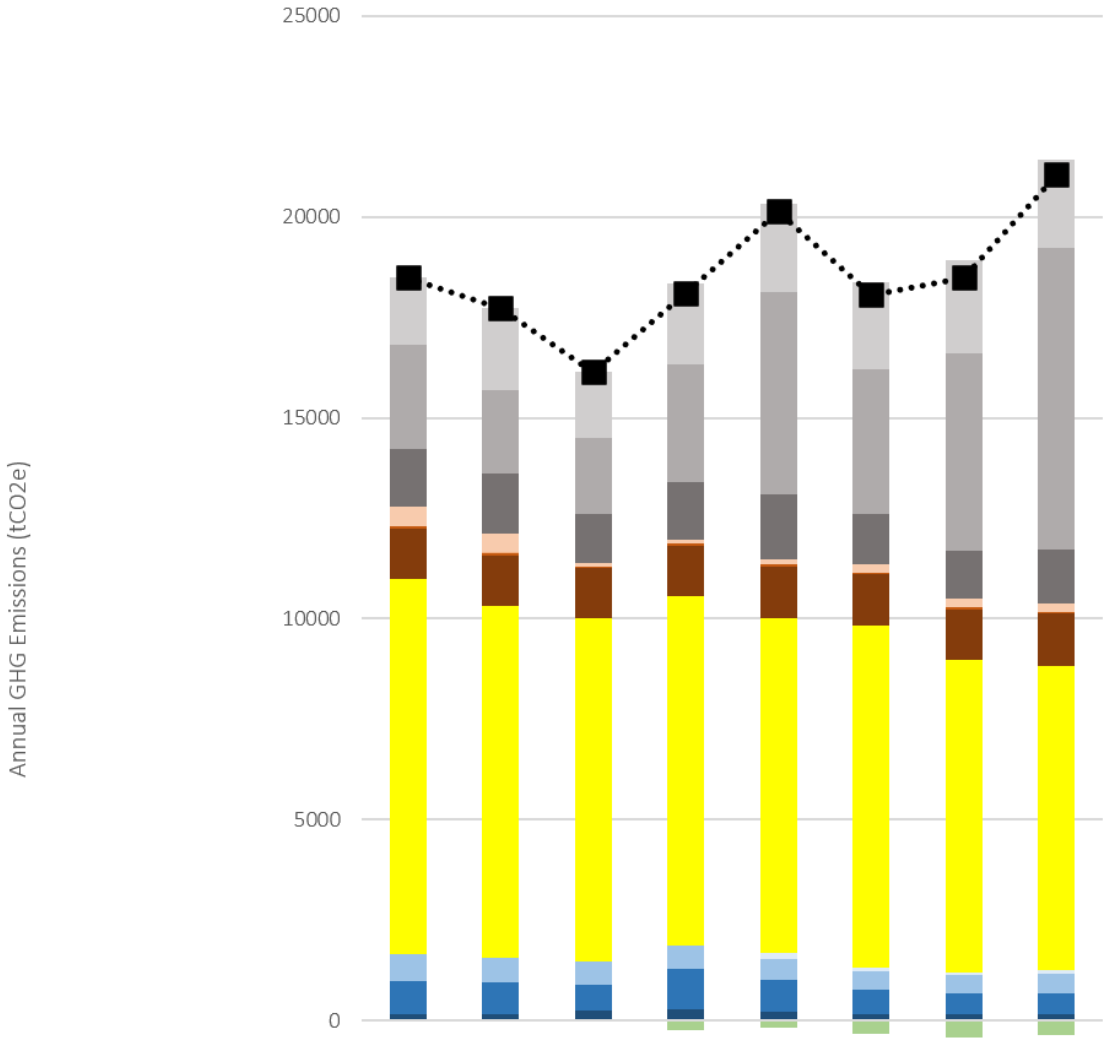
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Offset Carbon	0	-9	-8	-241	-181	-324	-420	-358
Other indirect emissions not included in the other 22 categories	0	0	0	0	0	0	0	0
Employee commuting	385	385	89	87	262	237	246	241
Downstream leased assets	0	0	0	0	0	0	0	0
Downstream franchises	0	0	0	0	0	0	0	0
End of life of the product	0	0	0	0	0	0	0	0
Use stage of the product	0	0	0	0	0	0	0	0
Downstream transport and distribution	0	0	0	0	0	0	0	0
Client and visitor transport	0	0	0	0	0	0	0	0
Investments	0	0	0	0	0	0	0	0
Upstream leased assets	0	0	0	0	0	0	0	0
Business travel	59	75	8	30	28	27	35	30
Upstream transport and distribution	0	0	0	0	0	0	0	0
Waste generated from organisational activities	2	2	2	2	2	2	1	0
Capital equipment	0	0	0	0	0	0	0	0
Purchased products	5698	5604	4754	6372	8833	7032	8420	11051
Energy-related activities not included in direct emissions and energy indirect emissions	2036	1830	1678	2268	2098	2035	1873	1907
Indirect emissions from consumed energy imported through a physical network	0	0	0	0	0	0	0	0
Indirect emissions from imported electricity consumed	3625	2705	2460	2364	2268	2535	2202	1921
Direct emissions and removals from Land Use, Land Use Change and Forestry (LULUCF)	0	0	0	0	0	0	0	0
Direct fugitive emissions	0	0	0	0	0	0	0	0
Direct process related emissions	0	0	0	0	0	0	0	0
Direct emissions from mobile combustion	1016	1003	1016	1008	1048	1025	1012	1047
Direct emissions from stationary combustion	5669	6131	6144	6214	5777	5484	5125	5217
GRAND TOTAL (net)	18491	17726	16144	18104	20134	18053	18494	21057

Figure 3: Breakdown of emissions by detailed sub-category from ISO 14064-1



	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
5. Offsets	0	-9	-8	-241	-181	-324	-420	-358
4. Procurement	5698	5604	4754	6372	8833	7032	8420	11051
3. Transport	1812	1818	1382	1400	1473	1515	1520	1541
2. Social Housing	9326	8758	8547	8711	8319	8526	7775	7583
1. Buildings (exc. housing)	1654	1554	1469	1861	1690	1304	1199	1240
GRAND TOTAL (net)	18491	17726	16144	18104	20134	18053	18494	21057

Figure 4: Breakdown of emissions by headline alternative categories



	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
5.4 Purchased Offsets	0	0	0	0	0	0	0	0
5.3 Land Use Change	0	0	0	0	0	0	0	0
5.2 REGO Electricity	0	0	0	-241	-178	-322	-415	-352
5.1 Exported Renewable Energy	0	-9	-8	0	-2	-2	-5	-6
4.3 Services	1673	2050	1666	2022	2174	2167	2302	2180
4.2 Construction	2599	2064	1887	2912	5054	3607	4916	7529
4.1 Goods	1426	1491	1200	1438	1605	1258	1202	1342
3.4 Commuting	483	483	112	110	140	208	217	207
3.3 Business Travel	4	15	0	0	0	0	0	0
3.2 Grey Fleet	69	79	11	38	35	34	45	38
3.1 Own Vehicles	1256	1241	1259	1253	1298	1274	1258	1296
2.1 Operational emissions	9326	8758	8547	8711	8319	8526	7775	7583
1.5 Homeworking Energy	0	0	0	0	151	74	76	78
1.4 Waste from Buildings	2	2	2	2	2	2	1	0
1.3 Other Non-Domestic	669	612	569	578	529	478	464	488
1.2 Leisure Centres	835	798	659	1007	778	585	489	505
1.1 Corporate Estate	148	143	239	274	230	165	169	169
GRAND TOTAL (net)	18491	17726	16144	18104	20134	18053	18494	21057

Figure 5: Breakdown of emissions by detailed alternative categories

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