

REPORT OF **Head of Legal & Governance**
To: **Community and Resources Committee**
Subject: **TDC Carbon Footprint**
Date: **5th December 2022** **Reference:**

PURPOSE OF REPORT:

1. To inform the group of the outcome of the Council's carbon footprint review for 2021/2022
2. That this report provides a basis for understanding and discussion for members on our way forward.

1. INTRODUCTION

Torrige District Council's Carbon, Environment and Biodiversity Plan maintains a commitment to carry out a full review and update to our carbon footprint using HM Government – Environmental Reporting Guidelines (updated March 2019)¹ in order to provide an informed basis in our stated aim of plotting our route to carbon neutrality by 2030.

The attached Torrige District Council Greenhouse Gas Inventory 2021/2022 details the Council's carbon footprint (see Appendix One).

2. TOTAL CARBON FOOTPRINT

The Council has a total footprint of 4267.0tce for the period 2021/2022. This is compared with the previously reported footprint of 3875.1tce reported for 2020/2021 which is an increase of 391.9 tCO₂e or 10%.

The calculation considered Scope 1, 2 and 3 emissions.

Scope 1 includes four emission categories:

1. Stationary Combustion: Emissions associated with combustion of fuels, typically boilers in buildings. This includes owned buildings including leased out buildings where the Council have responsibility for maintenance.
2. Emissions associated with mobile equipment, typically transport equipment e.g. waste collection vehicles, maintenance vans, LA owned cars etc.
3. Process Emissions: Waste collection is part of the Council's obligations – those emissions are included within transport based emissions (2. Owned Transport). There are no other process emissions.
4. Fugitive Emissions: Emissions associated with refrigerant leaks from cooling equipment. No information was available.

Scope 2 includes one emissions category,

5. Emissions associated with purchased electricity. This includes owned buildings including leased out buildings where the Council has responsibility for maintenance.

1

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Environment-reporting-guidance-inc-SECR-31March.pdf



Scope 3 includes five emission categories:

6. Purchased material and fuel: Information taken from invoices and spend was allocated to a SIC product category and goods or service. Only product categories where spend was on goods are included. 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. There was no business travel by rail, air or road (hire car) in the reporting period. Commuting emissions were not included as this data is not captured.
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). Data on water treatment was included. No information was available regarding other waste production and so these emissions have been excluded from the footprint.
9. Leased assets and franchising, outsourcing: Information taken from invoices and spend was allocated to a SIC product category and goods or service. Only product categories where spend was on services are included.
10. Sold goods and services: No sold goods or services were identified.

No.	Category	2020/21	2021/22
SCOPE 1: Direct GHG emissions and removals		2243.2	2422.2
1.	<i>Stationary combustion</i>	108.5	117.2
2.	<i>Owned transport</i>	2134.8	2305.0
3.	<i>Process emissions</i>	0.0	0.0
4.	<i>Fugitive emissions</i>	0.0	0.0
SCOPE 2: Energy GHG indirect emissions		314.4	232.9
5.	<i>Electricity</i>	314.4	232.9
SCOPE 3: Other indirect GHG emissions		1317.4	1612.7
6.	<i>Purchased material and fuel</i>	740.0	1185.4
7.	<i>Transport related activities</i>	18.6	25.8
8.	<i>Waste disposal</i>	5.8	3.8
9.	<i>Leased assets and franchising, outsourcing</i>	552.9	397.8
10.	<i>Sold Goods and Services</i>	0.0	0.0
TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)		3875.0	4267.9
11.	<i>Offset Emissions</i>	-4.8	-0.9
TOTAL NET FOOTPRINT (SCOPES 1, 2 and 3 and Offsets)		3870.3	4267.0

Points to note

We expected to see an increase in our carbon footprint for 2021/2022 as we moved from a year affected by covid restrictions on our work and travel to one that was more 'business as usual'. In addition, we have made very additional little investment to improve energy efficiency or reduce our carbon footprint across our services although we are progressing our understanding of impacts and opportunities in order to focus our actions going forward.

The increase in emissions from owned transport and transport related activities reflects this move back to normality with more road travel.



The decrease in emissions from electricity is almost entirely due to the removal of the Burton Art Gallery from our carbon footprint; no data was available for this leased site. A small decrease is also due to the further decarbonisation of our energy supply in the UK.

The increase in emissions from purchased material is due to the method by which this is calculated, based on expenditure. An increase in expenditure on purchased goods will show an increased carbon footprint. Similarly, the decrease in emissions from purchased services reflects lower spend in this area for 2021/2022.

The full GHG Inventory Report for 21/22 is attached to this report.

3. IMPLICATIONS FOR OUR NET ZERO CARBON BY 2030 TARGET

The Council has set a target for its operations to be net zero carbon by 2030. Very recently this target has become even more challenging given our financial concerns. It is likely that to meet our aim fully we will need significant financial input to achieve, over a broad range of council functions and delivery. Our reliance on external funding to meet this is likely to become even more imperative.

Members need to use this and subsequent carbon audits to assess and direct our route to net zero. This will inevitably require the adoption of technologies and practices which “Avoid Reduce Replace Offset” emissions of greenhouse gases from our estate and operations, including our property and fleet and employee travel. Given the resources available to us, this does mean that our focus going forward remains on meeting the stated target for our establishment, though we will endeavour to continue to participate in wider opportunities where available.

4. OPTIONS FOR EMISSIONS ASSOCIATED WITH OUR PROPERTY

We have carried out surveys of our properties to identify opportunities for improving energy efficiency and installing renewable energy, to assist us in quantifying emissions reduction potential and set targets for future years. The outcome of these surveys will be reported separately.

5. OPTIONS FOR EMISSIONS ASSOCIATED WITH TRANSPORT

When the new Environment Centre is built in Bideford there will be a considerable reduction in emissions associated with our waste and recycling operations, as they will no longer need to travel to Deepmoor to dispose of their loads.

Conversely, this may be impacted by emerging legislation. If we are required to increase the types of materials we collect, we will have to make more journeys and there will be a smaller reduction in emissions.

In the longer term, we will need to look at emerging low impact technology for our waste fleet – most likely either electrical or hydrogen powered vehicles, but we have trialled this within the last year and at present this is not a viable alternative to diesel for a large, hilly, rural authority. There are also wider considerations around the necessary infrastructure to support such a move, as well as the funding needed to invest in this emerging technology.

We need to be open to opportunities to replace smaller vans with electric vehicles. The Council already has one such van being used and we are committed to reviewing the viability of electric vehicles as an option for every vehicle procurement cycle.

In relation to the impacts from our grey fleet, and especially with the development of a new Environment Centre in Bideford, there is a potential opportunity to move to use of pooled (electric) vehicles. But this again, this will involve significant investment. We are about to embark on a project



with the Energy Savings Trust to look at options and opportunities in reducing emissions from our grey fleet and this will be reported on shortly.

Alternatively/ additionally, there may be opportunities to incentivise greener travel by staff e.g.) use of cycle or public transport as opposed to car use, but this does present real difficulties in a large rural area as Torridge. However with the Government's commitment to phase out diesel and petrol cars and move to electric vehicles, there may be opportunities to incentivise their purchase by staff in the future.

6. OPTIONS FOR EMISSIONS ASSOCIATED WITH OUR PURCHASED GOODS AND SERVICES

Whilst there are undoubted opportunities to reduce the emissions associated with our purchased good and services through the introduction of a sustainable procurement system, this will not be possible to show in our carbon footprint calculations.

The current methodology used in 2021/2022 relies on carbon intensity values for different industry sectors from 2009. Reporting in future years will therefore use the same values. Whilst BEIS has indicated these may be updated, they are not able to reflect any changes we make as they apply at the Standard Industry Category level.

7. OPTIONS FOR OFFSETTING

It is extremely likely that we will not be able to "Avoid Reduce or Replace" emissions and therefore the Council will need to give consideration in the future to offsetting. There are a number of options in relation to this. As outlined in our Carbon plan, we are developing an offsetting strategy to look at opportunities to offset emissions through generation of renewable energy. There are also opportunities through traditional carbon capture - developing woodland planting or sea grass schemes, this could be on our own Estate or through land purchased for that use.

The North Devon Biosphere has also developed a tool which will enable investors such as the Council to match with providers of such green or blue offset schemes in the northern Devon area. This scheme allows an offset to be purchased for approximately £25 per tonne of carbon.

The costs of offsetting our emissions will vary widely with the scheme we choose, and it will be important to ensure that whatever scheme(s) are chosen will provide us with a claimable offset.

8. IMPLICATIONS

Legal Implications

None

Financial Implications

While the carbon report does not specify any specific investment required it does highlight areas where financial impacts may be seen in the future as we move towards our stated climate ambitions.

Human Resources Implications

NA

Sustainability/Biodiversity Implications

N/A



Equality/Diversity

N/A

Risk Management

Climate change and our net-zero carbon commitment are included on our Corporate Risk Register.

Compliance with Policies and Strategies

NA

Data Protection (GDPR) Implications

NA

Climate Change

This carbon audit is a significant and necessary step on our goal of TDC being a net zero organisation by 2030.

Lead Member Views – Cllr Hames

Donna Sibley should be congratulated again for her excellent work in reviewing the Council's carbon footprint. Based on the data she has provided the Council needs to urgently progress its target of net zero carbon emissions by 2030, seizing every opportunity to implement projects relating to our properties and operations.

4. CONCLUSIONS

This update of our carbon footprint is a significant tool on our journey towards our stated ambitions. The results further highlights the areas of challenge over the coming years and it will be necessary to focus our efforts and available resources on those projects which will progress the authority's carbon reduction programme. Members of the Councillor Climate Group will need to engage widely and effectively to gain support for the changes necessary to drive this programme forward within the organisation.

5. RECOMMENDATIONS

1. That the results of the carbon audit be noted.
2. That this report provides a basis for understanding and discussion for members on our way forward.

SUPPORTING INFORMATION

Consultations:	Lead Member for Climate – Cllr Hames
Contact Officer:	Jan Williams Public Health and Housing Manager
Background Papers:	None



SUPPORTING INFORMATION

Torrige District Council Greenhouse Gas Inventory 2021/22

Company Information

Torrige District Council (TDC)
Riverbank House, Bideford, Devon EX39 2QG

Reporting Period

1st April 2021 to 31st March 2022

Reasons for Change in Emissions

The Council's carbon footprint has shown a slight increase from the 2020/2021 baseline from 3875.1 tCO₂e to 4267.0 tCO₂e. This is an increase of 10%. The main reasons for this are:

- greater expenditure on goods which, due to the spend method used to calculate scope 3 emissions, inflates the carbon footprint.
- An increase in the carbon footprint for our operational services.

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*.

The *2021 UK Government GHG Conversion Factors for Company Reporting (version 1.01)* were used in the calculations.

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).

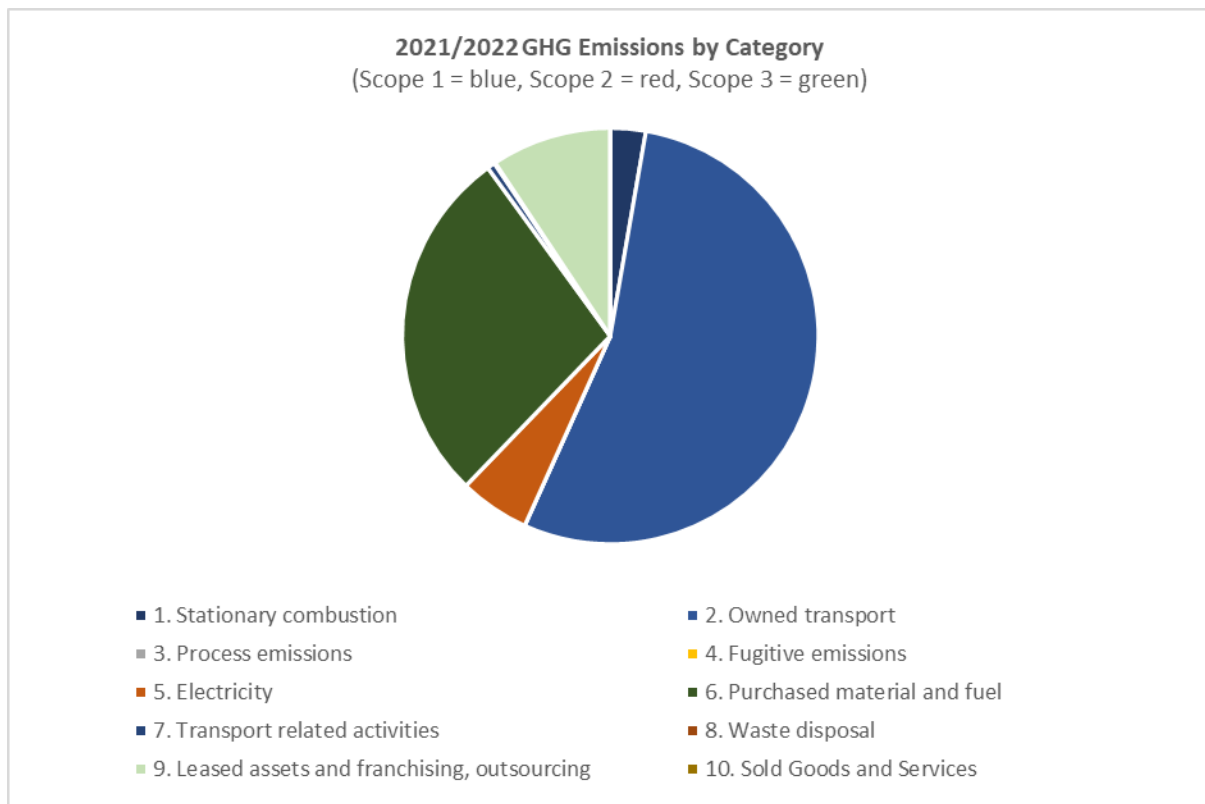
Summary Inventory

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

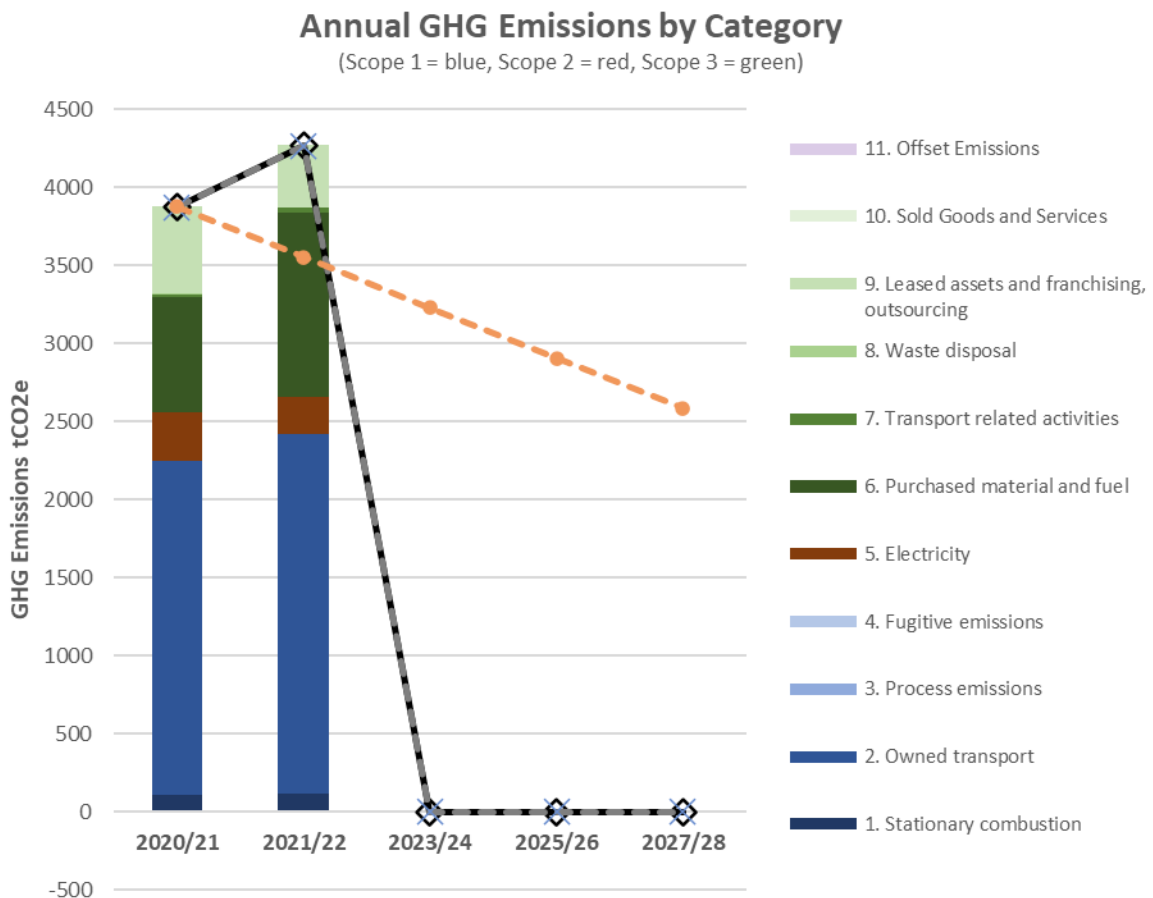
Total gross emissions in 2021/2022 were 4267.0 tCO₂e.



No. Category	2021/22
SCOPE 1: Direct GHG emissions and removals	2422.5
1. Stationary combustion	117.2
2. Owned transport	2305.0
3. Process emissions	0.0
4. Fugitive emissions	0.0
SCOPE 2: Energy GHG indirect emissions	232.6
5. Electricity	232.6
SCOPE 3: Other indirect GHG emissions	1612.7
6. Purchased material and fuel	1185.4
7. Transport related activities	25.8
8. Waste disposal	3.8
9. Leased assets and franchising, outsourcing	397.8
10. Sold Goods and Services	0.0
TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)	4267.1
11. Offset Emissions	1.0
TOTAL NET FOOTPRINT (SCOPES 1, 2 and 3 and Offsets)	4267.0



The graph below shows the Council’s carbon footprint trajectory towards 2030, and actual footprints. We are not likely to achieve our target of net zero by 2030 based on the current direction of travel.



Base Year

The base year is 2020/2021.

Note this year was impacted by Covid-19 pandemic lockdown restrictions resulting in a lower carbon footprint for some scopes, future years may show an increase above the baseline.

Targets

Torridge District Council has committed to achieving net zero emissions by 2030.

Intensity Measurement

Emissions have been quoted in absolute terms only.

External Assurance Standard

None.

Carbon Offsets

No carbon credits have been purchased.



Detailed Inventory

Emissions by type and in detail measured in tCO₂e 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 owned buildings including leased out buildings where the Council have responsibility for maintenance. Data was available for a number of sites in terms of fuel use (in kWh for gas, oil and biomass).
2. Emissions associated with mobile equipment, typically transport equipment e.g. waste collection vehicles, maintenance vans, LA owned cars etc. The calculation is based on distance travelled, and type and size of vehicle.
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. No information was available.

The results are shown in the Table below.

No.	Category	2021/22
SCOPE 1: Direct GHG emissions and removals		2422.5
<i>1. Stationary combustion</i>		<i>117.2</i>
1	Appledore Fish Dock Hubbastone Rd Oil	6.0
1	26 High Street	8.3
1	Westcombe Depot	4.9
1	Riverbank House	17.8
1	Bideford Town Hall	35.2
1	Bridge Buildings	12.1
1	Windmill Lane	5.8
1	Cromlech House	7.8
1	Barton Tors	7.5
1	Appledore Fish Dock Bldgs propane	9.0
1	Northam Burrows propane	2.9
1	Caddsdow Biomass (N ₂ O and CH ₄)	0.0
<i>2. Owned transport</i>		<i>2305.2</i>
2	Operational Services - Diesel HGV Rigid 3.5-7.5 t	412.2
2	Operational Services - Diesel HGV Rigid >7.5-17t	336.1
2	Operational Services - Diesel HGV Rigid >7.5-17t	624.0
2	Operational Services - Diesel HGV Rigid >17.5t	687.5
2	Operational Services - Diesel Van class II	180.4
2	Operational Services - Diesel Van class III	43.9
2	Operational Services - Petrol Van class III	14.5



No.	Category	2021/22
SCOPE 1: Direct GHG emissions and removals		2422.5
2	Communities & Place Diesel Van class I	3.9
2	Public Health and Housing Diesel Van class I	2.4
<i>3. Process emissions</i>		<i>0.0</i>
3	Not Applicable	0.0
<i>4. Fugitive emissions</i>		<i>0.0</i>
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 owned buildings including leased out buildings where the Council has responsibility for maintenance. Data was available for a number of sites as kWh consumption.

The results are shown in the Table below.

No.	Category	2021/2022
SCOPE 2: Energy GHG indirect emissions		232.9
<i>5. Electricity</i>		<i>232.9</i>
5	7-8 TDC Units	5.8
5	Victoria Park Greenhouses	2.3
5	26 High Street	2.3
5	2A TDC Units	0.0
5	Torrington Pannier Market	1.7
5	Torrington Pannier Market Museum Entrance Lobby	0.3
5	Torrington Pannier Market Hall Entrance	0.5
5	9-10 TDC Units	0.0
5	Middle Dock	0.9
5	Pipers Yard Depot	1.6
5	Westward Ho Entertainment Unit	0.5
5	Village Green Westward Ho Toilets	0.5
5	Caddisdown Farm Units	0.0
5	Westcombe Depot	0.0
5	Westcombe Depot	4.8
5	Caddisdown Business Support Centre	25.1
5	Unit 15 Caddisdown	10.4
5	Victoria Park Paddling Pool	2.0
5	Victoria Park Amenity Building	1.7
5	Riverbank House	38.8
5	Sportsground Lighting	0.5
5	Sports Ground Changing Rooms	0.9
5	Sportsground Changing Rooms	0.1
5	Bridge Buildings	1.7
5	Town Hall	3.1
5	Entertainment Pillar 1 - Jubilee Square	0.0



No.	Category	2021/2022
SCOPE 2: Energy GHG indirect emissions		232.9
5	Entertainment Pillar 2 - Jubilee Square	0.0
5	Bideford Quay Facility	1.8
5	Mens Toilets Bideford Market Place	0.0
5	Ladies Toilets Bideford Market Place	0.0
5	Northam Burrows Visitor Centre	9.4
5	Churchfields Toilets Appledore	1.0
5	5 Hubbastone Road	0.3
5	Coastguard Building	1.4
5	Merley Road Toilets	0.2
5	Windmill Lane Office	0.5
5	Windmill Lane Office	3.0
5	Windmill Lane Office	2.2
5	Cromlech Hostel	1.9
5	Torrington Commons Toilets	0.3
5	Torrington Cemetery	0.0
5	South Street Toilets	0.2
5	School Lane Depot	2.6
5	Bradworthy Toilets	0.1
5	Unit 12 Tamar Units	n/a
5	North Road Toilets & Bus Shelter	0.9
5	Manor Offices Holsworthy	1.3
5	Holsworthy Pannier Market	2.9
5	4 The Square Holsworthy	2.3
5	Manor Offices	4.4
5	Manor Offices Holsworthy	3.5
5	Manor Workshops Holsworthy	1.0
5	Halwill Toilets	0.1
5	Black Torrington Toilets	0.0
5	Winkleigh Toilets	0.1
5	Stoke Toilets	0.1
5	Hartland Toilets	0.1
5	Bideford Cemetery	0.1
5	Barton House Hostel	
5	Pollyfield Changing Rooms	0.5
5	Brunswick Wharf	n/a
5	Victoria Park Cricket Pavilion	0.4
5	Appledore Fishdock Block B	43.1
5	Appledore Fishdock Block A	15.7
5	Burton Art Gallery & Museum	n/a
5	CCTV cameras	4.0
5	Unmetered Public Lighting	1.0
5	Unmetered Public Lighting	6.6
5	Unmetered Public Lighting	13.7
5	Unmetered Pay and Displays meters	0.9



Scope 3

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

Purchased material and fuel: Information taken from invoices and spend was allocated to a SIC product category and goods or service. Only product categories where spend was on goods are included. 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 (where cars are owned by employees and costs claimed back via expenses) were calculated based on mileage claims, and the size of car and type of fuel used. There was no business travel by rail, air or road (hire car) in the reporting period. Commuting emissions were not included as this data is not captured.

Waste disposal: Emissions associated with disposal of the Council's own waste e.g. from its offices (as opposed to waste produced by constituents). Data on water treatment was calculated on the basis of South West Water's 5% Non Return to Sewer Allowance. I.e, 95% of water supplied is considered to return to sewers. No information was available regarding other waste production and so these emissions have been excluded from the footprint.

9. Leased assets and franchising, outsourcing: Information taken from invoices and spend was allocated to a SIC product category and goods or service. Only product categories where spend was on services are included.

10. Sold goods and services: No sold goods or services were identified.

The results are shown in the Table below.

No.	Category	2021/2022
SCOPE 3: Other indirect GHG emissions		1612.7
<i>6. Purchased material and fuel</i>		<i>1185.4</i>
6	WTT Emissions	377.8
6	Water supply	2.2
6	Procured goods	805.4
<i>7. Transport related activities</i>		<i>25.8</i>
7	Diesel, small car	4.5
7	Diesel, medium car	4.1
7	Diesel, large car	8.5
7	Petrol, small car	1.6
7	Petrol, medium car	1.9
7	Petrol, large car	5.3
<i>8. Waste disposal</i>		<i>3.8</i>
8	Waste water cubic metre	3.8
<i>9. Leased assets and franchising, outsourcing</i>		<i>397.8</i>
9	Procured services	397.8
<i>10. Sold Goods and Services</i>		<i>0.0</i>
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.

Torrige District Council generate renewable energy at two sites: Riverbank House and Caddstown Business Centre.

Due to lockdown, meter readings are only available for Q1 of 2021/2022. In this period, Riverbank House exported 2196.2 kWh of renewable energy, and Caddstown 1970 kWh which equates to an approximately 1tCO₂e reduction.

We are waiting for our account to be verified so that further meter readings can be provided, this footprint will then be amended to reflect a further small reduction.

