Elmbridge Borough Council

Carbon Footprint Report – 2018/19

Rob Franklin, Rob Hatcher

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Contacts

Prepared by:

Rob Franklin, Senior Analyst
Rob.Franklin@carbontrust.com
+44(0)20 7832 4526

Rob Hatcher, Senior Manager
Robert.Hatcher@carbontrust.com
+44(0)20 7832 4619

Approved by:
David Reilly, Director
David.Reilly@carbontrust.com
+44(0)20 7832 4620

Prepared for:

Anthony Jeziorski
Head of Environmental Services
ajeziorski@elmbridge.gov.uk

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Introduction

About the Carbon Trust

Our mission is to accelerate the move to a sustainable, low carbon economy.

The Carbon Trust is an independent, expert partner of leading organisations around the world, helping them contribute to and benefit from a more sustainable future through carbon reduction, resource efficiency strategies and commercialising low carbon technologies.

About Elmbridge Borough Council

Elmbridge Borough Council is second tier Local Authority located in Surrey; it encapsulates the towns of Esher, Walton and Molesey, and has an approximate population of 133,000.

The Council is responsible for local refuse collection and recycling, leisure services, parks, tourism and office-based services such as local planning and building control. Elmbridge Borough Council has a strong track record of placing sustainability and the environment at the heart of its operations.

Background

- The UK Government declared a climate emergency in 2019, with the principle aim of achieving net zero emissions by 2050. In response, many local authorities across the UK have taken the necessary steps to declare a climate emergency, recognising the need for robust local action.
- Elmbridge Borough Council (EBC) declared a climate emergency in July 2019, a primary action by the newly formed council coalition. As part of this declaration, the council pledged to become a carbon neutral organisation by 2030.
- Local authorities who have declared a climate emergency now have an opportunity to facilitate action at the local level and can begin to play a key role in encouraging action across a variety of key stakeholders and organisations.
- EBC therefore recognises the crucial role it can play in helping to reduce both the causes and impacts of climate change at both the national and local level.

Scope of work

- The Carbon Trust have been commissioned by EBC to assist with the next steps of their climate emergency declaration. This includes a comprehensive carbon footprint of the direct and indirect carbon emissions (scope 1,2 and 3) for the financial year 2018/19.
- In addition to the calculation of the council's footprint, the Carbon Trust have conducted energy audits of key council buildings, to identify and assess potential carbon reduction opportunities.
- The analysis will contribute towards the development of a final summary report which will prioritise and quantify a number of key carbon reduction projects that have been identified across the council.
- The following report consolidates the findings of the councils carbon footprint, and provides initial feedback on the results observed from auditing the councils main estate (Civic Centre, 7 Centres for the Community).

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Executive Summary

1. Key Findings

- Elmbridge Borough Council (EBC)'s total measured footprint for the 2018/19 financial year is **6,203 tonnes of CO2 equivalent** (tCO_2e) (Figure 1).
- The largest emissions source is associated with buildings that are owned by the Council but operated by a 3rd party (leased buildings) (**4,022 tCO_2e**).
  - This is primarily from significant emissions from leisure centres and also includes the areas of the Civic Centre leased out by external organisations (Surrey CC, Surrey Police), alongside an additional ~100 buildings.
- The total measured footprint for Elmbridge Borough Council's direct operations in the FY 2018/19 is equal to **1,236 tCO_2e/year** (Figure 2).
- Emissions from Council-operated activities primarily come from electricity and gas consumption across Council operated buildings, alongside fuel consumption associated with Council owned vehicles.
- The Council's 2030 carbon neutral target is **only applicable to those emission sources that are considered to be under direct control of the council** (Figure 2). Emission sources outside of the Council's direct sphere of influence not included in the Council's 2030 target, but those arising from leased buildings and procured goods and services (contracts) have been provisionally measured as part of this first phase of work. These emission sources have an estimated combined footprint of 4,931 tCO2e for the FY 18/19. EBC will work towards developing separate target and reduction pathway for these emissions sources in due course.

Figure 1: EBC total measured footprint broken down by scope 1, 2 and 3.

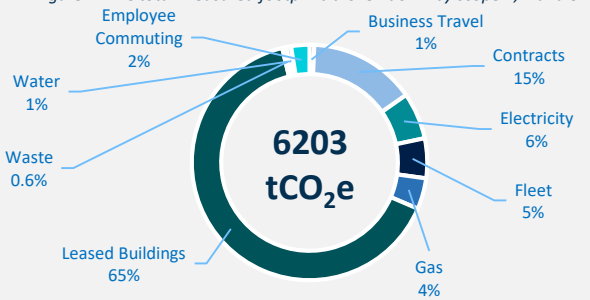
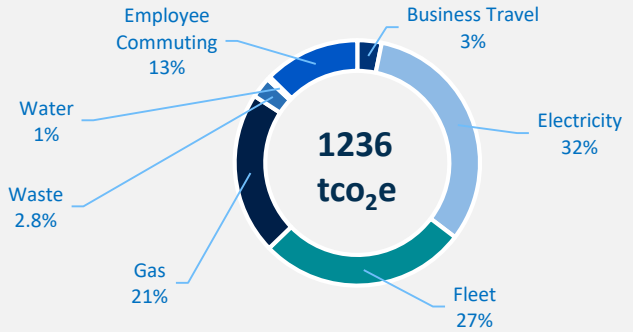


Figure 2: EBC operational emissions broken down by scope 1, 2 and 3.



2. Recommendations

Strategic:

- Given the natural decarbonisation of the UK grid and subsequent implications for associated electricity emissions, the focus of EBC should be on **reducing gas (heating) consumption** – this has both emissions and financial updates.
- EBC should use the findings of this footprint report alongside the Climate Action Plan to **drive organisational change** across the Council in order to reduce overall emissions. The analysis presented should be communicated to key decision makers and staff from across the Council.

Direct:

- The measured carbon footprint signposts key areas that the Council should prioritise to reduce its emissions, such as **electrifying the fleet**, and **electrifying heat sources where possible** to reduce gas consumption across Council operated buildings.
- The Council should now consider **whole-fleet electrification** where possible, alongside the installation of additional **Electric Vehicle (EV) charging points** across it's estate.
- Feasibility options should include the additional **installation of on-site renewables** to fully decarbonise stationary assets such as the Civic Centre.

Indirect:

- EBC should **work closely with 3rd party organisations** who are present in Council owned buildings to initially determine carbon hotspots and share the investment burden when assessing carbon reduction opportunities.
- The Council can also reduce scope 3 emissions by **expanding its selection criteria for contractors** to include sustainability metrics – for example the minimum kilometres driven by Electric Vehicles in delivering procured goods and services.
- Looking ahead, the Council **should monitor carbon emissions annually**, and source data to create an expanded and more comprehensive scope 3 footprint.

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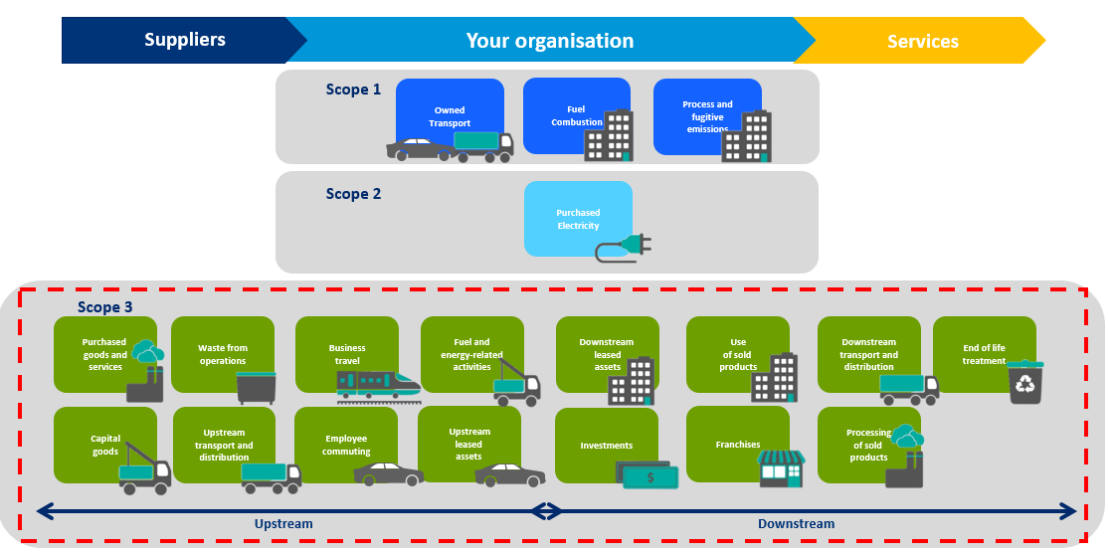
Carbon Footprint Boundary

Green House Gases (GHGs)

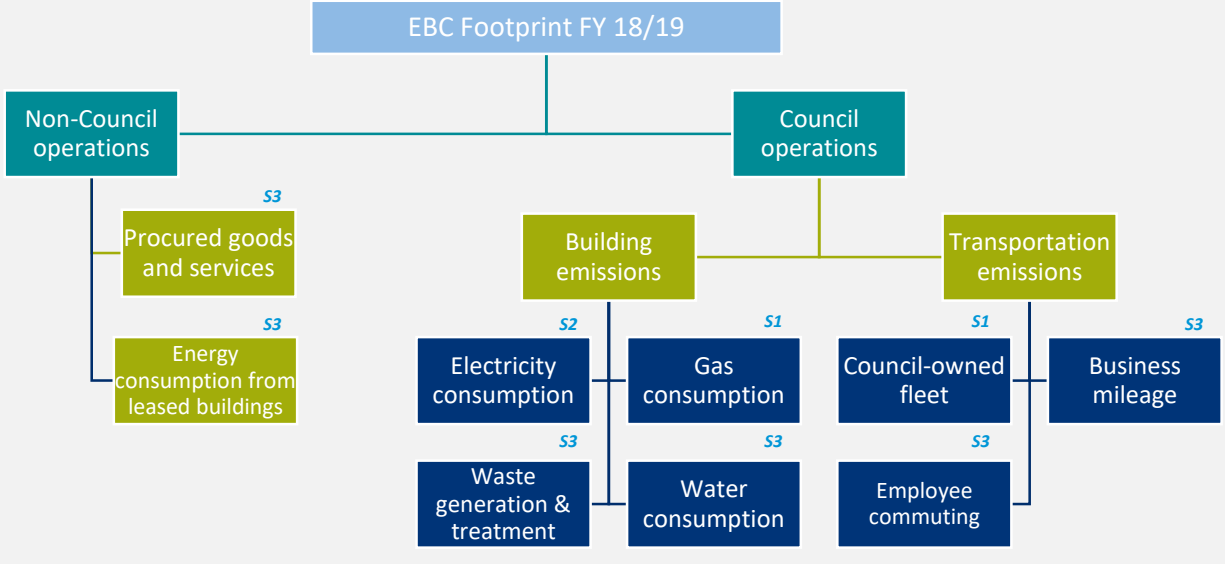
- Greenhouse gases (GHGs) are gases in Earth's atmosphere that trap heat. They let sunlight pass through the atmosphere, but they prevent the heat that the sunlight brings from leaving the atmosphere.
- **Carbon dioxide is not the only greenhouse gas.** There are six other principle greenhouse gases that contribute to global warming: Methane, Nitrous Oxide, Hydrofluorocarbons, Perfluorocarbons, Sulphur Hexafluoride and Nitrogen Trifluoride.
- Not all of these gases arise from combustion of fossil fuels, with some originating from refrigeration/cooling, agriculture, chemical production and electrical applications.
- **Under the GHG Protocol (see summary next slide), each gas has its own global warming potential (GWP).** By comparing each gas's GWP to that of Carbon Dioxide (CO_2) it is possible to derive a **Carbon Dioxide equivalent value (CO_2e).**
  - Example: CO2 has a GWP of 1, Methane has a GWP of 24; therefore we can say that 1 ton of methane emissions is equal to 24 tons of CO2e (tCO2e)
- **Values presented in this report will be given in CO_2e** or **tCO2e** (in tons) and therefore reflect the emissions resulting from the above greenhouse gases.
- Although CO_2 has the lowest GWP, with some other GHGs having a GWP thousands of times higher, it is by far the most abundant GHG and is therefore the predominant focus when discussing emissions reduction and climate change.

GHG Protocol and emission scopes

- The **greenhouse gas (GHG) protocol** is the most widely used and accepted methodology for GHG accounting. It has been followed to calculate EBC's footprint for FY 18/19.
- Under the GHG Protocol, emission sources are divided into **scopes 1, 2, and 3**. Scopes 1 and 2 emissions are a result of an organisations' **direct** operations, whereas scope 3 emissions result from an organisations' **indirect** activities or value chain (for example, from the manufacturing of products used by the Council).
- Scope 3 emissions are emitted by a third-party's operations and are generally **more difficult to monitor, control and reduce**. As a result, public (and private) sector carbon action has traditionally focused on scope 1 and 2 emissions.
- Where scope 3 emissions have been included, organisations have tended to only consider select elements. However, there is now **increasing appetite to include more scope 3 emissions** in footprints and to encourage carbon reduction in an organisations' supply chain.



Footprint Boundary



- **Scope 1 emissions [S1]**:
  - Gas consumption, typically used for space and water heating in buildings
  - Fuel consumption used to power the Council's fleet
- **Scope 2 elements [S2]**:
  - Electricity consumption
- **Scope 3 elements [S3]**:
  - Emissions resulting from business travel in non-Council operated vehicles
  - Emissions associated with employee commuting in non-Council operated vehicles
  - Emissions from the third-party disposal and treatment of waste generated *in Council-controlled operations*
  - Emissions resulting from the supply and subsequent treatment of water consumed by the *Council's operations*
  - Emissions associated with the execution of Council-procured goods and services
  - Emissions from energy consumption in buildings leased to a 3rd party operator

Including / Excluding Emissions

There are several reasons why emissions may be included or excluded; the following criteria detail how and why data may be included/excluded (taken from the GHG protocol guidance).

Size	They contribute significantly to the organisation's total anticipated Scope 3 emissions and total footprint
Influence	There are potential emissions reductions that could be undertaken or influenced by the organisation
Risk	They contribute to the organisation's risk exposure (e.g. climate change related risks such as financial, regulatory, supply chain, product/technology, compliance/litigation, and reputational risks)
Stakeholders	They are deemed critical by key stakeholders (e.g. Councillors, local citizens, local business, suppliers, national or regional government, civil society)
Outsourcing	They relate to outsourced activities previously performed in-house, or activities outsourced by the reporting organisation that are typically performed in-house by other organisations in the same sector
Sector guidance	They have been identified as significant in sector-specific independent guidance
Spending or revenue analysis	They relate to areas that require a high level of spending or generate a high level of revenue for the reporting organisation (and are sometimes correlated with high GHG emissions)
Other	They meet any additional criteria developed by the organisation or industry sector

Data Table of Excluded Emission Sources

The following emission sources have been excluded from the footprint calculation:

	Emission Source	Comment
Scope 3	Capital goods	Out of scope: Does not play a key role in the Council's operations.
	Upstream leased assets (3rd party owned, Council operated)	Out of scope: No upstream leased assets known
	Franchises	Out of scope: No franchises controlled by the Council
	Investments	Out of scope: Initial Investment data has been provided, but the decision has been made to exclude Investments from this iteration of the Council's footprint
	Downstream transportation and distribution	Out of scope: No sold goods distributed by the Council
	Processing of sold products	Out of scope: Not applicable to the Council's operations
	Use of sold products	Out of scope: Not applicable to the Council's operations
	End-of-life treatment of sold products	Out of scope: Not applicable to the Council's operations

Future Emissions Sources for Inclusion

- Elmbridge Borough Council has worked closely alongside the Carbon Trust to ensure that their footprint is as comprehensive and accurate as feasibility possible at this time.
- This means that only emissions sources with full and accurate data currently available to the council have been taken into consideration for the final footprint calculation.
- The decision has been made to exclude Investments data from the current footprint for the council. This is due to the difficulty associated with control over certain investment decisions, which at times may fall out of the council's sphere of influence. However, obtaining a greater level of detail and clarity on where investments are being channelled should be a priority for the council moving forward. This would then allow more effective engagement with investment managers which can be encouraged to green the portfolio.
- In addition to this, it is recommended that the council aims to enhance their overall Scope 3 footprint by moving away from proxy values (EEIO[1] and benchmarks) to real, more accurate data sources where possible.
- Tailored scope 3 emissions factors should be developed through a detailed Scope 1 and 2 footprint analysis of individual contractors, suppliers, and leased buildings. This would create an inventory of supply chain emissions, which can be updated at regular intervals.

[1] EEIO = Environmentally Extended Input-Output factors for Scope 3 footprinting

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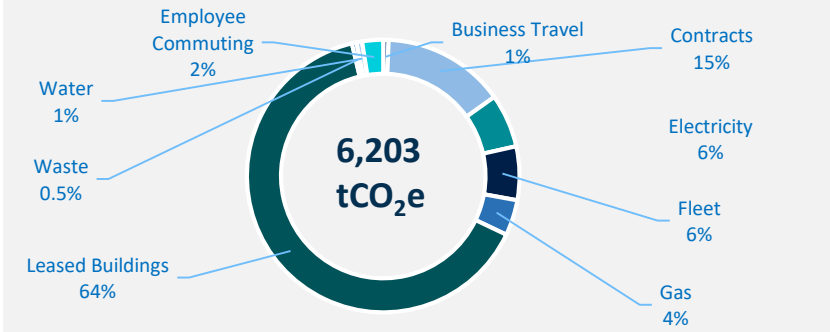
Carbon Footprint analysis for FY 18/19

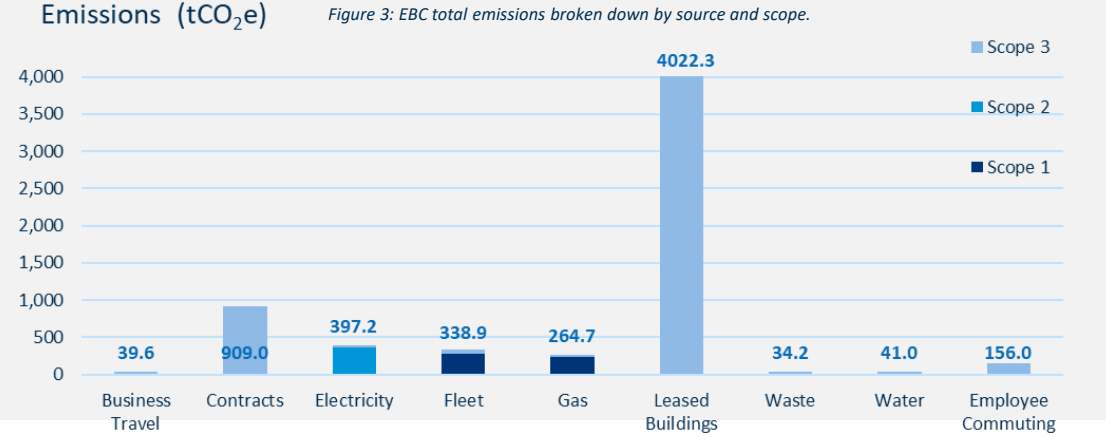
2018/19 Footprint

- The total footprint for Elmbridge Borough Council's operations in the FY 2018/19 is equal to **6,203 tCO_2e** (Figure 1).
- The majority of this footprint is attributed to the emissions associated with the Council's leased buildings. Indirect emissions resulting from procured goods and services, alongside emissions from building electricity consumption are also significant emission sources (Figure 3).



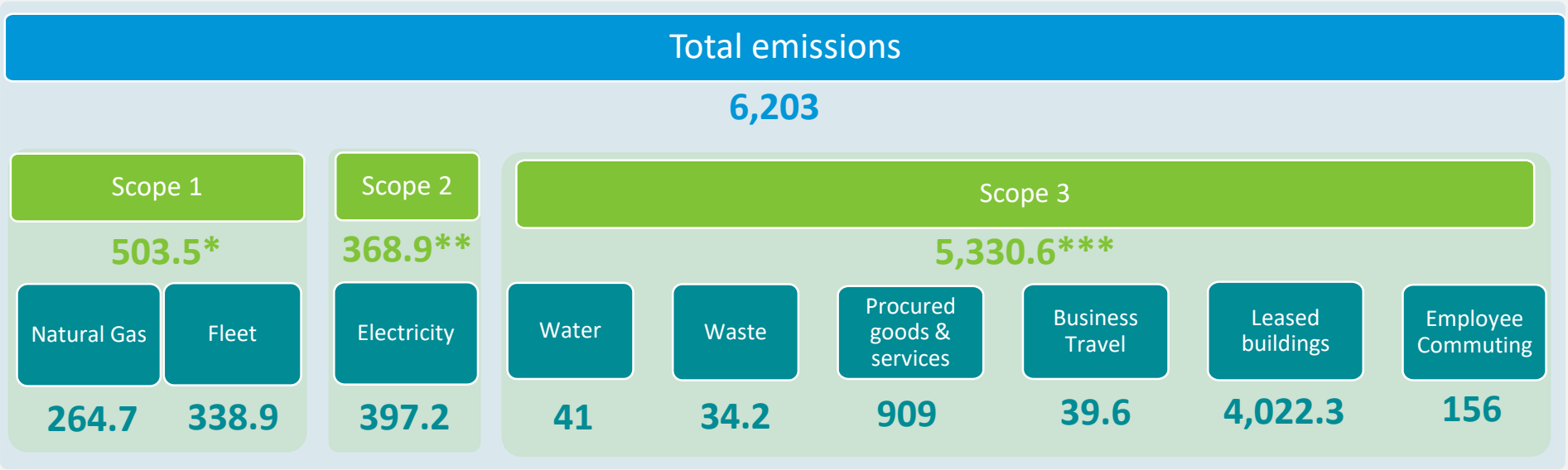
Scope	Emissions (tCO2e)
Scope 1	503.5
Scope 2	368.9
Scope 3	5,330.6
Total	**6,203**

Figure 3: EBC total emissions broken down by source and scope.



Footprint breakdown

- The Council's emissions can be broken down into discrete emission categories, as defined by the GHG protocol.

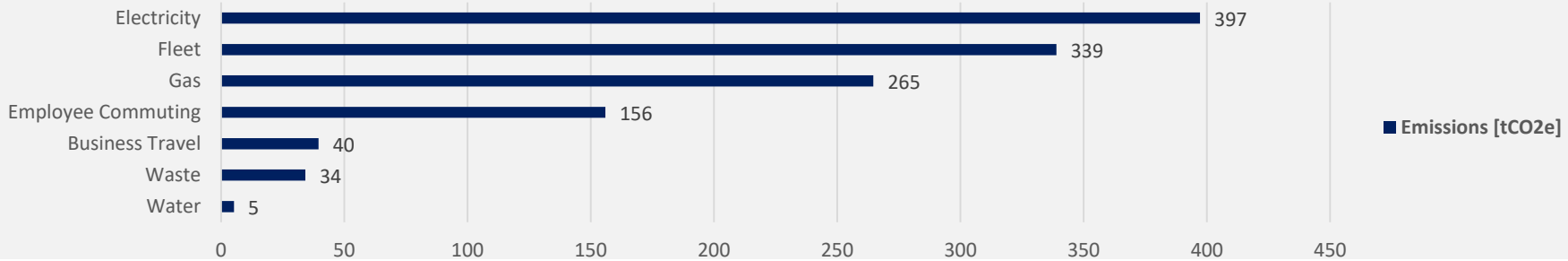


* Total Scope 1 emissions value excludes Scope 3 Well to Tank emissions associated with Gas and Fuel consumption
** Total Scope 2 emissions value excludes Scope 3 Well to Tank and Transmission and Distribution emissions associated with electricity consumption
*** Total Scope 3 emissions value includes the above Well to Tank and Transmission and Distribution emissions

EBC's Operational Emissions

- EBC's operational emissions which are those that are within a tangible sphere of influence include a mix of direct and indirect emissions associated with the **Council's operation and use of their own buildings and assets**. This includes:
  - **Scope 1:** gas (primarily for heating buildings) and transport fuel consumption in the Council's own fleet
  - **Scope 2:** electricity consumption within EBC buildings used by EBC staff
  - **Scope 3:** waste generation, water supply & treatment, business travel and employee commuting (arising from EBC operated buildings, journeys completed by EBC staff on behalf of EBC activities and employee commuting)
- These emissions equal **1,236 tCO_2e** (20% of the total footprint), of which fleet and electricity consumption are the two largest sources (Figure 4).
- The decarbonisation of the national electricity grid is expected to reduce emissions associated with electricity by 65% by 2030, to 139 tCO_2e. Under a no-action scenario, **transport fuel consumption from the Council's own fleet would therefore account for 35% of the Council's operational emissions.**

Figure 4: A breakdown of Elmbridge Borough Council's operational emissions.

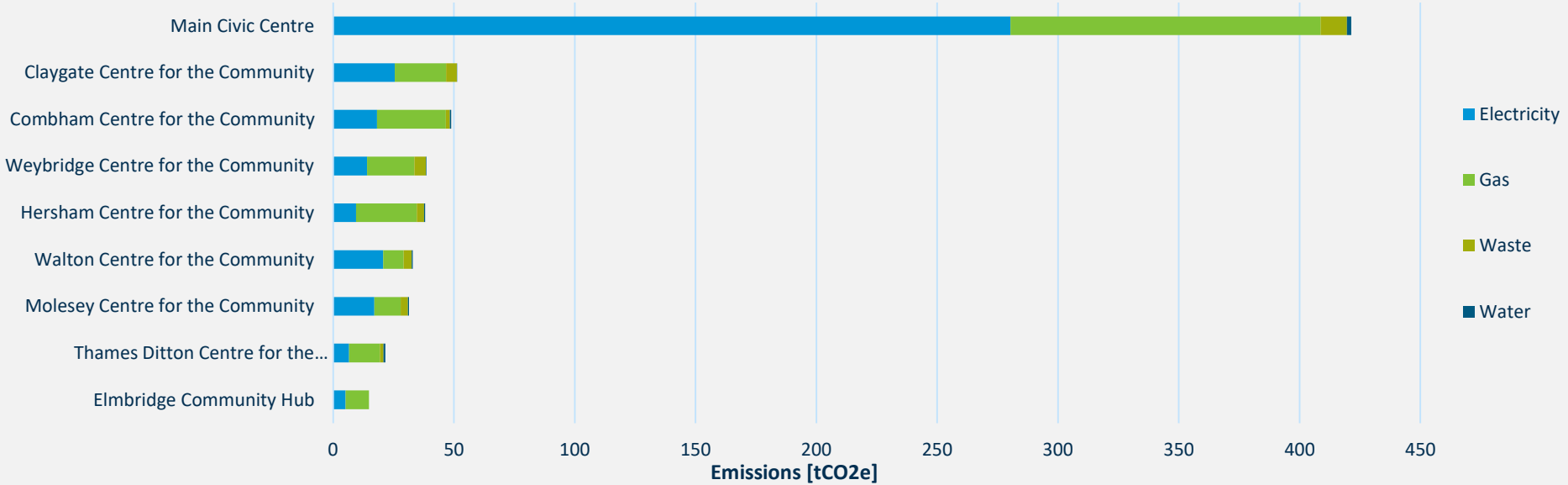


Emissions from Council operated buildings

- The majority of emissions from EBC-operated buildings and facilities come from the **Council's Main Civic Centre** (Figure 5). The Civic Centre accounts for 60% of emissions from Council operated buildings.
    - **Electricity and gas consumption** are the dominant emissions sources for all buildings, accounting for 95% of all emissions from Council operated buildings.
- Numerous measures can be put in place to **reduce these emissions**. The roll-out of deep retrofit measures, alongside the installation of controls and improved behavioural changes, will help to reduce the emissions produced at these buildings.
- In addition, as the national grid decarbonises, it is recommended that **heat sources are generally electrified** where possible (e.g. by the installation of heat pumps). This will help to reduce gas consumption significantly and the emissions associated with heating Council operated buildings.

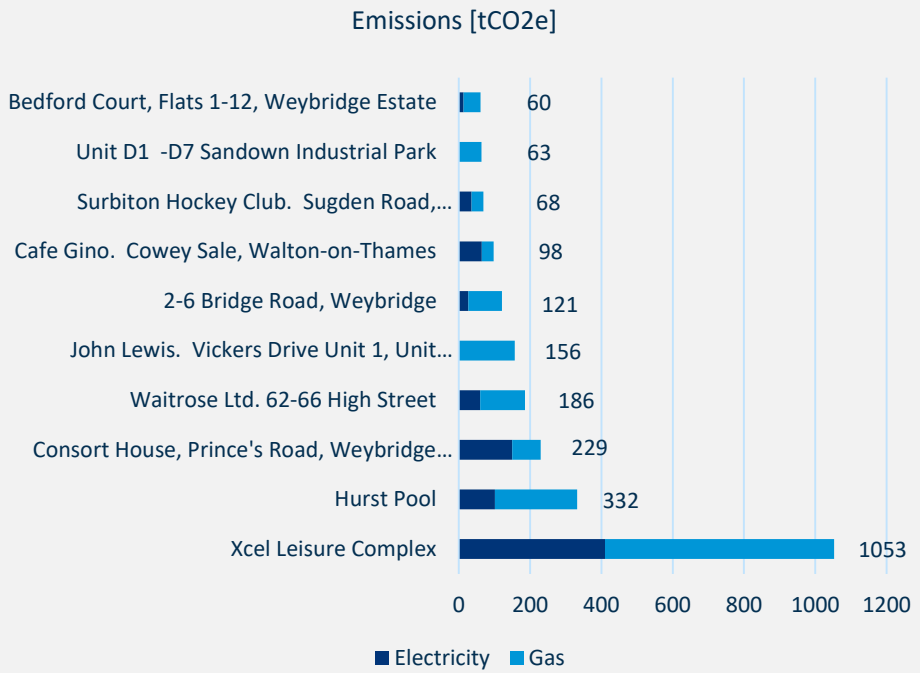
Council operated buildings: Key emission sources

Figure 5: A breakdown of Elmbridge Borough Council's emissions from operational buildings



Emissions from Council leased buildings[2]

Figure 6: Emissions from Council leased buildings

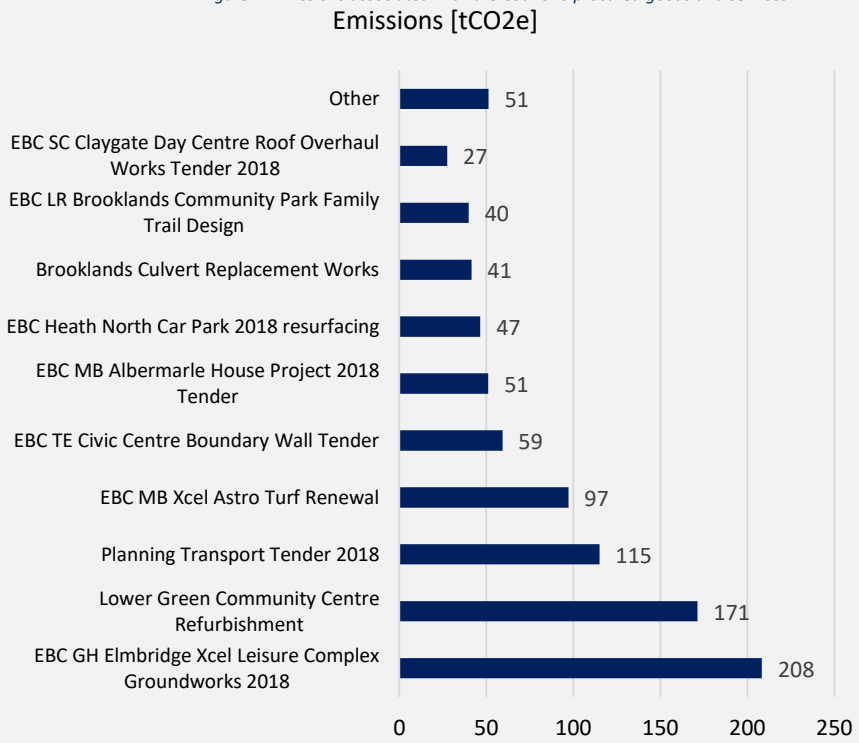


- Energy consumption (gas & electricity) in buildings owned by the Council and leased to a 3rd party operator is the **largest single contributor to EBC's measured footprint**, accounting for 64% of total emissions.
- The council has a total of 100 buildings[3] that they lease to a 3rd party operator. Only the top 10 highest emitting sites are shown in Figure 6.
- The **Xcel Leisure Complex and Hurst Pool buildings** account for approximately 34% of total emissions from Leased Buildings.
- The electricity & gas consumption per m2 does not appear abnormal for the nature of the buildings[4], and decarbonisation will likely involve a combination of deep retrofit options, and close collaboration with the building operators to determine hotspot emission areas & reduction measures.

[2] Top 10 highest emitting leased buildings
[3] This includes areas of the Civic Centre that are leased to external organisations
[4] Benchmarking not conducted

Procured services

Figure 7: Emissions associated with the Council's procured goods and services



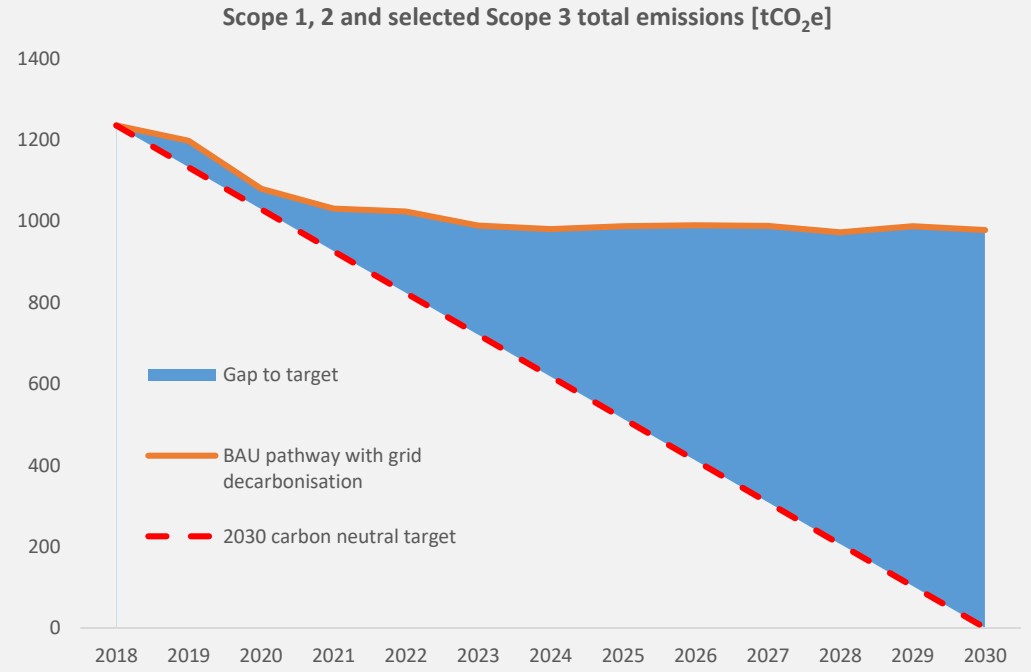
- Emissions from the execution of services outsourced to 3rd parties – 'Procured Goods and Services' – make up **15% (909 tCO_2e) of the Council's total footprint.**
- The top 10 contracts by emissions have been included in Figure 7. An additional 5 contracts are included under the contract category of 'other'.
- The emissions associated with these procured goods and services have been calculated using the environmentally extended input-output (EEIO) economic proxy[5].
    - EEIO proxies are a GHG-protocol approved method of calculating scope 3 emissions, and have the advantage of being simple to apply, and facilitate manageable effort versus the collection of primary data from all suppliers.
- **The Excel Leisure Complex Groundworks** service was the highest contract by both value and overall emissions contribution, accounting for 23% of overall emissions associated with procured goods and services.
- In future, primary data sources for procured goods and services should be used to calculate associated emissions, instead of using expenditure proxies. E.g. the groundworks company should be engaged to obtain their scope 1 and 2 data.

[5] Refer to page 17 of the *'Technical Guidance for Calculating Scope 3 Emissions'* GHG protocol report for more information on EEIO proxies (see Appendix 1).

2030 Carbon Neutral Target

- Elmbridge Borough Council are targeting carbon neutrality by 2030, taking into consideration their **scope 1, 2 and selected scope 3 emissions (Figure 2).**
- If the council were to maintain a business as usual (BAU) case, where energy consumption remains constant, **electricity emissions will still decrease as a result of grid decarbonisation.**
- In a 'do nothing' scenario, EBC's grid supplied electricity emissions are **expected to reduce by 258 tCO_2e/year by 2030** as a result of greener electricity from the national grid[6].
- Beyond this, a further **978 tCO_2e/year** reduction would then need to be achieved by EBC to achieve the 2030 carbon neutral target (Figure 8) (the exact level of offsetting required will need to be determined following detailed project identification, assessment and prioritisation).
- The BAU scenario assumes that the council's operations, number of buildings and estate does not change from the baseline year 2018/19 in subsequent years.

Figure 8: Projection of total EBC business as usual emissions (including grid decarbonisation), the Council's 2030 carbon neutral target and the associated gap to target

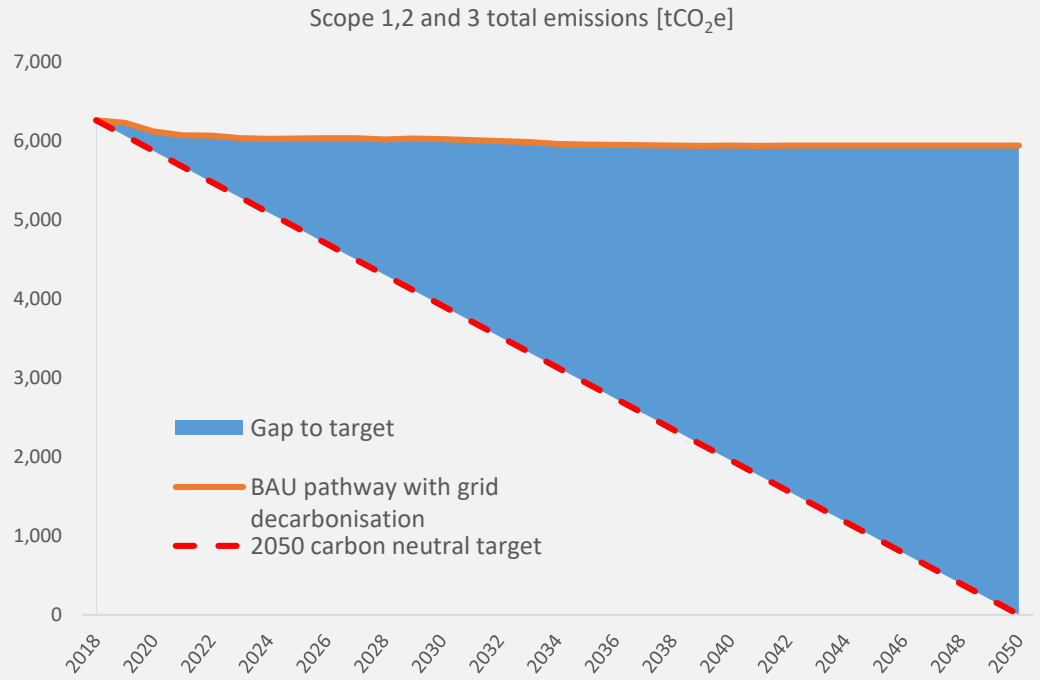


[6]This refers to electricity consumption in Council operated buildings only.

2050 Carbon Neutral Target

- Looking beyond the Council's 2030 carbon neutral target for scope 1 and 2 emissions, Elmbridge Borough Council are also committed to extending that ambition to include scope 3 emissions, with a target of becoming a carbon neutral organisation by 2050, with the consideration of all scope 1, 2 and 3 emissions (Figure 9).
- By 2050, in a 'do nothing' scenario, as discussed, EBC's grid supplied electricity emissions are expected to reduce by **320 tCO_2e** as a result of greener electricity from the national grid[7].
- Beyond this, in order to achieve a carbon neutral target by 2050 across all emissions sources, a further **reduction of 5883 tCO_2e** would need to be achieved across the Council's operations.

Figure 9: Projection of total EBC business as usual emissions (including grid decarbonisation), the Council's proposed 2050 carbon neutral target and the associated gap to target



[7] This refers to electricity consumption in Council operated and leased buildings. It does not account for changes in emission intensity from contracted work, which will also benefit from a greener grid

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Recommendations & Next Steps

Strategic Recommendations

- Given the natural decarbonisation of the UK grid and subsequent implications for associated electricity emissions, **the focus of EBC should be on reducing gas (heating) consumption** – this has both emissions and financial upsides. Specifically, heating consumption at the Council's Main Civic Centre, which accounts for 60% of total emissions from council operated buildings, should be reduced.
- At present, transport fuel consumption from the Council's own fleet of vehicles accounts for 29% of the Council's operational emissions, the largest overall emissions source. The Council should therefore **prioritise the further roll-out of Electric Vehicles (EVs)**, alongside installing additional charge-points across Council operated sites. These actions provide the Council with a **visible intervention which signals intent**, develops employee awareness and experience of these technologies, and provides a platform for further action.
- With the completion of the carbon footprint, EBC should now move towards implementing the recommendations and opportunities that will be presented to the Council in the newly developed **carbon action plan**, which will provide initial guidance on the actions required in order to reduce the measured footprint in line with the established target.
- The footprint data can be leveraged as a **useful communication tool** to drive internal awareness and behaviour change, as well as building support for the wider agenda and the subsequent interventions that will follow.
    - This includes its function in creating senior-level buy-in for committing resources and budget to the development and delivery of potential interventions.

Direct Control Recommendations

- Given the largest source of direct emissions are associated with the Council's own fleet of vehicles, opportunities to reduce emissions should focus on **whole-fleet electrification** where possible, building on the 3 x EVs that are already in use. The Council should now focus on conducting an initial feasibility analysis of the level of fleet electrification that can be implemented across the Council's own vehicles.
  - In the first instance, EBC should look into the feasibility of switching those Diesel vehicles which have a total annual mileage of over 100,000 miles (n=4), over to EVs. These **4 vehicles currently account for 43%** of total fuel consumption emissions from the Council's own fleet of vehicles.
- EBC should also focus on **reducing gas (heating) consumption across operational buildings**, most notably the Civic Centre. For high consumption sites like the Civic Centre and across all 7 Community Centres, future ambitions include electrifying heating supplies, for example through **heat pumps**.
- **Energy efficiency should be prioritised** as an initial heat-load reducing measure, this could involve **smart controls** to 'trim' heating hours overnight for staffed buildings, and **improving air-tightness** for buildings in constant use to reduce heat loss.
- Ensuring that all Council operated buildings are also upgrading to energy efficient LED lighting units, also presents an opportunity for EBC to reduce its direct emissions.
  - LED lighting should be considered as a 'low-hanging fruit' option, with "no-regret" short investment paybacks.

Indirect Control Recommendations

- Energy consumption (gas & electricity) in buildings owned by the Council and leased to a 3rd party operator is the **largest single contributor to EBC's measured footprint**, **accounting for 64% of total emissions**. Although not under direct control, the Council should prioritise actions that reduce emissions across the Council's leased buildings.
  - The Council should focus on **working collaboratively with leased buildings operators** to reduce energy costs and associated emissions. Initial analysis should focus on **identifying key carbon hotspots** across selected buildings, alongside possibly sharing the burden of capital investment that will be required in order to reduce emissions.
- Procured services (contracts) also account for **approximately 15% of EBC's total footprint**. There are several levers that the Council can pull to influence these emissions. The benefit of exerting influence over procurement is clear, as it is a means to 'invest' already allocated budget.
  - A key way through which the Council can reduce its scope 3 emissions is through expanding its selection criteria for contractors to include sustainability metrics – for example the minimum kilometres driven by Electric Vehicles in delivering the contract, or giving an XX% weighting to environmental/social value in tenders.
- EBC should also develop a **Data Management Plan**, denoting data owners, how data should be stored and maintained, and identifying where data needs to be sourced or data quality improved. The Council should look to implement these plans across both **operated and leased buildings**.
- Looking ahead, EBC should now **continue to monitor carbon emissions annually**, and source data to create an expanded and comprehensive scope 3 footprint.

Next Step – Monitoring and Reporting

- One of the most fundamental follow-on activities for an organisation that has completed a carbon footprint is monitoring and reporting.
- It is integral that an organisation aims to complete a carbon footprint at regular intervals in order to demonstrate progress in carbon reduction.
- As an organisation becomes increasingly familiar with the process required to complete a carbon footprint, and is able to instil a strong data collection framework, they can begin to look to expand their footprint to cover all emission sources and revisit existing sources to make them more accurate and less reliant on proxies.
- Fundamental to this is establishing clear roles and responsibilities for the different areas of data collection feeding into the footprint – i.e. electricity, gas, business travel, water, waste, leased buildings.
- This also acts as a method to verify and validate previous footprints.

Next Step – Enhanced Scope 3 Footprinting

- EBC should aim to enhance their scope 3 footprint by moving away from proxy values (EEIO and benchmarks) to real, more precise data.
- Emission factors can be developed by conducting a detailed scope 1 and 2 footprint of individual contractors, suppliers, and leased buildings. This creates an inventory of supply chain emissions, which can be updated at regular intervals.
- Those supplier with the highest nominal footprint as identified through the EEIO proxy analysis, should targeted first.
- EBC should look to develop appropriate metrics for measuring the performance of key suppliers. By analysing the model and the results, it is likely that different metrics will be relevant for different Economic Sectors and/or key suppliers.
  - For example, the performance metric for the waste collection and treatment sector should be kg CO2e/tonne of waste collected and treated, whereas the metric for passenger transport could be kg CO2e/km of service delivered, or passengers served.
  - For construction, it could be kg CO2e/km of road laid or m2 of building completed. For all suppliers however, there will always be the fall-back option of measuring kg CO2e/£ spent.

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Appendix

Appendix 1: Data Sources

- Energy, vehicle mileage, utilities data – **Elmbridge Borough Council**
- Building energy benchmarks - **CIBSE**
- Emission Factors – **BEIS**
- UK emission factors projections – **BEIS**
- Environmentally-extended input output (EEIO) data – **GHG Protocol**

Appendix 2: Assumptions

- The following assumptions have been made in order to develop an initial footprint for EBC for the FY 18/19. As part of the Council's continual efforts to improve and build on the footprint presented within, actions should focus on improving the quality and completeness of direct consumption data across the Council's operations that can be used in future footprints going forward.
- The use of direct consumption data will improve the overall accuracy of the Council's footprint, moving away from the use of industry benchmarks and economic proxies that have been utilised within.

	Footprint Element	Data Source & Assumptions
Scope 1	Natural Gas consumption	• Actual Gas consumption data for the Civic Centre and Community Centres has been sourced from metre readings
	Organisational fleet vehicles	• Annual mileage of all Council owned vehicles was provided
Scope 2	Purchased Electricity	• Actual electricity consumption data for the Civic Centre and Community Centres has been sourced from metre readings
Scope 3	Waste generated in operations	• Volume data based on the size of bins (L) used at Council operated sites has been utilised. It is assumed that these bins are 100% full on collection
	Water consumption	• Actual water consumption data was provided for the Civic Centre but was unavailable for the Community Centres. Where consumption data was not available, a unit price of £3.19/m^3 has been applied based on invoice totals
	Business Mileage	• Data was not provided in an aggregated format, assumptions have therefore been made as to the overall vehicle type for each journey. It has been assumed that all journeys have been completed by an 'Average Diesel Car', alongside those journeys which were highlighted as being completed by EVs.
	Employee Commuting	• Data has been sourced from the annual staff travel survey. Weekly averages have been applied in order to extrapolate data on an annual basis.
	Procured Goods and Services	• Environmentally Extended Input-Output (EEIO) factors have been used to determine the emissions associated with individual contracts. These are proxy indicators and do not represent direct measurement of the emissions.
	Downstream Leased Assets (Leased Buildings)	• Where available, actual energy consumption data has been used to determine the emissions of leased buildings. Where consumption data was not available, CIBSE benchmarks have been used to determine the emissions of buildings based on total floor areas e.g. kWh/m^2.

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