

LONDON BOROUGH OF BARKING AND DAGENHAM

Net Zero Roadmap

Jan 2022

V1.0



APPENDIX 1

01 Executive Summary

1. EXECUTIVE SUMMARY

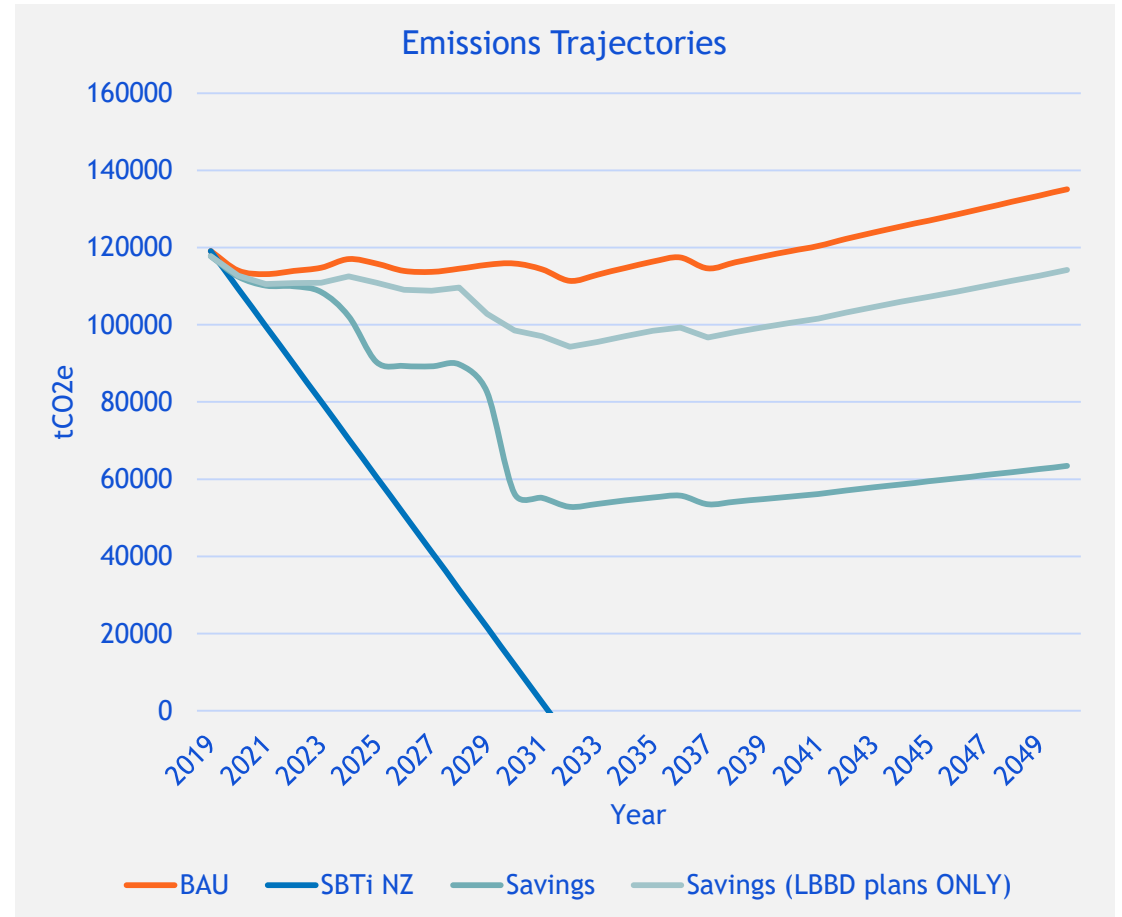
CLIMATE CHANGE STRATEGY AND ACTION PLAN

Climate Change Commitment

In 2020, the London Borough of Barking and Dagenham (“LBBD” or “the council”) declared a motion on climate change, recognising the growing urgency for climate action across the borough. The council has set an ambition for the borough to be carbon neutral by 2050 and for the council’s own footprint by 2030. This roadmap explores the actions the borough will need to consider to meet its net zero ambition.

Emissions Reduction Pathways

- **Business as Usual (BAU):** An evaluation of the current emissions, the expected growth factor year by year, and the expected grid decarbonization.
- **Net Zero Carbon by 2030:** An evaluation of reductions and/or offsets or removals required to achieve net zero emissions by 2030, based on the definition of carbon neutral as defined by the Carbon Neutral standard and PAS 2060.
- **Savings:** This line shows the reduction achievable from the recommendations within this roadmap. This includes projects already proposed by the Council and further activity recommended by Anthesis.
- **Savings (LBBD Plans Only):** This demonstrates the impact against BAU of only the projects already proposed by the council.



1. EXECUTIVE SUMMARY

NET ZERO ROADMAP – COUNCIL OPERATIONS

Delivering Climate Action

The plan sets out recommendations for action across several areas:



Buildings

- Radical demand reduction
- Electrification of heating and hot water



Energy Management Programmes

- Metering upgrades
- Monitoring and targeting
- Energy and carbon data management



Transport

- Switching to electric vehicles across the council fleet



Natural Environments

- Increased tree coverage & tree planting



Waste

- Realising the projected savings from ELWA Strategy 2027



Renewables

- Increase solar photovoltaic (PV) capacity
- Switch to renewable energy contracts



LBBB's Supply Chain

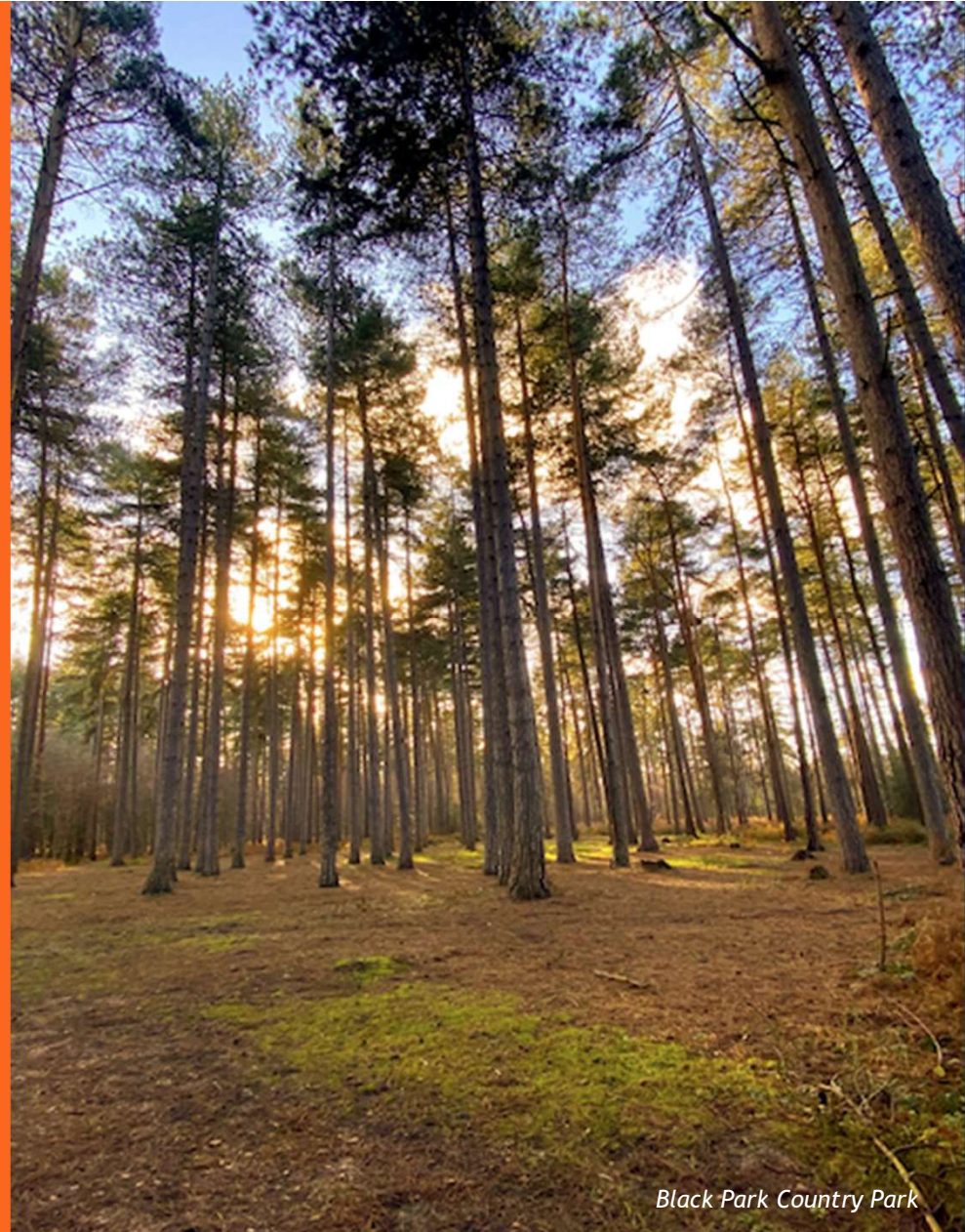
- Moving to Net Zero standard in key procurement contracts

The modelled measures achieve 51.5% reduction against the baseline. The remaining emissions in 2030 result from the purchased goods and services category of emissions.

This emphasises the necessity of engaging LBBB's full supply chain in order to achieve the target.

Carbon reductions achieved in the supply will have knock on benefits for carbon reductions across the borough.

02 Background & Context



Black Park Country Park

2. BACKGROUND & CONTEXT

INTRODUCTION

Overview & Scope

This report was commissioned by LBBB, who have committed to becoming a carbon neutral council by 2030 and borough by 2050.

The roadmap is designed to demonstrate the impact of existing programmes of work on the emissions trajectory for LBBB and provide an outline for further work or offsets to achieve the target.

Objectives

1. Provide an understanding of LBBB's carbon footprint using a location-based accounting approach and build on existing work to date;
2. Explore the science-based carbon budget and emissions reduction pathways;
3. Collate existing projects and understand their impact on the emissions profile of the Council and the Borough.
4. Identify further emissions reduction measures, milestones and actions for LBBB to implement

This will help LBBB to:

- Provide a more informed evidence base for climate change action
- Pull together the existing strands of action and visualise their cumulative impact and the remaining gap in reductions

Data Quality

As part of the scope of this roadmap, a baseline GHG footprint has been created. This footprint will need updating and completing each year in order to monitor progress against the reduction target.

The footprint will also need expanding and correcting to bring in data currently missing or requiring an alternative approach, and remove erroneous supplies as detailed in the technical report.

The council will be unable to track or report progress against the target without first addressing problems with data collection and management. This should form part of an overall energy and carbon management programme designed to achieve reductions in energy and carbon emissions, improve data and reporting, and complete the annual footprint of the council.

2. BACKGROUND & CONTEXT

OVERVIEW OF POLICY CONTEXT

A Motion on Climate Change

On 29 January 2020, the London Borough of Barking and Dagenham declared a motion on Climate Change. The motion stated: “This Council notes:

- That a changing climate will have severe and enduring social, economic and environmental implications, and that tackling climate change is an issue of inequality as the greatest impact will be on the most vulnerable and those least able to protect themselves.
- That the ‘Special Report on Global Warming of 1.5°C’, published by the Intergovernmental Panel on Climate Change in October 2018, (a) describes the enormous harm that a 2°C average rise in global temperatures is likely to cause compared with a 1.5°C rise, and (b) confirms that limiting Global Warming to 1.5°C may still be possible with ambitious action from national and sub-national authorities, civil society and the private sector.
- That strong policies to cut emissions also have associated health, wellbeing and economic benefits.”

National, Regional and Local Commitments

Commitments have been made and targets have been set at all levels of government in response to the growing consensus and evidence around climate change.



The Paris Agreement set the international target to limit global temperature rise to well below 2°C with the aim of 1.5°C above pre-industrial levels. The IPCC’s follow up report stated that this requires a global reduction in GHG emissions of 45% by 2030.



The Climate Change Act 2008 introduced a legally binding target for the UK to reduce GHG emissions by 80% by 2050. In June 2019, the target was updated to reach net zero by 2050. In April 2021, the government committed to reducing emissions by 78% by 2035 compared to 1990 levels - this is due to go to parliament in June 2021.

In 2018, both the London Environment Strategy and the Zero Carbon London: A 1.5°C Compatible Plan were launched, resolving to improve the city’s environment and transform London into a zero-carbon city by 2050 . The London Plan 2021 also covers multiple aspects of the natural environment and sustainable infrastructure.

In 2020, LBBDD set a motion on climate change and committed to tackling 8 key action objectives.¹ Following the motion, the Council set a borough-wide net target of 2050, and an operational target of 2030.

03 LBBB's Emissions Baseline



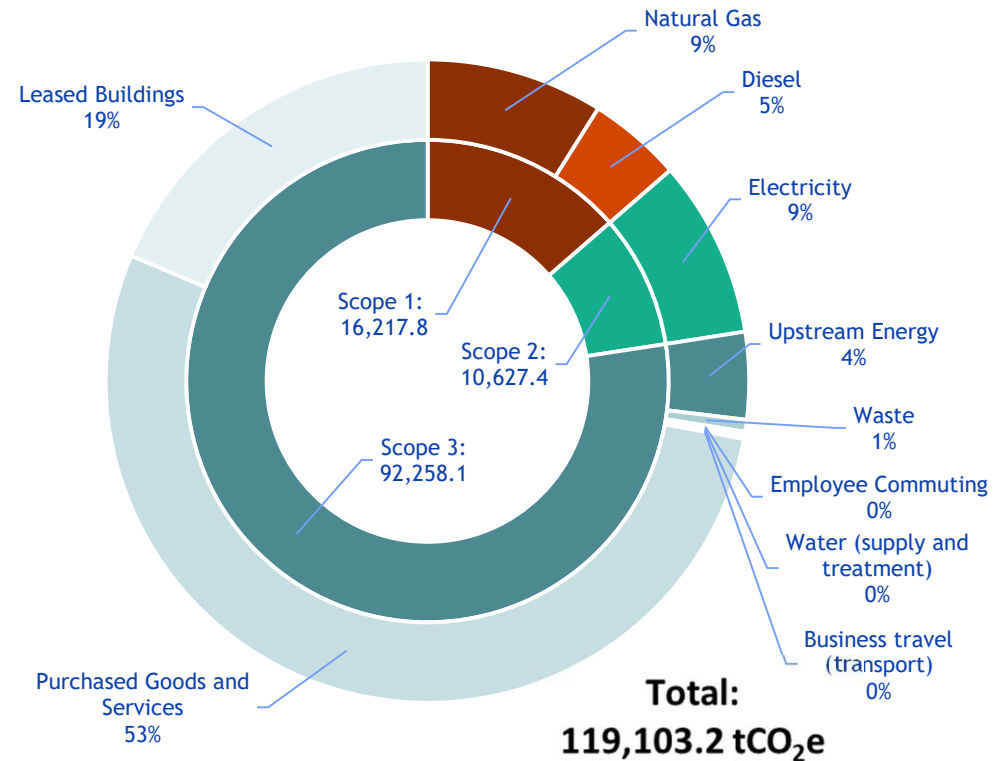
UPDATED CARBON FOOTPRINT

2019-2020

LBBB’s footprint for the FY 2018/2019 was recalculated based on the data from the Carbon Trust with additional data on communal energy in council housing stock factored in. The revised footprint was calculated to be 119,103 tCO₂e. The boundary of this assessment includes all scope 1 and 2 emissions and relevant scope 3 emissions (exc. investments).

The scope boundary excludes arms-length management organisations (ALMOs) such as BeFirst and B&D Energy. It is recommended that these organisations undertake their own carbon footprinting exercises.

Scope 3 emissions account for approximately 77% of the overall footprint, with purchased goods and services and leased buildings accounting for ~72% alone. LBBB’s scope 1 and 2 emissions result from energy consumption in buildings and fleet vehicles.



04 Carbon Reduction Trajectories



4. LBBB EMISSIONS TRAJECTORY

Net Zero by 2030

To achieve net zero emissions by the year 2030, LBBB must reduce emissions as far as possible and then in 2030 purchase offset certificates equal to the residual emissions of the council operations. To achieve reductions in line with the Net Zero pathway, an average of 9% reduction must be achieved each year between 2019 and 2030.

The volume of emissions emitted between now and 2030 differs greatly depending on the annual reductions achieved in the lead up to the target year, e.g. following this straight-line reduction pathway results in a total of 706,603 t/CO₂e being emitted compared to 1,174,031 t/CO₂e if reductions to 0 are only made in the final year.

The business-as-usual (BAU) emissions trajectory is the calculation of the emissions for the council based on the 2018/2019 baseline, the expected rate of grid decarbonisation and the growth in population.

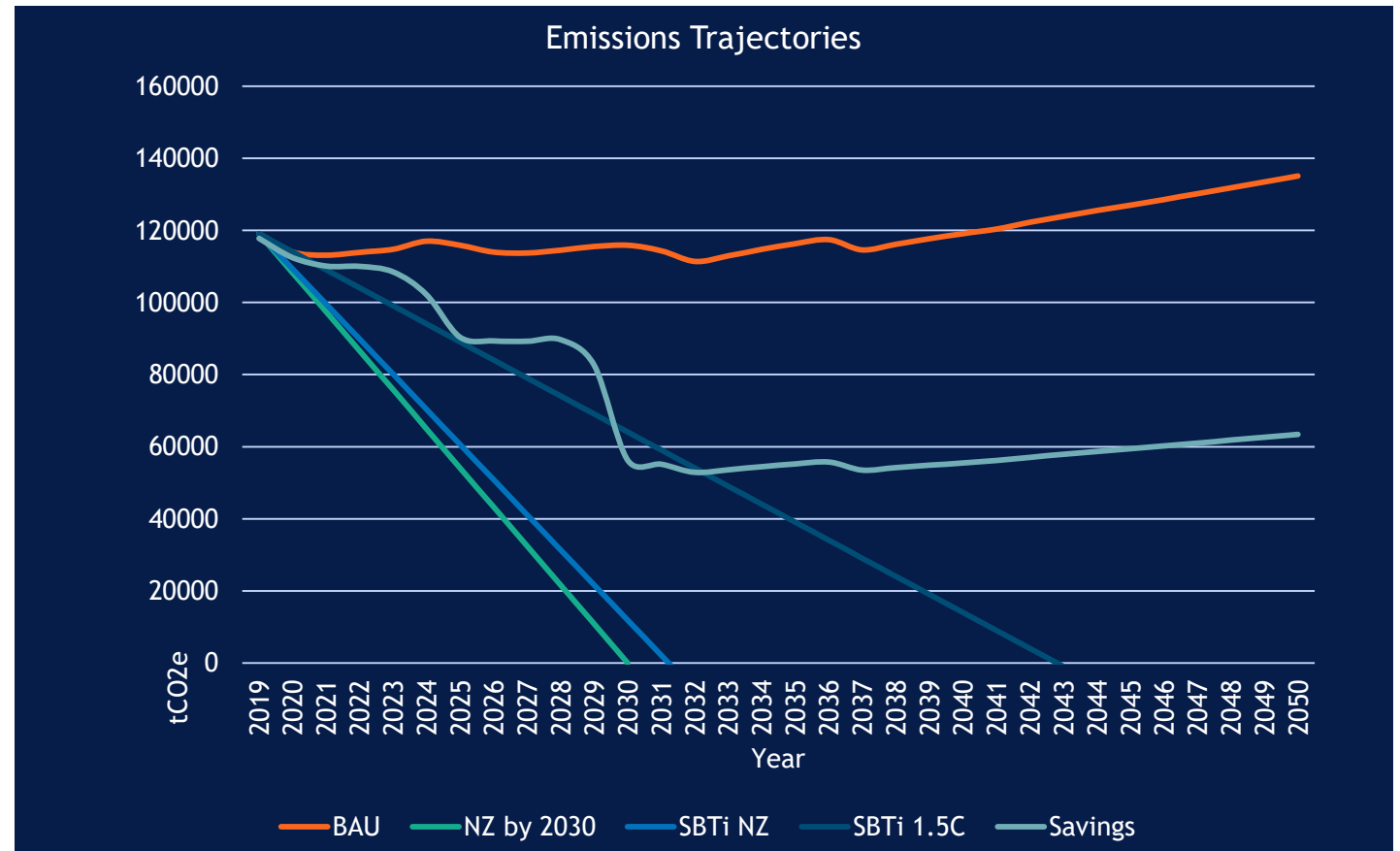


Figure 4.1: Emissions Reduction Trajectories and the Business as Usual Projection for LBBB

05 Identified Savings



5. IDENTIFIED SAVINGS

EXISTING AND ADDITIONAL PROJECTS

Despite applying the multiple existing work streams across the council estate, transport operations and large infrastructure projects, the savings achieved are very far from what is required.

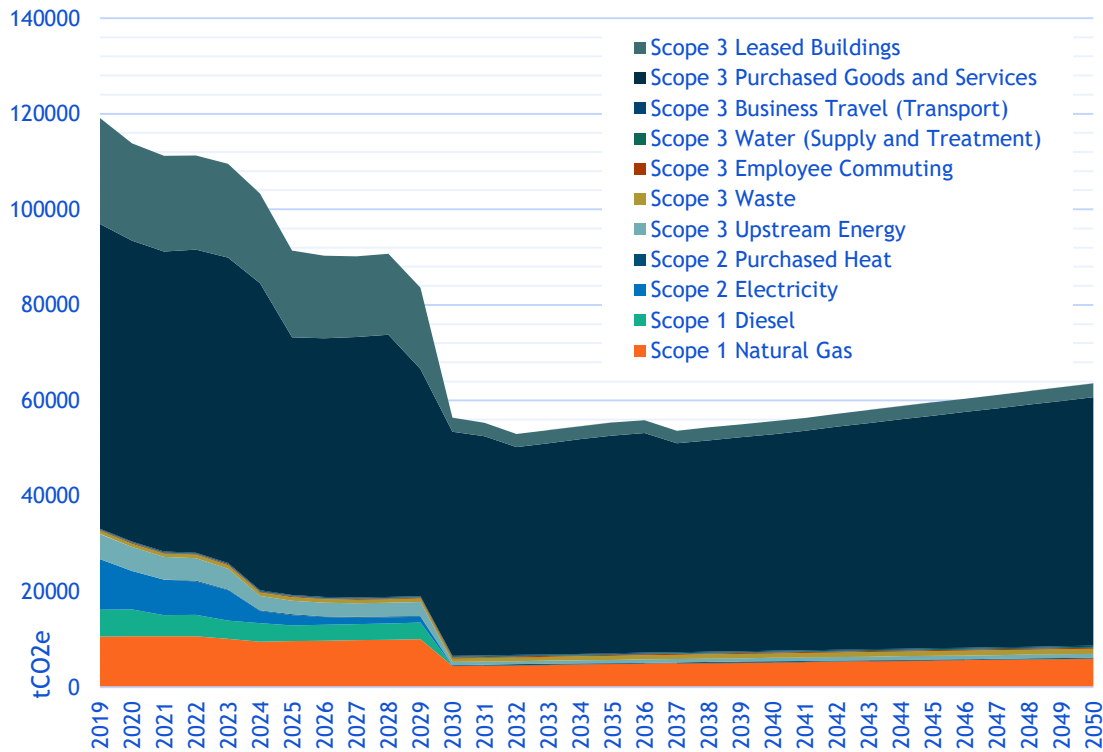


Figure 5.2: emissions trajectory for LBBDD, broken down by scope and category. Shaded areas correspond to residual emissions (those remaining after reductions). Offsets from tree planting are not shown.

The identified savings and energy conservation measures (ECMs) include:

- Transitioning the council fleet to 100% electric vehicles
- Revising the council waste collection strategy in line with ELWA's Joint Strategy for East London's Resources and Waste 2027 - 2057
- NHS net zero targets applied to the health and domestic care services within the purchased goods and services (PG&S) category
- Ensuring all domestic properties with the Private Sector Leasing (PSL) sector are upgraded to EPC band B minimum
- Purchasing 100% renewable energy contracts
- PFI contracts for two schools coming to an end
- Selling of council property
- Installation of solar PV arrays on to multiple council properties
- A further holistic energy assessment for all buildings within the council estate, in order to reach net zero within the estate
- Expansion of the existing B&D-owned heat network to connect several public buildings
- Better energy management through metering monitoring and targeting activities across the council's estate
- Tender specifications and supplier engagement measures to reduce PG&S emissions

5. IDENTIFIED SAVINGS

THE GAP TO TARGET

How can LBBD achieve Net Zero?

Even with the successful implementation of the interventions, which will be discussed in further detail in Chapter 6, the bulk of the emissions remain.

To meet the target, the council will need to:

- set a higher ambition for decarbonising the estate
- move to activity-based emissions data and carbon footprinting
- push for much higher energy efficiency standard in private sector leasing
- Implement a shadow cost of carbon and flow this down through departmental budgets

Closing the gap

Detailed below are some of the ways it may be possible to “close the gap” in emissions:

Technological innovation and marginal improvements

Improvements to technology, such as solar PV, have moved forward at an unpredictably rapid rate in the past twenty years. Technological efficiency improvements in different areas may dramatically improve the feasibility for emissions reductions in different sectors. However, no “silver bullet” transformational technology should be relied upon or anticipated.

Accelerated and increased deployment

LBBD may consider action ‘above and beyond’ the interventions outlined in this report, for example, installing more onsite renewables than currently identified by desktop studies. LBBD may also seek to deliver actions at an earlier date in order to accelerate emissions reductions. It is important to approach this with an understanding of the challenge associated with extending beyond the recommended measures, and the dependency on such developments.

Offsetting & Insetting

This approach would emphasise nature-based solutions such as tree planting and the restoration of other ecosystems. Other nascent technologies such as carbon capture and storage (CCS) and negative emissions technologies (NETs) may also be considered. Offsetting is explored further in Chapter 6.

Insetting may also be considered. This is an alternative to traditional offsetting where instead of offsetting using an emissions reduction activity outside of the organization’s scope, the organisation targets emissions that are within its value chain. For a local authority, these could be emissions within its borough boundaries.

06 Action Plan



Tree planting in Scafell Park

6.1 Buildings



6.1 BUILDINGS

PORTFOLIO OVERVIEW

Data Quality Comment

The data supplied to calculate the footprint was largely missing for leased buildings. Of 546 leased building sites listed in the scope 3 data, actual data was available for only 3. Emissions were estimated using benchmark data and floor areas, however for a large number of sites floor areas data was also missing, leading to an incomplete footprint.

It is assumed that where data is supplied for schools, they are under the central billing service and therefore the council has ready access to the data. Where data was not supplied, the school is not part of this service. However at the point of the completion of the footprint, the data was provided under the basis of scope 1+2 and scope 3 leased buildings. This does not therefore accurately reflect the actual level of operational control. As the operational control is complex, and changing, but the impact of the emissions upon the footprint remains the same however the site is treated, the schools estate has been reviewed as a single entity and the measures applied equality to all sites. It is recommended to address the labelling of sites and produce a single asset management list of all portfolio buildings including the correct attribution to either scope 1+2 or scope 3 leased buildings, to enable future improvement to annual carbon footprint updates.

There are supplies which are within the council footprint erroneously, e.g., some domestic supplies which relate to a historic metering arrangement but should now be moved over to the private individual living at the address. Secondly, the leisure centre supplies within the footprint may in fact be within the operational control of B&D Energy and therefore not within scope of this roadmap. Until this question is resolved, the emissions remain in the total calculated footprint.

Within the total buildings portfolio within the operational footprint of LBBD, 44% of emissions result from energy use within the schools estate.

19% result from the communal area energy use and 12% from leisure centres and sports facilities.

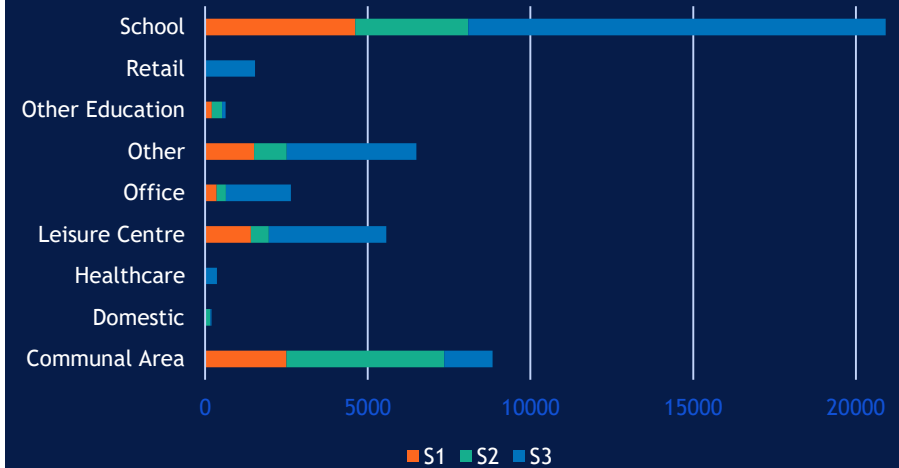


Figure 6.1.2: Emissions per building type, 2019.

6.1 BUILDINGS

INTERVENTIONS OVERVIEW

The interventions consider both decreasing the demand for energy, as well as the increase in scope 2 emissions from electrifying heating systems.

1. **Ameresco RE:FIT Phases:** This measure considers the energy savings from energy conservation measures (ECMs) in some of the council's largest energy consumers made possible according to an IGP process provided by Ameresco.
2. **Net Zero Estate Assessment:** This measure considers the need for a holistic assessment of every individual building within the council estate to go beyond the measures recommended by Ameresco and get each building to Net Zero.
3. **Energy Management (EM) Programme:** Considers the setup of an energy management service across all sites within the council portfolio.
4. **Move to Renewable and Lower Carbon Energy:** Considers the move to renewable energy across the council estate, in addition to a small number of council buildings being added to the local district heat network.
5. **Office Closure:** Considers the reduction in emissions from the selling of council properties so they are no longer in the council footprint.
6. **PSL EPC Improvement:** Considers the reduction in emissions from upgrading all homes within the private sector leasing category to a minimum of EPC band B.

6.1 BUILDINGS

ENERGY MANAGEMENT

It is recommended to set up an energy management service and roll this out to all sites within the council portfolio, with the ambition being to reduce consumption via energy management practices and make it easier to then fully decarbonise the remaining energy demand. A conservative estimate of 10% reduction has been applied to the trajectory from 2024.

Schools: The council currently offers energy management and billing support to schools. This will need to be expanded into a more comprehensive service to further enable schools to reduce energy consumption and cost.

The service should entail:

- HH meter installs (as above)
- Monthly HH data analysis and reporting.
- BMS bureau service to monitor and manage HVAC control systems to ensure optimum operation
- Support to set up and run pupil-led sustainability programmes
- Support with Salix or other funding applications where applicable
- Billing review service to validate bills, monitor and reduce capacity charges
- Integration with schools estates team to connect and build upon ongoing energy conservation and sustainability work with schools

Leisure Centres: While the components required for this are the same as for schools, there are likely to be slightly different skills required in monitoring and managing more complex building systems than compared to some of the school estate.

Healthcare: It is possible the operators of the healthcare sites in the council's portfolio are within the NHS supply chain and are therefore required to reduce emissions in line with the NHS' scope 3 reduction targets. If there are no existing energy management targets and activity, they can be offered the same services as above. If the Council is purchasing any services from these operators, then carbon reduction requirements can be written into future purchase specifications.

Leased Retail and Office Sites: The retail sites are unlikely to be large enough to benefit from the same energy management service as schools, sports facilities and care homes. These sites would be better addressed as a programme, rather than individual sites. In the short term the council has limited options other than to encourage the occupier to join a centrally procured renewable energy contract and upgrade the meter to a smart meter to facilitate billing. In the medium term, upon lease break, further changes can be implemented to electrify the heating and hot water.

Actions and Next Steps: It is estimated that five FTE Energy Management Officers will be required to carry out the actions described above.

Final costs will be impacted by a large number of currently unknown variables. The council will be able to recover a portion of this cost by charging a small fee for an energy management service, and re-selling electricity purchased via a vPPA or other central contract, to the tenants of the leased buildings.

6.1 BUILDINGS

AMERESCO REPORT AND NET ZERO

The current carbon reduction plans for the council estate involve energy efficiency and installation of a number of PV systems and heat pumps across 18 of the highest energy consuming sites in the council portfolio. These measures have been identified through an IGP process provided by Ameresco.

The IGP found:

- An average of 11.7% annual energy reduction
- Total capital cost of £4.8m (exc VAT)
- Average £/tco2e LT of £373

The IGP presented the most cost- and carbon-effective ECMs, which follows from the purpose of the RE:FIT programme under which Ameresco were contracted.

In addition to the Ameresco IGP process, a desktop solar PV feasibility study was also carried out by BRE, to assess which sites would be suitable for the installation of solar PV arrays. Excluding some overlap with the Ameresco report, an additional estimated 160.7 tCO2e per annum could be saved from solar PV arrays on several different council buildings.

Neither of these reports go far enough. LBBDD will need to use a different methodology and approach to go beyond these savings, and determine the measures and steps required to get every building within the estate to net zero emissions. It is recommended that LBBDD refer to the UK Government's Net Zero Estate Playbook for guidance on an overarching strategy.



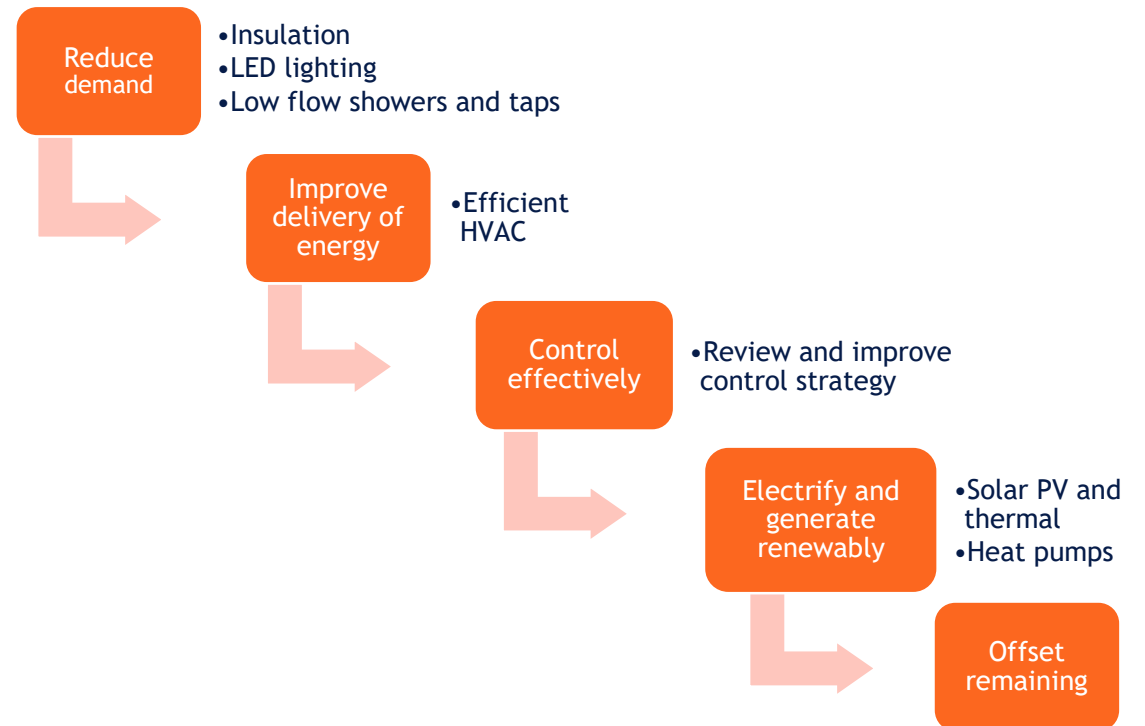
6.1 BUILDINGS

NET ZERO ESTATE ASSESSMENT

A summary for the approach to assessing individual buildings is shown here.

The council's portfolio includes a variety of different building types, such as schools, offices, leisure centres and industrial buildings.

While individual measures will vary depending on the suitability for an individual building or building type, the general steps remain the same.



6.1 BUILDINGS

DISTRICT HEAT NETWORK AND RENEWABLE ENERGY

B&D Energy District Heat Network

The Town Hall, Broadway Theatre and Abbey Leisure Centre are all planned to be connected to the district heat network in Barking town centre, run by B&D Energy, in January 2022.

This will move the buildings' scope 1 emissions to scope 2 (purchased heat and steam) in LBBB's footprint (and move them to the scope 1 footprint of B&D Energy) and reduce the scope 3 'leased building' emissions (two of the three buildings are double-counted in the original footprint) as a result of the improved efficiency of the heat network¹ compared to standard natural gas heating.

A total of 134.9 tCO₂e emissions are saved from LBBB's footprint by connecting these three buildings. Any plans by B&D Energy to decarbonize its district heating network will increase the emissions saved.

Renewable Electricity Procurement

Electricity consumption across scope 2 and scope 3 accounts for 18% of the total footprint of the council. These emissions arise indirectly from the mining or similar activities related to obtaining primary fuel, generation of the electricity and distribution to end users.

Moving to a fully renewable electricity supply across all this consumption is therefore imperative. While some supplies are currently directly controlled by the council, others will need to either be brought on to a central contract, or lease holders encouraged to move to a renewable supplier. This action therefore intertwines with the proposed energy management service described previously. The energy management service will enable the move to renewable energy across the estate.

There are multiple options for procuring renewable electricity, varying in perceived and actual robustness.

- LBBB could procure electricity directly via a vPPA between a generator anywhere in the UK and the council supplies which are purchased directly by the council. This would provide the most robust and direct link between LBBB actions and the increase of renewable generation and reduction in emissions from grid electricity.
- For all remaining supplies, it would still be necessary to move these to a 'green tariff' - an arrangement whereby a company purchases renewable electricity from its utility through a green premium - in order to address the emissions within the council footprint. Green tariffs are not necessarily backed by the utilities' own renewable electricity production, but in some cases by unbundled EACs, such as 'Renewable Energy Guarantees of Origin' (REGOs), acquired by the utility on the open market. This has led to some criticism over the lack of transparency with respect to the origin of the products offered and the extent to which they support additional renewable electricity deployment.

6.1 BUILDINGS

OFFICE CLOSURES AND PSL

Pondfield House

Pondfield House Depot was sold - and therefore no longer part of the council's estate, and carbon footprint - in 2020.

It is still currently being occupied by LBBB in the short-term, so the carbon savings from the sale are considered from 2022 onwards in the trajectory.

The building is listed in both the council's own estate and in the scope 3 leased buildings category, so savings from both are made.

The total estimated saving from the selling of Pondfield House Depot is 217.2 tCO₂e.

PSL EPC Improvement

11% of emissions from purchased goods and services (PG&S) arise from spend associated with private sector leasing. To reduce emissions arising from these private sector leases, LBBB should set specifications for a minimum EPC rating for any private sector accommodation leased by the council. However, as this will likely not affect the spend by on this category, without also changing the way these emissions are calculated, reductions will not be recognised. LBBB will need to require landlords to provide activity data such as actual energy consumption. More detail on this is given later.

The Minimum Energy Efficiency Standards (MEES) currently require any domestic property to achieve a minimum EPC rating of D. This will be raised to C in 2030, however the government is expected to bring this forward to 2028 and require band B by 2030.

94% of EPCs issues in LBBB in since 2008 are below band B. Requiring band B compared to the current average EPC rating would result in 20% emissions reduction across these homes.

6.2 Transport



6.2 TRANSPORT

LBBD'S OWN FLEET

When the baseline carbon footprint for LBBD was calculated, LBBD had 326 diesel vehicles in their ownership, contributing almost 7000 tCO₂e emissions each year (not to mention local air pollution). Several steps to decarbonisation have been identified.

- 1. BD Group fleet transition:** BD Group have recently taken ownership of 91 of the vans from LBBD's fleet, resulting in an approximate saving of 1512.7 tCO₂e from scope 1 and 3 emissions, as the vans no longer come under the council's estate.
- 2. Energy Saving Trust report:** A report carried out by the Energy Saving Trust in 2020 found that 42 vans, 8 cars and 3 refuse collection vehicles (RCVs) are suitable for replacement by electric vehicles (EVs) imminently. This would save an estimated 921 tCO₂e from scope 1 and 3 emissions.
- 3. Electrifying remaining fleet:** LBBD have set their own targets of electrifying 25% of their fleet by 2026 and 100% by 2030. Electrifying 25% of the remaining fleet would save a further estimated 685 tCO₂e, and the remaining 75% would save approximately 3950 tCO₂e.

Current Context 2022	By 2030
235 diesel vehicles, having transferred ownership of 91 vans to BD Group since the baseline footprint was calculated	100% fleet electrification

Table 6.3.3: Current context and the 2030 intervention milestone for reducing fleet emissions

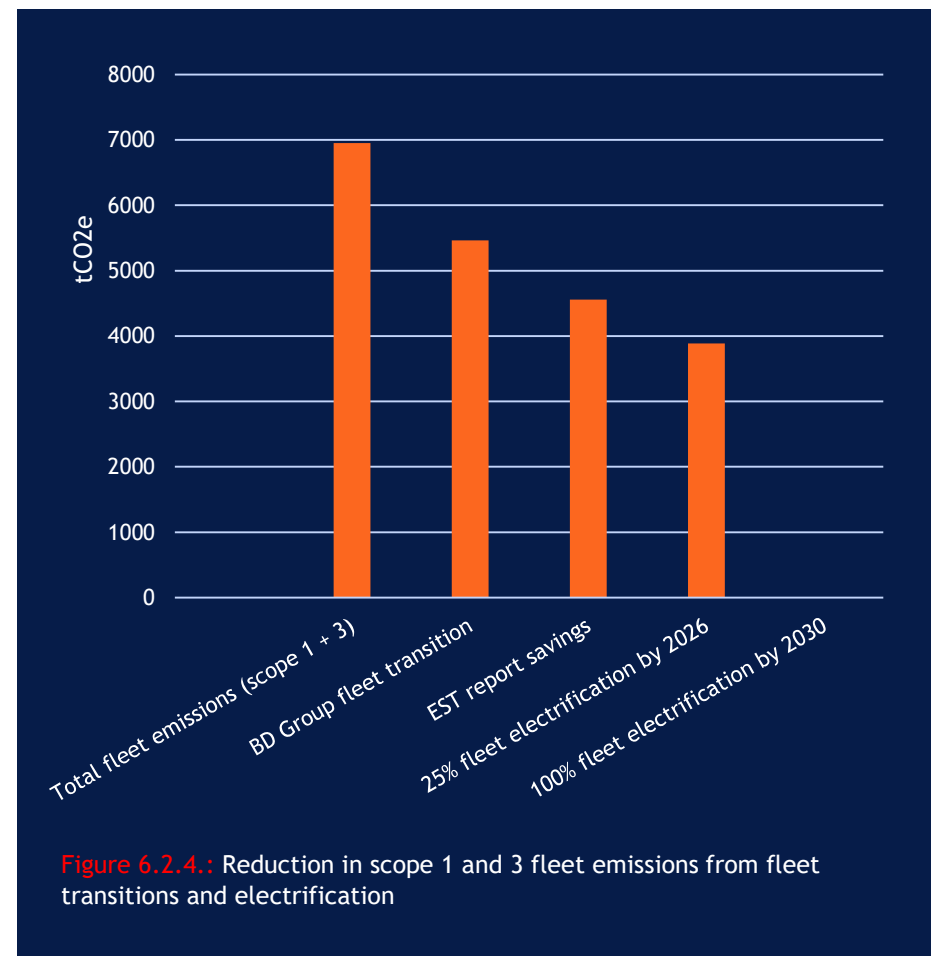


Figure 6.2.4.: Reduction in scope 1 and 3 fleet emissions from fleet transitions and electrification

6.3 Waste



6.3 WASTE RESOURCES AND WASTE STRATEGY

Carbon Footprint Data

Waste is covered in two sections in LBBB’s carbon footprint: ‘waste’ (scope 3) and ‘purchased goods and services - waste services’ (scope 3).

The larger category by far is the waste services. Based entirely on spend data rather than anything more granular, it contributed over 23,000 tCO2e emissions to LBBB’s baseline footprint.

ELWA’s Joint Strategy for East London’s Resources and Waste 2027 - 2057

The East London Waste Authority have produced a Joint Strategy for East London’s Resources and Waste¹ (which includes LBBB), covering the years 2027 - 2057.

As part of this strategy, the predicted volumes of waste and the impact of different collection and waste stream scenarios were modelled².

Assuming LBBB council follow the single stream waste collection service recommended, a 30.4% reduction in emissions from waste services was estimated.

Activity- rather than spend-based data is required to be able to accurately report emissions savings in this category of PG&S.



Figure 6.3.5:

Current Context 2022	By 2030
Over 23,000 tCO2e emissions from waste services, based on high-level spend-based data	Achieve a 30.4% reduction in emissions from waste services as a result of changes to collections Activity-based data to allow for accurate emissions reduction calculations

Table 6.3.3: Current context and the 2040 intervention milestones for increasing recycling rates.

¹ [ELWA Joint Strategy for East London’s Resources and Waste 2027 - 2057](#)
² [ELWA and Ricardo Waste Flow Model - Collections Modelling](#)

6.5 Natural Environments



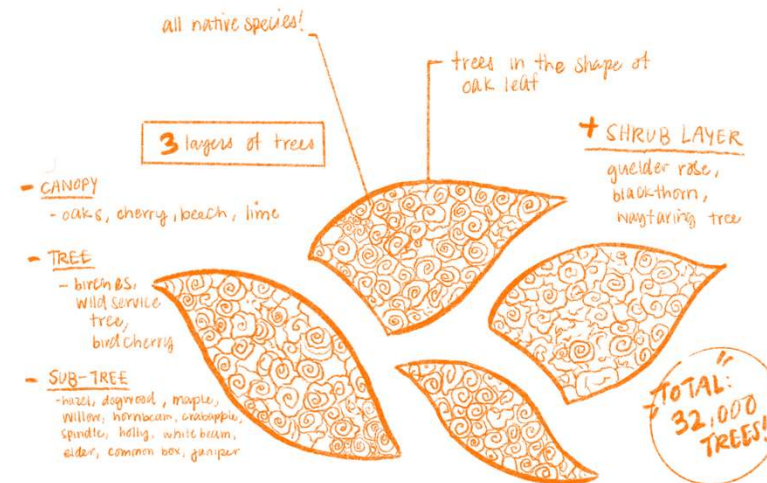
6.5 NATURAL ENVIRONMENTS

TREE PLANTING

The emissions sequestered by planting 50,000 trees add up to approximately 1100 tCO₂e per annum, once the trees reach maturity.

The figure of 50,000 trees includes the Miyawaki Forest in Dagenham, on which work began in 2020.

These emissions reductions are added in to the savings trajectory in 2030, to allow time for the planted trees to grow and mature.



6.6 The Council's Supply Chain



6.6 THE COUNCIL'S SUPPLY CHAIN EMISSIONS DATA

Market-based emissions data:

Currently LBBDD report emissions from scope 2 purchased electricity using the location-based method, which reports emissions reflecting the emissions per unit of electricity delivered via the national grid.

In order to calculate and recognise reductions in emissions, LBBDD will need to move to market-based emissions reporting for scope 2, and should do so as soon as possible.

The market-based approach reflects emissions associated with the 'contractual instruments'. This means that a customer can decide to purchase electricity from a renewable electricity supplier and therefore reflect lower emissions (as recommended above). When setting an emissions reduction target, either a market-based or location-based method should be used and should be used from the baseline year. Therefore, once LBBDD can collect market-based data, the baseline and target should be refreshed.

Activity-based emissions data:

Scope 3 emissions have been calculated using environmentally extended input-output (EEIO) tables and spend data per category. In order to recognise the impact of action taken to reduce emissions, LBBDD will need to move to activity-based emissions calculations for key elements of scope 3 emissions.

On the right is a list of emissions categories areas which will require a change from the current emissions data and calculation methodology in order to report changes in emissions from activity recommended elsewhere in the roadmap.

Scope	Sub-Scope	Current Data	Required Data
Scope 2	Purchased electricity	Location-based	Market-based. Emissions factors per electricity contract to be obtained from the energy company
Scope 3	PG&S – Private sector leasing	Spend data	Activity data – EPC rating per accommodation location and length of time occupied, or actual electricity and gas consumption per occupancy
Scope 3	PG&S – Waste services	Spend data	Activity data – emissions per waste stream by volume
Scope 3	PG&S – Utilities provision	Spend data	Market-based. Move to obtain actual emissions factors from the utility provider
Scope 3	PG&S – Healthcare, SEND, care services including residential and homebased care	Spend data	Activity data – suppliers' scope 1+2 emissions data per year per contract.

6.6 THE COUNCIL'S SUPPLY CHAIN

NET ZERO PROCUREMENT

Procurement Specifications:

In 2019, purchased goods and services accounted for 54% of the total carbon footprint of LBBB. These emissions occur during the provision of goods and services to LBBB. The council, as a procurer of significant amounts of local services, has the power to progress carbon management and reduction across these contracts between now and 2050. To achieve this will require short-, medium- and long-term supplier engagement, alongside specific requirements to be added to future tendering exercises.

Tender Specification:

There are specific tendering specifications which should be brought in for the largest sources of emissions within the PG&S category, such as:

- PFI
- Utility Provider Housing Stock
- Healthcare and Care Services
- Private Sector Leasing (previously discussed)
- Waste (previously discussed)

The council could also consider including as standard in all large contracts and for all large suppliers a requirement for a carbon reduction plan. These requirements could reference those recently brought in by the government for large contracts. These require bidders to have a published carbon reduction plan on their website, stating the actions they will take to achieve net zero emissions by 2050 across multiple different emissions sources.

The council could go one step further than this and require suppliers' scope 1+2 emissions data relating to delivery of the contract, service or product to be provided annually. This activity-level data would help to identify emissions and reductions by benchmarking suppliers against their competitors as well as their own previous performance.

Supplier Engagement:

Specifications within tenders provides the requirement, but supplier engagement both enables suppliers to meet that requirement and allows LBBB to better understand and report emissions from PG&S.

It is likely that LBBB will need to work with their largest suppliers in advance of new procurement rules requiring suppliers submit carbon emissions data and plans to reduce this.

Secondly, supplier engagement will help LBBB begin to uncouple PG&S from emissions. This will address the steady increase in emissions seen in the trajectory arising from the increase in population and therefore the increase in purchased goods and services.

07 Conclusions



7. CONCLUSIONS AND NEXT STEPS

PRIORITISING ACTION

Priority for Action

Substantial carbon and cost savings can be achieved, but it is essential to resource the carbon and energy management function within the council.

It is then possible to build the bedrock of good data, asset management and regular carbon reporting upon which the rest of the programme relies.

Funding

Identifying funding for this programme will be a substantial challenge, which makes it more essential to incorporate a form of carbon pricing as early as possible. This will prevent available funds being sunk into high carbon infrastructure which will prove more costly in the long run.

Secondly, it is expected that a fourth round of PSDS funding will be announced in 2022. Being ready to move on this will be important in making the most of this essential funding source.