



Pathway to a **Net Zero Council** by 2027

Net Zero Action Plan

Annual Performance Report

Year 5 2023/24



**A fantastic place to
live and work, where
everyone can lead
healthy, safe and
independent lives**



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Executive summary

We know that Bromley is a fantastic place to live and work, where everyone can lead healthy, safe, and independent lives. We also know that the local level is where we must collectively implement the strategies and projects which allow us to meet national policy objectives.

Building on years of good work, this Net Zero Action Plan Performance Report charts the planned activities of the Council in reducing our organisational emissions to achieve our ambitious target of Net Zero by 2027. This is the fifth year of reporting and continues to reflect Bromley's ambition and sincerity in leading by example for others to transition to Net Zero. By focusing on the Council's own organisational emissions across seven priority areas, we report on the 2023/24 progress. Since the baseline year of 2018/19 emissions have reduced; however, for this fifth year there has been a slight increase in emissions of just over 20% from the previous year 2022/23. The reduction against the baseline year of 2018/19, currently standing at 48% emission reduction, is measured over a financial (or fiscal) year and not calendar year.

This increase in emissions from 2022/23 to 2023/24 is due to energy usage relating to the running of two Civic Centres at Stockwell Close and Churchill Court side by side, whilst the Council is in transition and moving its operations from one to the other. This increase will be reflected over two greenhouse gas reporting years, as this transition took place partly in 2023/24 and 2024/25. The new centre became fully operational from the end of December 2024, with the Council operating from one site only. An assessment of energy usage at both sites shows that emissions from the new Civic Centre site are expected to remain lower.

By focusing on emission reduction, we also continue to achieve co-benefits including:

- Financial savings
- Energy efficiency
- Improvements to our beautiful woodlands, parks and green spaces

Meeting Net Zero is a challenge we must rise to, to avoid the worst impacts of a changing climate. We also have a responsibility to future generations for leaving the environment in a better way than when we inherited it.

This is more important now than ever. With the release of the Intergovernmental Panel on Climate Change (IPCC) 6th Synthesis Report 2023 ^{[1][2]} stating that:



"Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with more frequent and extreme weather events affecting "every region across the globe".

Climate change risk is already listed on our corporate risk register. With the challenges experienced due to COVID-19, alongside energy price rises, effective recovery includes embedding carbon reduction, energy efficiency and adaptation across all Council services.

We continue to seize opportunities such as applying for Government grant funding to support decarbonisation projects and aim to continue our contribution to meeting our climate goals and emissions reductions.

Many ambitious projects are already underway and the headline figures which illustrate our progress thus far include:

48% reduction in carbon emissions

An overall 48% reduction in carbon emissions (3,429 tCO₂e) achieved against a 2018/19 baseline.

60% reduction in LED streetlighting

60% reduction in carbon emissions (1,745 tCO₂e) achieved against a 2018/19 baseline, because of LED streetlighting upgrades.

100% Green Tariff energy contract

The decision to aim to procure 100% green energy with REGO backed certificates for electricity.

Woodlands and Trees

Woodlands and Trees Project Board established to deliver joint carbon reduction and greenspace objectives.

^[1] CLIMATE CHANGE 2023 Synthesis Report, Summary for Policymakers – IPCC 20 March 2023

^[2] 10 big findings from the 2023 IPCC Report on Climate Change <https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings> – World Resource Institute 20 March 2023

About this plan

Building on years of good work, this Net Zero Action Plan Performance Report charts the planned activities of the Council in reducing our organisational emissions to achieve our ambitious target of Net Zero by 2027.

This plan is split into four distinct chapters:

Chapter 1: Emissions update

The emissions comparison
between year 4 (2022 to 2023)
and year 5 (2023 to 2024)

Chapter 2: Our approach

The key drivers and principles
that guide this Net Zero Action Plan

Chapter 3: Our 7 priority initiatives

The seven priority actions and
initiatives to reach net zero, including
progress and intentions

Chapter 4: Enabling factors and implementation

The financial mechanisms, governance
regimes and partnerships, and the
monitoring, verification, and reporting,
which will facilitate the delivery of
these key actions

Emissions update

This table highlights the change in tonnes of CO₂e emitted by sources under the control of the Council.

The table also illustrates the percentage change in emissions between our year 4 progress report (2022/23) and year 5 report report (2023/24).

	Year 4*	Year 5*	Percentage	Change
Buildings	1,893	2,462	30%	↑
Street Lighting	1,159	1,143	-1%	↓
Council Fleet	8.6	5.3	-39%	↓
Waste	2	1.9	-5%	↓
Water	3.1	4.1	33%	↑
Paper	8.7	11.8	35%	↑
Business Travel	59	138	134%	↑
Total*	3,133	3,767	20%	↑

* (tCO₂e/yr)

Year 1

8.5% reduction

In year 1 (2019/20) the net zero profile emissions totalled 6,584 tCO₂e, equivalent to an 8.5% reduction against 2018/19 baseline emissions (7,196 tCO₂e).

Year 2

39.5% reduction

In year 2 (2020/21) the net zero profile emissions totalled 3,985 tCO₂e, equivalent to a 45% reduction against the 2018/19 baseline and a reduction of 39.5% on year 1 (2019/20).

Year 3

9% reduction

In year 3 (2021/22) the net zero profile emissions totalled 3,646 tCO₂e, equivalent to a 49% reduction against the 2018/19 baseline and a reduction of 9% on year 2 (2020/21).

Year 4

14% reduction

In year 4 (2022/23) the net zero profile emissions totalled 3,133 tCO₂e, equivalent to a 56% reduction against the 2018/19 baseline and a reduction of 14% on year 3 (2021/22).

Year 5

20% increase

In year 5 (2023/24) the net zero profile emission totalled 3,767 tCO₂e, equivalent to a 48% reduction against the 2018/29 baseline and an increase of 20% on year 4 (2022/23).

Overall

48% reduction

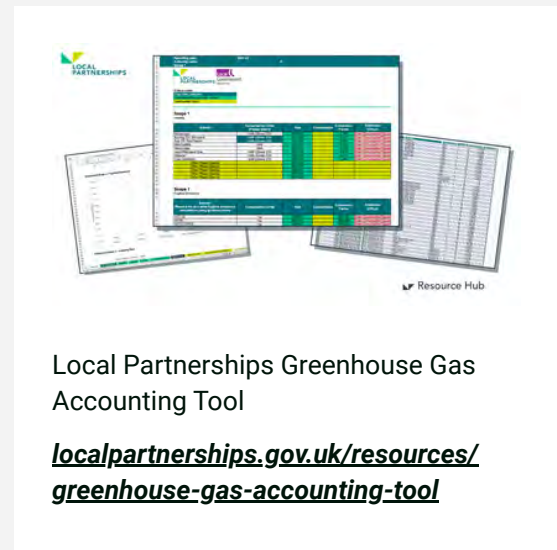
Year-on-year emission reductions continue to be achieved. The large reduction in emissions achieved in year 2 (2020/21) from previous years was predominately because of COVID-19 impacts. A rebound in emissions post-pandemic did not occur and emissions are lower than the base year.

Greenhouse Gas Assessment

The Greenhouse Gas (GHG) Accounting Tool developed by Local Partnerships, working with the Local Government Association, is used to calculate the Council's emissions. This tool provides a straightforward and consistent approach to calculating carbon emissions. The tool produces summary tables and charts to enable us to understand our most significant sources of emissions, which can then be used to prioritise actions to reduce carbon emissions.

The same methodology in applying assumptions to year 1 (2020/21) data through to calculating each year's emissions have been used to estimate the reduced water, waste, paper use and business travel.

The tool continues to be updated by 'Local Partnerships' and improved accuracy of reporting will be progressed where possible.



Local Partnerships Greenhouse Gas Accounting Tool

localpartnerships.gov.uk/resources/greenhouse-gas-accounting-tool

Working practices

Emissions related to building use (electricity, gas, waste, water, paper etc.) have not increased to pre-COVID times. However, there has been a slight increase in overall emission from the previous year of 20%.

Hybrid working arrangements continue, with staff working at home for some of their working week, and spending as a minimum two days in the office.

Overall emissions have reduced by 48% from the baseline year. However, during 2023/24 and for part of 2024/25, until December 2024, the Council was operating two Civic Centres at Stockwell Close and Churchill Court side by side, whilst in transition and moving its operations from one site to the other. Hence emissions for buildings and water usage have been higher and likewise this will be reflected in 2024/25 which will in due course be reported on.

Most streetlight LED upgrades were completed in 2022/23 and therefore only a small decrease was shown for 2023/24. Overall, this upgrade programme has been successful in reducing electricity usage.

In terms of gas usage from heating Council owned buildings, due to two Civic Centre sites in operation there was a small increase of 6% in emissions.

In terms of waste, only waste generated from the Civic Centre site is measured. This has increased over the last two years with staff returning to the office post COVID but it is still below the baseline year. The increase could in part be due to better accounting but also to the Council's decision to 'declutter' and move towards a paperless system.

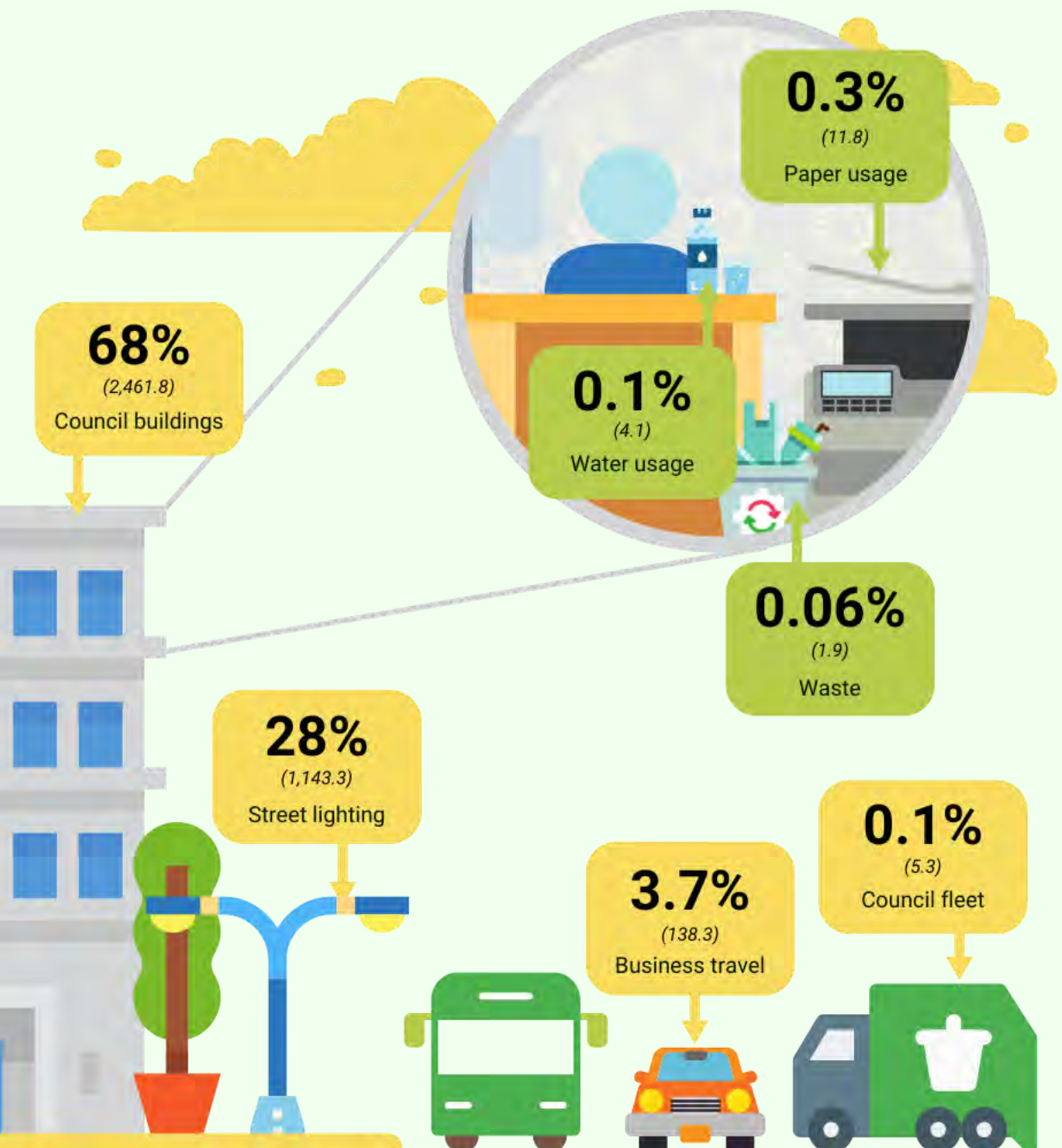
The Council's fuel use for its own fleet has decreased significantly. This in part is due to fuel for certain parties now being recharged to clients and therefore not within Bromley's organisational emissions. Likewise, there has been improved accuracy of reporting, plus the fleet is gradually moving to electrification. The use of the 'winter gritting fleet' has also changed, with newer cleaner vehicles in the fleet. Emission is also dependent on the severity of the winter season.

As expected, in year 5, (2023/24) business travel has risen, and more than doubled from the previous year, although this is still lower than the baseline year 2018/19 by 27%. However, the low mileage in 2022/23 was possibly due to the digital reporting platform having changed and older data having been archived which meant not all data could be retrieved accurately. For year 5 more effective data retrieval was possible.



Where our emissions are coming from

in tonnes of CO₂ equivalent (tCO₂e/yr)
for 2023/24



Summary

This chapter has provided a progress update on the changes to our emissions profile between year 4 and year 5 of this action plan.

Before reading any further, please refer to the Net Zero Action Plan ^[3] and the years 1 to 5 progress reports as reported in November each year to the Environment and Community Services Policy Development and Scrutiny (PDS) Committee to refresh on the policy context, as well as the scope of our reporting to fully understand what the plan is and is not. To reiterate:

- It is an organisational plan covering strategies to reduce emissions created by Bromley Council.
- It is not an action plan to quantify and lay a roadmap for the reduction of emissions across the whole borough.

The next chapter will outline the key principles which guide the delivery of this plan.



^[3] Carbon Management Programme Update, Report ES20201, Executive 6 October 2022

Our approach

Key drivers in Bromley

Our adopted approach to meeting net zero in organisational emissions is guided by three key drivers:

Renewable Energy and Energy Efficiency (REEE)

Global energy use accounts for two thirds of all emissions. That is why REEE is the foundation of our NZAP. It is the gateway to reducing our overall energy demand on the national grid as far as possible, moving away from fossil fuel-based energy, towards a green energy supply.

Leadership by example

Bromley Council aims to set an example, leading the way in reducing the emissions of our organisation, while we continue to guide residents, businesses, and communities to do the same.

Co-benefits

Bromley Council aims to set an example, leading the way in reducing the emissions of our organisation, while we continue to guide residents, businesses, and communities to do the same.

The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) defines co-benefits as being “the positive effects that a policy or measure aimed at one objective might have on other objectives”. Although the measures detailed in this NZAP are aimed at emissions reductions, where possible the plan seeks to positively influence other objectives across the Council.

For example, the planting of woodlands and street trees will not allow for a very small amount of CO₂ to be captured but it critically supports biodiversity, improves our green spaces, provides cooling/shading and improves air quality. This aligns with objectives of the Council’s Air Quality Action Plan, the Open Space Strategy, and Bromley’s local planning document.

Likewise improving building energy efficiency through retrofits and installing on-site renewable energy generation on buildings, not only supports carbon reduction, but also leads to green job creation, skills development, economic growth, whilst reducing waste energy and helping to keep energy bills down.

Public health benefits from active travel can also be realised. The Co-Benefits of Climate Action - Accelerating City-level Ambition from CDP 2020 (CDP was established in 2000 as the Carbon Disclosure Project).

Priority actions

Various factors have informed the proposed projects which we will implement to achieve net zero by 2027, such as:

- The potential carbon, energy and cost savings of initiatives.
- Available funding.
- The priorities identified in terms of mobilising medium to large scale projects.

In line with best practice, we aim to reduce our emissions as much as possible, then offset any remaining emissions. Seven priority initiatives have been agreed:

Primary initiatives 1 to 4

96% reduction

Aim to reduce emissions to potentially deliver a 96% reduction

Secondary initiatives 5 to 7

4% offset

Aim to offset the remaining 4% of emissions

Our 7 priority initiatives

Reduction against the 2018/19 baseline



Street Lighting LED

Phased upgrade of remaining 10,000 non-light-emitting diodes (LED)

Reduction
24 to 27%



Energy efficiency

Priority site refurbishments and Automated Meter Readers (AMR) installed

Reduction
5 to 10%



Renewable energy

Purchase power from renewable energy generator

Reduction
Up to 96%



Zero Emissions Fleet

100% zero emissions fleet and accompanying infrastructure

Reduction
Under 1%

Offset



Alternative Technologies and Renewables Investment

Establish portfolio of renewable investments

Offset
TBC



Parks and Greenspaces

Natural carbon offsets and co-benefits

Offset
Less than 1%



Certified Carbon Offsets

Purchase UK based carbon credits

Offset
TBC

Street lighting LED upgrades



2026 target

Phased upgrade of remaining 10,000 non-LEDs



Intermediary target

Feasibility assessment for upgrade of remaining streetlights before the end of 2022



Cost

£4.5 million



Emissions reductions

6 to 9%

In 2023/24 electricity consumption from Bromley's 28,000 streetlights accounted for 27.9% of the Council's carbon emissions, with a 1% reduction in energy usage from the 2022/23 reporting year. The majority of streetlights were upgraded prior to year 5 reporting, with 1,120 converted to LED in the finance year 2023/24, and an additional 400 lanterns in the process of being converted.



Key actions

- A phased upgrade programme for updating the remaining non-LED lights has continued. It is worth noting that the remaining columns were predominantly 6m columns with relatively low wattage lamps, therefore offering lower energy savings compared to the old high wattage lanterns used for the 10m and 8m columns.



Progress

In October 2020 a project began to upgrade a further 4,200 traffic route streetlights (10m and 8m columns) to LEDs with dimming capability and photocells – installation of these remaining streetlights was completed in 2024. Only approximately 400 lights in various locations are now left that are in the process of also being upgraded by the Council contractor. Apart from the benefits of improved light quality for both pedestrians and road users, this latest project is set to achieve the following:

- Annual cost saving: £380k
- Annual carbon saving: 600 tCO₂e
- Project payback: 3 years

Buildings (energy efficiency)



2027 target

Priority site refurbishments complete and AMR meters installed



Intermediary target

Feasibility assessments and energy audits undertaken before the end of 2025



Cost

TBC (audit dependent)



Emissions reductions

5 to 10%

In 2023/24 energy consumption from the operation of Council buildings accounted for 62.5% of total emissions. This compares to 60.4% in year 4 (2022/23), 54.8% in year 3 (2021/22), 48.7% in year 2 (2020/21) and 58% in year 1 (2019/20). The percentage contribution of emissions from buildings to the overall total emissions has increased. This is due to the percentage contribution from the streetlight and fleet vehicles and business mileage emissions having reduced. To realise future cost/energy/carbon savings it is imperative that the Council continues to improve the energy efficiency of the estate, and move towards the use of low carbon energy sources for heating whenever feasible.

As more buildings adopt electric heating and vehicles transition to electric power, it is increasingly important to ensure that this electricity comes from renewable sources. Doing so not only reduces pressure on the national grid but also strengthens energy security and helps protect against rising electricity prices.



Key actions

- Undertake a full energy audit of the top 10-15 most energy intensive buildings to identify energy efficiency opportunities.
- Develop an energy efficient upgrade programme for the priority sites.
- Ensure any site refurbishments and new build projects incorporate low carbon design elements and solar photovoltaic (pv) installation wherever viable.
- Continue the rollout of the Automated Meter Reading (AMR) installation programme to achieve more accurate and timely billing and energy monitoring capability.



Progress

An energy audit of the top 10-15 most energy intensive buildings is due to start in 2025 as part of the operational property repair programme work. Based on the energy efficiency assessment findings, a planned upgrade programme can be developed that will in turn inform the amount of carbon that can be saved. The outcomes from the audits will also be able to be used to inform any future applications to the Government's Salix 'Public Sector Decarbonisation Grant' programme. A significant factor in any future upgrade programmes is cost of the works and type of works required and connection costs to the electricity grid network. However, with rising energy prices and energy security concerns, energy efficiency and use of renewables will support keeping costs down. 'The cheapest energy is the energy that is not used in the first place.'

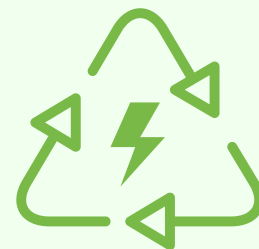
Roll out of the AMR installation continues. The installation programme will help us to achieve more accurate and timely billing and energy monitoring capability and will enable us to achieve better results when tendering supply contracts.

The Council's net zero target is focused on scope 1 and 2 emissions for gas and electricity usage respectively, where the Council is the bill payer. For the Council's new Civic Centre:

- Old fluorescent lighting has been replaced with new LED luminaires and new lighting controls making more efficient use of energy and reduced future maintenance costs.
- The life expired four pipe fan coil unit heating and cooling system was replaced by a variable refrigerant flow (VRF) air source heat pump system, offering a cleaner and more efficient way to heat, cool, and decarbonise the building. The technology divides the building into zones with individual set points based on usage, occupancy, and user preferences, helping to reduce energy use and therefore costs. It is estimated that the new heating system may save up to 111tCO₂e.

Likewise, improvements to buildings such as maintained schools and libraries is on-going. For example, the West Wickham Library refurbishment completed in 2024, has heating and cooling using air source heat pumps and includes renewable energy generation via a solar PV system. The scheme also includes a comprehensive energy management system integrating natural ventilation into the forced heating and cooling installation to ensure that its running costs, and the resultant CO₂ emissions, are as low as possible.

100% renewable energy



2027 target

Purchase power directly from a renewable energy generator



Intermediary target

Green electricity and gas contract secured by 2021



Cost

TBC



Emissions reductions

Up to 96%

The most effective solution for reducing emissions is a rapid shift to 100% renewable electricity.

In 2023/24 electricity associated emissions accounted for 61% of the Council's total net zero profile emissions, whilst gas emissions accounted for 29%. Procuring 100% renewable energy therefore offers the most impactful opportunity for carbon reduction – a potential 96% reduction, allowing the Council to discount all our energy emissions.

Two main options exist for switching to renewable energy sources:

Renewable Energy Guarantee of Origin certificates (REGOs)

- The REGO regime, issues a certificate for each megawatt hour (MWh) of renewable electricity produced by a generators (companies that generate the electricity).
- REGO certificates are most often used to help energy suppliers (companies that purchase the electricity from generators and then sell it to the user, such as the council), demonstrate the proportion of electricity they purchase from generators that is made using renewables.

REGOs can also be traded separately from the renewable electricity in respect of which they were issued.

Using REGOs to reduce scope 2 emissions is a more questionable method, and the REGO scheme does nothing material in and of itself to support new renewable generation being developed.

Purchasing electricity with the attached REGO certificates from a supplier is a preferable approach, rather than purchasing REGO certificates separately to the energy supply. However, purchasing REGOs from an already established renewable energy supplier, in general does not enable new renewable supplies to be developed and is not considered as ensuring 'additionality'. There is an on-going debate around additionality and whether REGOs lead to increased renewable generation (i.e. where demand translates into new sources of green, renewable energy being built), which is considered a key requirement for being able to report zero emissions for energy.

For the purposes of the greenhouse gas accounting, the 'Local Partnership GHG accounting tool' states:

'The accounting practice would be to report on your emissions as though you were purchasing standard grid supplied electricity. You can then make a below the line adjustment to show a net position if your electricity meets suitable criteria for being genuinely renewable. The reason for this is that it continues to provide a focus on the actual consumption and the necessary pressure to reduce consumption, whilst at the same time allowing organisations credit for purchasing suitably green electricity.'

Therefore, merely purchasing REGOs from an existing renewable generation plant will not offset the emissions from our use of electricity.

Power Purchase Agreements (PPAs)

These are direct agreements with renewable energy generators. These types of agreements typically allow for further investment that directly lead to increased renewable generation. However, PPAs are more complicated to set up and tend to be for longer contractual periods (e.g. 10-15 years). Usually, they also require large energy users and hence for local authorities will in the main only be possible as a consortium with other local authorities. The renewables' share of grid network electricity generation ^[4] was 50.8 per cent in 2024.

Green Gas

Likewise, as for electricity, Renewable Gas Guarantees of Origin (RGGOs) can be issued by the Green Gas Support Scheme (GGCS) for gas, which will contain information on the type of green gas produced, the feedstocks used, and sustainability criteria that have been met. Any 'green' gas produced is injected into the gas grid where it mixes with fossil fuel. Green gas is biomethane and accounts for a very small proportion of the gas in our grid. The rest is natural gas. Green gas is more expensive than renewable electricity and there is less of it around. Green gas can in part come from a renewable source and the rest of the green gas claim would be from carbon offsetting.

^[4] UK, Energy trends October to December 2024 – Department for Energy Security and Net Zero



Key actions

- Review green energy options for both gas and electricity when the existing energy contract nears expiry, including PPA options to purchase directly from a renewable energy generator.



Progress

In October 2020 the Leader of the Council made an executive decision that the Council proceeds with the procurement of green energy. In October 2020 the Council switched to purchasing REGO-backed renewable energy from Haven Power, and green gas from Total Gas & Power. Unlike many energy suppliers who supply a mix of both green and brown energy, Haven Power only supplied 100% renewable energy. In 2022 a standard flex supply gas contract was procured with SEFE that terminates on 30 September 2025. The current electricity contract was procured with EDF in May 2024 and is due to finish at the same time as the gas contract. EDF electricity is stated to be 100% from a nuclear source.

The aim is to review options for power purchase and renewable electricity with additionality from September 2025.



Zero Emissions Fleet



2027 target

100% Zero emissions fleet and accompanying infrastructure



Intermediary target

Install minimum of five electric chargepoints at main depot by 2023 and the rest by 2026



Cost

TBC



Emissions reductions

Under 1%

Council fleet refers to vehicles directly managed by the Council but not vehicles used by the Council's contractors (e.g. Veolia for Waste Services). The fleet operated directly by the Council is very small and includes 3 EV's, with one van in Environmental Health & Public Protection and two hatchback cars in the Highways Division. These are used on highway inspection duties around the borough.

We also operate two plug-in hybrid Mayoral cars which are based at the Civic Centre and a small number of other pool cars etc. that are hybrids, as a 'stepping stone' away from a diesel/petrol powered fleet.

Our gritters are owned by the Council but are operated by our contractor as part of the Highways contract.

Although the Council's fleet only accounts for less than 1% of the Council's emissions, this is deemed an important initiative for helping to advance the use of zero emissions vehicles in the broader context. Also, the benefits of zero emissions vehicles extend to improving air quality, which feeds into Bromley's Air Quality Action Plan objectives.



Key actions

- Install electric charge points at the main depot to enable electrification of the Council's own fleet and the next fleet of refuse collection vehicles, if electric becomes the industry standard for HGVs over hydrogen.
- Switch to a 100% Zero emissions fleet



Progress

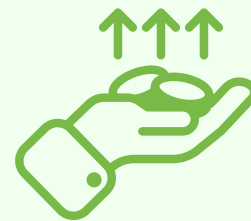
Members have approved the appointment of Connected Kerb as a supplier for the on street electric vehicle charge points to be installed in the locations defined in the EV Residential Charging Strategy following approval by Members at the Environment and Community Services PDS Committee on 23 January 2025. Up to 44 charging points will be installed at selected locations across the borough.

A Gul-E scheme is being progressed, with at least 8 Gul-E units installed in the borough, which provides a secure and convenient home charging option for those who don't have access to a driveway. This is achieved by the placing of a specially built gully under or beside residents' garden paths, leading out to the roadside where their cars are parked. This can only be accessed by the resident, ensuring reliable car charging access from their home without causing a trip hazard to the public or adding to street clutter.

These borough projects are being kept under review, to assess the range of different and emerging electric vehicle charging solutions and their performance.



Alternative Technologies and Renewables Investment



2027 target

Establish a portfolio of renewable Council owned, or joint owned, investments



Intermediary target

Annually horizon scan for UK-wide investment and partnership opportunities



Cost

TBC



Emissions reductions

TBC

Following the Government's recent announcement for the UK to become a world leader in clean wind energy, and all homes to be powered by renewable energy by 2030, it is envisaged that renewable investment opportunities will increase during the course of this plan, allowing organisations to either use the generated electricity themselves, offset their emissions, or create a revenue stream.



Key actions

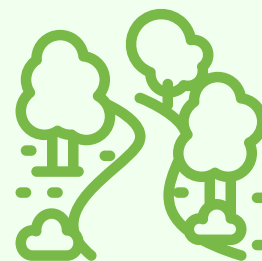
- Explore commercial renewable investment opportunities as and when they materialise.
- Explore joint partnership opportunities with other councils.



Progress

Bromley may be able to accommodate some ambitious renewable projects. The aim is to carry out early-stage feasibility assessments to determine the suitability for renewable opportunities in the borough, with the Council also monitoring the market for opportunities elsewhere.

Woodlands, parks and greenspaces



2027 target

Establishment and/or enhancement of Council green spaces for natural carbon offsets and co-benefits



Intermediary target

Feasibility assessment to begin in 2021



Cost

TBC



Emissions reductions

<1% by 2027

Tree planting is a medium to long-term solution for carbon sequestration because young trees absorb small amounts of carbon during their early years. In the context of the Council's net zero target, a significant number of trees/saplings would have to be planted across vast acres of land to make an impact. Tree establishment also comes with its challenges – a robust maintenance programme to stimulate healthy growth, and tree/site protection is vital for its success.

However, the Council recognises the value and many benefits that green spaces, parks and woodlands provide to residents and natural ecosystems, and the need to protect and enhance them for future generations. As more and more carbon is sequestered over time, this initiative will help the Council maintain its net zero target post 2027 and reduce borough wide emissions.



Key actions

- Produce a new Tree Management Strategy.
- Consider offsetting opportunities associated with registering new tree planting under the government approved Woodland Carbon Code.
- Quantify/compare carbon sequestration levels for native trees, grasslands, wild meadows, hedgerows and verges.
- Conduct feasibility assessments for shortlisted Council-owned sites deemed suitable.
- Deliver suitable projects in a cost-efficient manner, maximising grant funding opportunities where possible.



Progress

The Council's Arboriculture Team produced the Tree Management Strategy 2023 to 2027.

The five-year 'Treemendous' tree planting programme commenced in 2021/22 with 5,000 additional street trees planted.

The trees planted have been carefully selected for the locations to complement the existing trees already on site or to improve and diversify the species of trees in that area. Species suitability and the "right tree, right location" approach has been adopted.

Every newly planted tree benefits from an aftercare programme. With all new trees, regular watering is needed to help them successfully establish, especially during warmer weather in the summer months. Watering is undertaken by our contractors, but importantly our amazing Tree Friends (www.bromley.gov.uk/TreeFriends), who are volunteers, help the Council's tree team maintain a healthy tree stock across the borough.

Bromley's Parks and Greenspaces Team will continue to review funding opportunities and apply for appropriate grant funding as the opportunities arise.

The Woodlands Establishment Board continues to progress three identified sites within the borough, which include Edgebury, Kemnal and World's End Lane, that are underused and suitable for woodland creation. With a small amount of funding from the Forestry Commission's Woodland Creation Planning Grant, concept plans were designed and a public consultation undertaken. The Council will also apply for further funding for the planting and maintenance of these new woodlands.

With amazing fundraising by the Friends of Cator Park and Alexander Recreation Ground a 'micro forest' of 600 trees was planted up in February 2024.

Certified Carbon Offsets



2027 target

Purchase UN certified and/or verified voluntary carbon credits, based in the UK



Intermediary target

Annually horizon scan for UK-wide carbon offset opportunities from 2024



Cost

TBC



Emissions reductions

TBC

Purchasing certified carbon offset credits remains a last resort option for offsetting any residual carbon emissions that cannot viably be offset through initiatives 5 and 6. If the Council does exercise this option the preference will be for a UK-based project, typically involving tree planting, new woodland creation or peatland bog restoration, with the added benefit of protecting an areas biodiversity.



Key actions

- Research suitable UK-based carbon offset projects.
- Purchase offset credits in an honest and transparent way.



Progress

The Carbon Management Team will look to identify the most appropriate and cost-effective carbon offsetting credits further into this plan, once all of the above initiatives have been fully appraised.

Summary



This chapter laid out the initiatives which will be used to deliver our NZAP. Many of these reduction projects are already underway, while more of the offset projects are currently being researched. Pending member approval, feasibility, and financing, we will look to mobilise these projects over the next few years. By 2025/26 we will have a clearer idea of the remaining emissions that we need to offset.



Enabling factors and implementation

Enabling factors

To progress projects and the proposed actions as set out in the Net Zero Action Plan requires finances to be in place, formal decisions to be made alongside governance, as well as partnerships both internally and with external partners. Some of the finance mechanisms are explored in the following chapter.

Financial factors

Currently, it is difficult to know the amount of funding required for the Council to reach its net zero target by 2027. Some initiatives, such as the LED streetlight upgrades, have been completed, with only a few residual upgrades required. Funding for these projects, which included the Salix Energy Efficiency Loan Scheme and Recycling Fund have also closed.

Feasibility assessments will need to be undertaken to identify and help inform the most viable and cost-effective projects/initiatives to take forward in terms of building energy efficiency and renewable measures. Likewise, energy costs and procurement of green energy with 'additionality' is kept under review.

With the energy price rises over the past few years and energy security a high priority for the country, focusing on energy efficiency measures to reduce energy usage is essential. Likewise, actions that allow for payback through invest to save measures are an important aspect of the NZAP. Therefore, the financial options available to the Council to support the delivery of these actions continue to be kept under review.

The key funding streams are outlined over the next two pages:

Public Sector Decarbonisation Scheme

First announced in September 2020, the UK Government's Public Sector Decarbonisation Scheme provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures in non-domestic buildings. The scheme is managed by the Department for Energy Security and Net Zero (DESNZ) and is delivered by Salix Finance.

Mayor of London – London Climate Finance Facility

To achieve London's net zero target will require a mix of public and private finance, investment and grant funding. Even with greater Government commitment, far higher levels of private investment will be needed to achieve London's ambitions. Therefore, in 2023 the Mayor extended his programmes and launched a new London Climate Finance Facility. The Carbon Management Team will continue to review options and opportunities to bid for funding.

Carbon Offsetting Funds (s106 contributions)

The Carbon Offsetting Funds (COF) is related to major developments required to reach a certain level of onsite carbon reduction. If the development falls short of achieving net zero-carbon, the developer is expected to make a cash-in-lieu contribution to the relevant Local Planning Authorities' carbon offsetting fund. This fund is ring fenced for the sole purpose of delivering carbon reduction projects across the borough. Projects paid for out of this fund must deliver tangible carbon savings. For example, the fund has supported the 'Domestic Energy Efficiency Advice and Referral Service', which commenced in 2021/22. Likewise, funding is contributing to the refurbishment of both the West Wickham and Walnuts leisure centres by contributing towards the installation of more energy efficient air handling units (AHU) and the building energy management system (BEMS).

The GLA's "Accelerator" frameworks

This scheme was developed by the Mayor of London to help make London's non-domestic public buildings and assets more energy efficient and lower emissions and save public money. The aim is to finance projects in their development stage, such as the commissioning of feasibility studies and consultation services. With this enabling financial mechanism, the Carbon Management Team envisages more viable projects in the future at no cost to the Council throughout the project's development stage. This mechanism is also designed to deliver projects at pace by streamlining the process to achieve financial and carbon savings earlier.

Carbon Neutral Fund

In recognition of new investment being required to achieve our net zero target, as part of approving the 2020/21 revenue budget the Council agreed to establish a Carbon Neutral Fund. This will provide pump-priming funding of £0.875m for new initiatives to reduce the Council's carbon footprint whilst reducing its long-term energy costs. Approval to spend this fund will be via the Executive.

The Council's Capital Programme Funding

For future energy efficiency initiatives as part of the Environment Work Programme, such as building refurbishment, further street lighting upgrades, and renewable energy projects.

Each initiative to achieve the Council's net zero target will need to be assessed through a detailed business case process, taking into account available funding, revenue budget savings and other investment priorities. Savings generated from these projects will need to be factored into consideration of the Council's future budget strategy.

Governance and partnerships

Achieving net zero emissions will be ongoing, remain ambitious and subject to change as technology evolves, the regulatory environment changes, and more government funding becomes available.

Hence, continual review will be required to ensure the action plan is on track. While the key driver behind our 2027 net zero target relates to the regulatory changes of June 2019, it is important to recognise the influence of the wider landscape on our organisational NZAP.

Bromley's Greener Future Working Group

The impact of coronavirus on Council services, residents, businesses and the delivery of future Council projects cannot be understated. This is why the Council established an officer group, the Green Recovery Working Group, in December 2020 to align the Council with national aspirations to place climate and ecological policy at the heart of an economic and socially resilient recovery from COVID-19. The name of the group has since changed to Greener Future.

This Greener Future group explores areas where the Council can be more aspirational and will set out an action plan that aligns with existing corporate functions. Importantly, it provides a platform for internal discussion and promotes a more environmentally and socially sustainable borough, whilst strengthening the Council's financial resilience. It will demonstrate leadership to partners, stakeholders, businesses and the public, forming a basis for lobbying government. Some of the areas of focus of the group include retrofit programmes, green growth and skills development, consumption emissions, renewable energy procurement, green infrastructure, transport and being resilient to a changing climate.

80% of people in the UK said they were 'very or fairly concerned' about climate change, with 37% 'very concerned', according to the DESNZ 'Public Attitudes Tracker' carried out in Spring 2024 ^[5].

However, councils receive no core funding for climate action and compete for short-term pots of funding that come and go over time, taking up resources and creating uncertainty. Hence, elevated lobbying power will be required to demand greater financial support to councils, enabling us to reduce our organisational emissions and those of the borough.

TEC-LEDNet Priority Areas

The London Councils' Transport and Environment Committee (TEC) and the London Environment Directors Network (LEDNet), comprise London's local government environment leaders. In November 2019 they committed to pooling their experience, expertise, resources and working together, to pursue seven priority areas, necessary for delivering on London's climate ambitions, through the publication of a TEC-LEDNet Joint Statement: Climate Change.

These seven climate themes include:

- Retrofitting our buildings to make them cheaper to heat and reduce their impact on the environment.
- Increasing the number of Londoners employed in the green economy.
- Ramping up local renewable power.
- Ensuring that all new developments have a minimal carbon footprint.
- Advancing low carbon transport.
- Working with residents and businesses to reduce their consumption-based emissions.
- Developing the resilience London needs to cope with the extreme weather events that come more frequently and severely with climate change.

Priority area number 4 of the Joint Statement, Renewable Power for London, was focused on securing 100% renewable energy for London's public sector. This aligns with the Council's ambition to achieve carbon neutrality by 2027, through the purchase and supply of renewable energy to the Council owned estate. The remaining six action areas require significant investment and the engagement of individuals and businesses, through to national government.

^[5] DESNZ Public Attitudes Tracker: Net Zero and climate change, Spring 2024, UK - GOV.UK

Monitoring, verification and reporting

Performance against the Council's 2027 Net Zero Carbon target will be closely monitored, measured and reported by the Carbon Management Team.

Each new initiative will be quantified in terms of carbon, energy and financial savings, and show before and after statistics to help assess project performance.

Carbon Management Performance (CMP) reports are provided to the Director of Environment and Public Protection at the Departmental Management Team (DMT) meetings. This report will include information pertaining to the progress of projects and other relevant carbon reduction work.

The Carbon Management Team will report biannually to the Environment Portfolio Holder (the Council Member responsible for Environment) on the progress made towards the Council's net zero target. We will also report annually to the Environment and Community Services PDS Committee.

Approval to spend the Carbon Neutral Fund on suitable projects will be sought through the Executive Committee as and when required.

The annual Bromley GHG Emissions Performance report will continue to quantify the Council's performance in reducing our own direct organisational emissions known as scope 1 and 2 emissions and provide yearly progress statistics against the net zero target. It will include project specific information and will also report on actions taken to help reduce both scope 3 and borough-wide emissions, ensuring that reporting is accurate, complete and transparent. The borough-wide CO₂ emissions report is uploaded directly to the Council's website and the Council's own Net Zero Action Plan is reported to Committee in November of each year.



Existing obligations

When reporting on their emissions, local authorities are advised to use the international guidance on accounting and reporting, known as the Greenhouse Gas Protocol. This guidance will apply to reporting carried out under the Net Zero Action Plan; in the same way it is incorporated into our carbon management reports. The Greenhouse Gas Accounting Tool used by this Council and which has been developed by Local Partnerships, working with the Local Government Association, provides a straightforward and consistent approach for councils seeking to calculate their own carbon baseline and follows the Greenhouse Gas Protocol.

Summary and further information

This chapter detailed the mechanisms which will enable the delivery of initiatives in our NZAP, as well as those which will allow us to measure their success and progress towards net zero by 2027.

For more information on Council activity regarding emissions reduction projects, please email ClimateChange@bromley.gov.uk



Glossary

Automated Meter Reader

Automatic Meter Readers (AMRs or SMART Meters as they are sometimes known) provide suppliers with a cost-effective solution to obtaining meter readings that would otherwise need to be physically read. They are also capable of providing end users with information to help monitor and control energy consumption.

Carbon emissions

The shorthand for carbon dioxide emissions, or CO₂ usually produced by the burning of fossil fuels. Within this report Greenhouse Gas Emissions (GHG) are also reported in units of carbon dioxide equivalents (CO₂e). This allows the impact of each of the seven main greenhouse gasses to be expressed in terms of the amount of CO₂ that would create the same amount of warming, allowing easy comparison of the impact of different emission types.

Throughout this report, all greenhouse gas emissions are given in terms of carbon dioxide equivalent.

Carbon management programme

Bromley Council's dedicated programme of work to reduce carbon emissions.

Carbon neutral

Means that any CO₂ released into the atmosphere from a company's activities is balanced by an equivalent amount being removed. In theory a company could choose to offset all its emissions and not take action to reduce the emissions.

Carbon offsetting

Reducing emissions or capturing carbon in one sector, to compensate for an inability to reduce emissions in another sector. In accordance with the GHG mitigation hierarchy, carbon offsets must be a last-resort strategy and should not substitute other climate change mitigation measures.

Carbon Offset Fund

A fund that receives s106 contributions from developers who submit applications to build major developments that fall short of carbon standards. This money is then used to support carbon reduction projects in Bromley.

Carbon sequestering/sequestration

Capturing carbon through long-term storage methods. An example would be to plant more trees.

Decarbonisation

The process for the removal or reduction of carbon dioxide (CO₂) output into the atmosphere.

Energy efficiency

The amount of useful energy produced per unit of fuel. For example, loft insulation keeps the useful warm air in the home, increasing the energy efficiency of the building.

Electric Vehicle (EV)

Electric vehicles are those which use electric motors to drive their wheels. They derive some or all their power from large, rechargeable batteries. Also known as battery electric vehicles, BEV.

Greater London Authority (GLA)

The regional governance body of London.

Greenhouse gas emissions (GHG)

The gases that trap heat in the Earth's atmosphere, an excess of which are increasing global average temperatures i.e. global warming. In the context of this action plan, it usually refers to carbon dioxide but can also refer to other gases such as methane. This is why we report our emissions in units of carbon dioxide equivalents (CO₂e).

Further information on the UK greenhouse gas emissions can be found at

https://www.data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/local_authority_carbon_dioxide_emissions

Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. There are currently 195 member countries in the IPCC (www.ipcc.ch/about). The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place.

LED lighting

Light Emitting Diode. A more energy efficient form of lighting when compared to standard bulbs. They do not get as hot and release more of their energy as light.

Net Zero Carbon

The aim of reducing carbon dioxide emissions as much as possible, and if any residual emissions are produced, they are offset by carbon capturing processes.

Payback period

A period of time in which the value of a loan, or budget must be repaid to the lender. The payback period for carbon usually represents the duration required for a sustainable project or technology to offset its initial carbon footprint.

Power Purchase Agreement (PPA)

A long-term contract under which a business agrees to purchase electricity directly from a renewable energy generator. Power Purchase Agreements provide financial certainty to you and the project developer. PPAs therefore help to deliver more renewable energy, saving CO₂.

Procurement

The process of acquiring goods and services, which a council chooses not to run internally, through fair and competitive bidding processes in an open market.

Scope 1 Emissions

Direct emissions that occur from activities such as burning gas in boilers to heat homes and businesses or emissions from petrol/diesel used in vehicles we own.

Scope 2 Emissions

Indirect emissions that occur from activities such as buying in electricity and using that electricity to power our buildings.

Scope 3 Emissions

Indirect emissions that are related to an organisation's activities but occurring from sources not owned or controlled by the organisation. For example, adult social care providers, contracted by Bromley to undertake that service, will produce emissions through their company activity.

Bromley Council do not legally own, or control the emissions arising from this contractor's activities.

Solar photovoltaic (pv) system

Solar pv panels convert sunlight into electricity, which is a renewable form of energy. Renewable energy comes from sources that are constantly and naturally renewed.



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