

Pathway to a
**CARBON
NEUTRAL**
Council by 2029



Net Zero Action Plan
and Annual Performance Report 2019/20 – Year 1



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FOREWORD

Bromley has a long and proud record of protecting and caring for our Environment, with the long-held protection of our green spaces and our high recycling performance being just two examples, with much more beside.

However, to combat climate change and achieve net zero, Bromley must deliver projects to meaningfully reduce emissions and transform the energy efficiency of our services.

Building on our strong track record of environmental improvements and emissions reductions, which amounted to a 33% reduction under the second carbon management programme, we are now focused on delivering the Council's policy ambition to achieve net zero in organisational carbon emissions by 2029.

This report outlines how one of the most ambitious targets of any London borough will be achieved, again underlining the Council's clean and green reputation and our commitment to improve the environment.



The plan gives clear actions and targets for delivery of the seven key initiatives which will be used to achieve net zero. Some of these are already underway, including streetlighting LED upgrades and the purchase of green energy, while the plan also documents new initiatives to offset emissions, such as a brand-new Woodlands Project. This will also support biodiversity and add to the 560 hectares of existing woodland in London's greenest borough.

Compiled with residents in mind, the accessible nature of this action plan has been designed so that residents can easily follow our journey to carbon neutrality. This emphasises the Council's desire to lead by example, delivering projects which not only offer emissions reductions, but significant financial savings, reflecting the Council's strong financial management ethic, whilst also enhancing our environment.

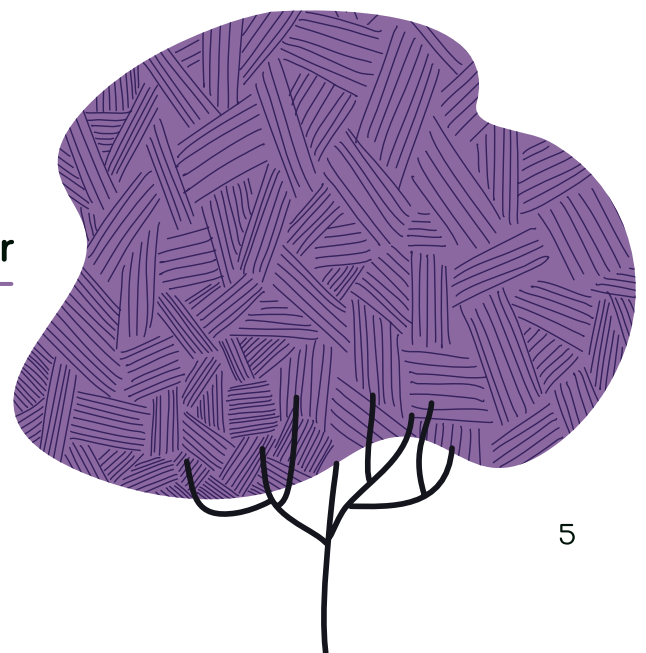
We will continue to look for opportunities as we move forward in delivering the exciting projects outlined. As well as hopefully inspiring residents, businesses and community groups alike, it is clear that we all have a part to play and I would encourage all of us to consider what steps you may be able to take on your own journey to carbon neutrality.



Councillor William Huntington-Thresher

Portfolio Holder

Environment and Community Services



EXECUTIVE SUMMARY

We know that Bromley is a brilliant place to live, work and play. 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.

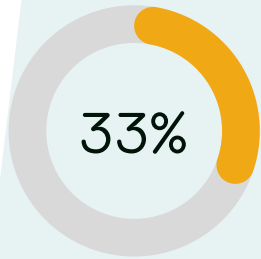
Building on years of good work, this Net Zero Action Plan charts the planned activities of the Council in reducing our organisational emissions to achieve our ambitious target of Net Zero by 2029. By first focussing on the Council's organisational emissions across seven priority areas, we lay the foundations for ambitious projects which not only reduce emissions, but realise co-benefits including; financial savings, energy efficiency, carbon sequestration and improvements to our beautiful woodlands, parks and green spaces.

Meeting Net Zero is a challenge we must rise to, not only because we must fulfil our statutory duties, but because we have a responsibility to future generations for leaving the environment in a better way than when we inherited it.



CO₂

This includes meeting climate goals through emissions reductions.



reduction in carbon emissions (12,000 tCO₂) achieved against a 2013 baseline



↓ £360k

savings a year through the most recent round of LED streetlighting upgrades



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



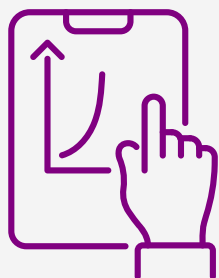
Some of these ambitious projects are already underway.

The remainder of this plan is split into four distinct chapters:



Chapter 1: **Introducing the Net Zero Action Plan**

The policy and regulatory context applied to Bromley and what is specifically included in the scope of this Net Zero Action Plan.



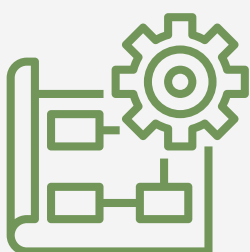
Chapter 2: **Our approach**

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.

INTRODUCING THE NET ZERO ACTION PLAN

The policy and regulatory context applied to Bromley

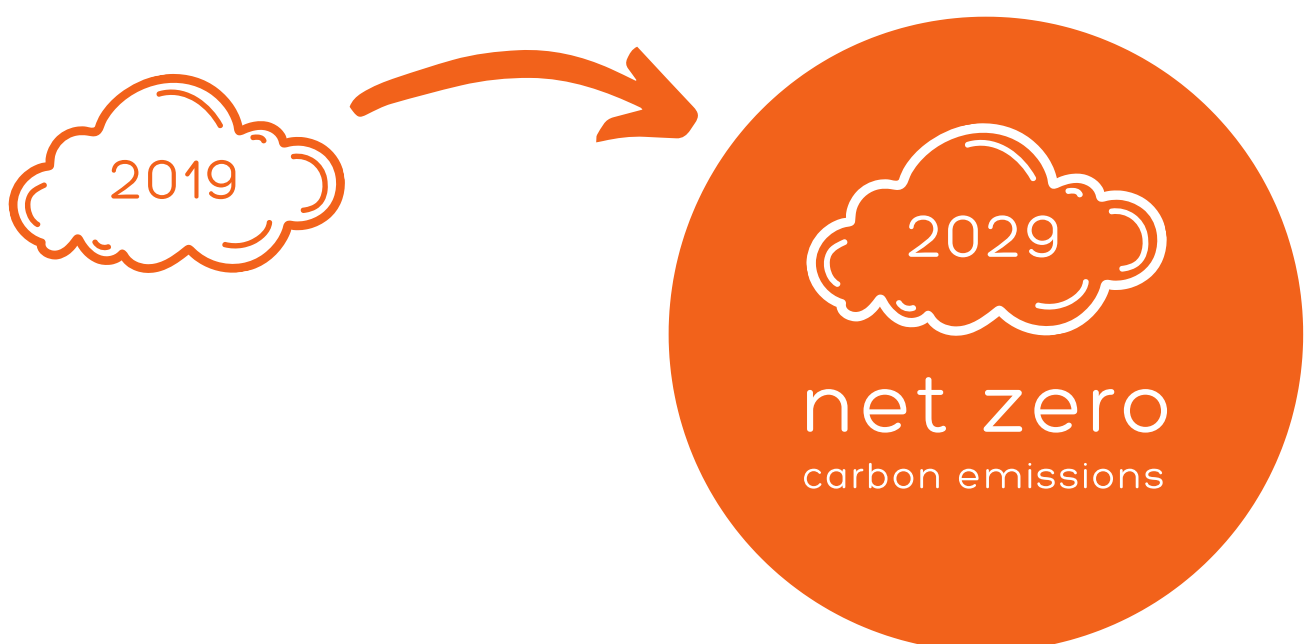


0%

In June 2019, the United Kingdom became the first major economy to pass a law to bring all Greenhouse Gas (GHG) emissions to net zero by 2050 - through the Climate Change Act 2008 (2050 Target Amendment) Order 2019.

This compared with the previous target of at least an 80% reduction from 1990 levels, under the Climate Change Act 2008.

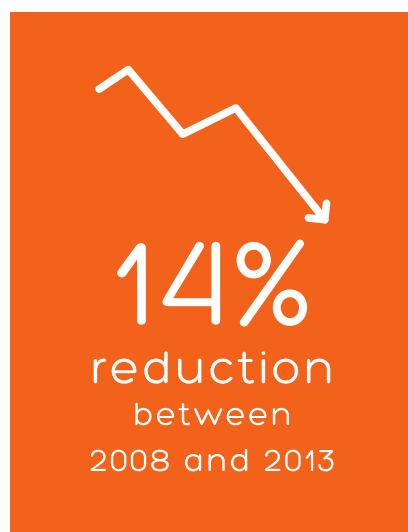
In response, the Council swiftly and unanimously approved a ten-year plan to ensure that the council reaches net zero carbon emissions by 2029. This means reducing carbon emissions produced by the Council to zero in order to achieve carbon neutrality.



A 2029 Net Zero Carbon Strategy was reviewed and approved at the Council's Environment and Community Services Policy Development and Scrutiny (ECS PDS) Committee meeting in January 2020. It was further agreed that an action plan be developed to deliver on that strategy.

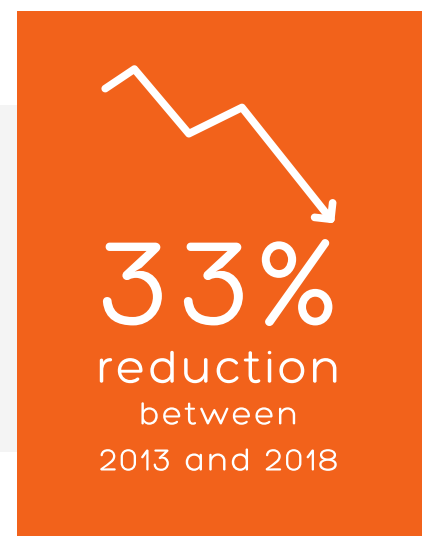
This commitment to net zero builds on a long history of work undertaken by the Council's Carbon Management Team through the Carbon Management Programme (CMP) to reduce energy consumption, revenue costs and carbon emissions. Originally this programme was established to fulfil legislative duties, required under the 2008 Act.

Since 2008, the Council's Carbon Management Team has quantified the Council's emissions each year, following the guiding principles of an internationally recognised accounting and reporting standard.



The Council's first Carbon Management Programme (CMP1) operated from 2008/09 to 2012/13, achieving a 14% reduction (5,275 tCO₂e) in the Council's greenhouse gas emissions (GHG).

The second programme (CMP2), which ran from 2013/14 to 2017/18, achieved a 33% reduction (12,000 tCO₂e) against a 2013 baseline.



Meanwhile the third phase of the Council’s Carbon Management Programme (CMP3), which will run from 2019/20 to 2029/30, has adopted 2018/19 as the baseline year against which progress will be monitored and measured over the next ten years, and zero emissions set as the new target.

The scope of this Net Zero Action Plan

The scope refers to the distinction between what we include in our NZAP and what we purposefully exclude. The reason for excluding data is to do with ownership.

There are some emissions, which may be outside of the influence, or control of a particular group. If we cannot directly influence particular emissions, then we cannot own them, or take responsibility for reducing them.

When reporting on their emissions, local authorities are advised to follow the international guidance on accounting and reporting, known as the GHG protocol.

This categorises emissions into three different scopes, which help to define the boundaries of our reporting:





Scope
1

Direct GHG emissions occurring from sources that are owned or controlled by the organisation, such as the emissions from burning gas to heat a building, and the emissions directly entering the atmosphere from using company vehicles.

Electricity indirect GHG emissions produced from the generation of purchased electricity.



Scope
2



Scope
3

An optional reporting category that allows for the accounting of other relevant indirect emissions (such as emissions resulting from the consequence of an organisation's activities, occurring from sources not owned or controlled by the organisation).

The Council's net zero target will apply to all those emissions that it directly controls, namely, all scope 1 and 2 emissions, plus scope 3 emissions for business travel, water and paper usage, office waste and electricity (transmission and distribution).

The Council does not directly control scope 3 emissions arising from staff commuting and procured services, which are therefore excluded from our net zero scope of emissions.

Scope
1



Building heating:

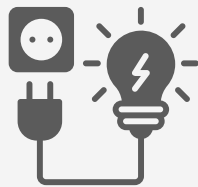
gas and oil consumption (Council estate)



Council owned fleet:

petrol and diesel consumption

Scope
2



Purchased electricity:

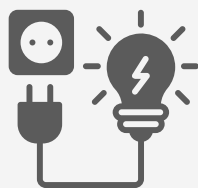
Council estate and borough street lighting

Scope
3



Travel:

Business travel and staff commuting



Electricity:

Transmission and distribution



Usage:

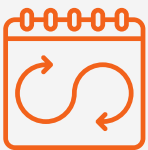
Waste and paper at the Civic Centre,
and water across the Council estate

It is also worth noting that several additional factors are currently playing a significant role in influencing Council's total carbon emissions:



COVID-19 pandemic

The impact of the pandemic has resulted in the majority of Council staff working from home for a prolonged period. This will have a significant impact on future emissions arising from office paper/water use, Council energy consumption, staff commuting, office waste and business travel. Since the report on progress included within this document is for 2019/20, emissions reductions associated with the impacts of COVID-19 will only be visible in the 2020/21 report on progress.



Flexible working

Long before the pandemic, the Council implemented a flexible working policy, allowing employees to partly work from home where appropriate. The COVID-19 pandemic catalysed this, and it is now envisaged that a significant percentage of staff will continue this new way of working post COVID-19. Therefore, it is expected that emissions will continue to remain low for the foreseeable future.



Paperless office and digitalisation

As the Council continues to push ahead with its paperless office environment (supported by a wide digitalisation exercise), it is expected that paper emissions will reduce significantly.



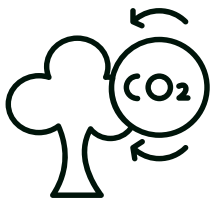
Council Emissions and Trends

Electricity emission factors are expected to continue to decrease over time as more national grid electricity is generated from renewables and fossil fuels are phased out. This will help lower the Council emissions and trends from electricity consumption. However, there remains significant uncertainty over the rate of this change, hence why strong action to implement energy efficiency measures will remain imperative for achieving carbon neutrality by 2029.

Emissions comparison against our baseline

The first step in achieving our net zero target is to understand what our emissions are for the sectors we have influence over and can therefore report on.

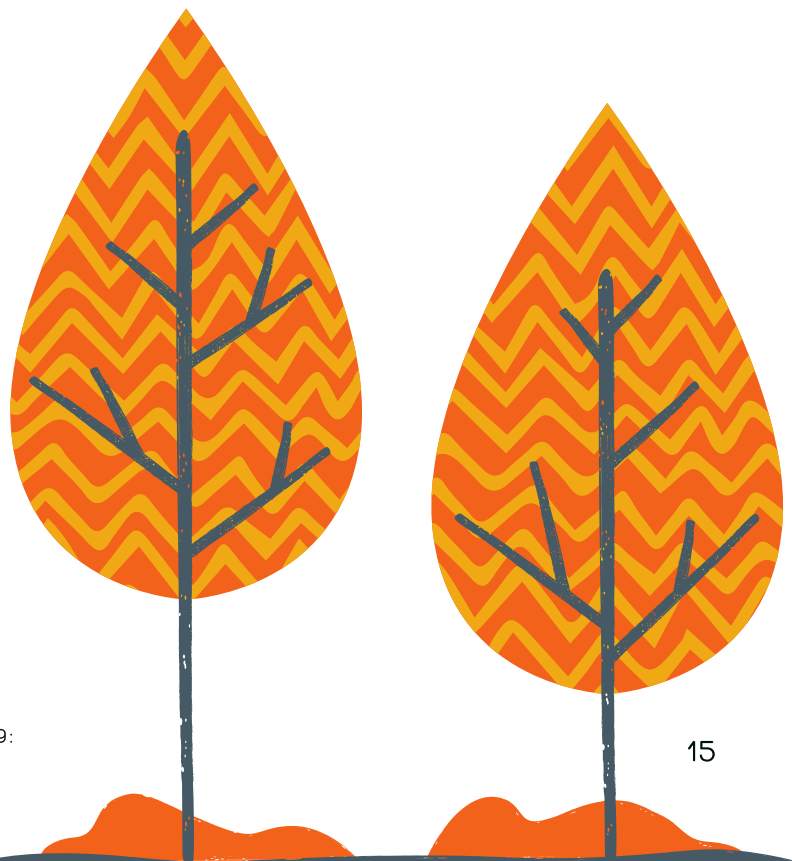
This means that we need a starting point to measure our annual progress against. This is known as a baseline year. For both this Action Plan and our forthcoming CMP3 report (covering from 2019 to 2029), we use 2018/19 as the baseline.











7,196
tCO₂e

The total tonnes of CO₂e emitted by the Council for our baseline year was 7,196 tCO₂e.

This is then broken down by the source of emissions. The Council's biggest source of emissions comes from Council owned estate and from the energy required to power the borough's streetlights. Initiatives which reduce the energy demand of these two sources will have the biggest impact on reducing the Council's organisational emissions.



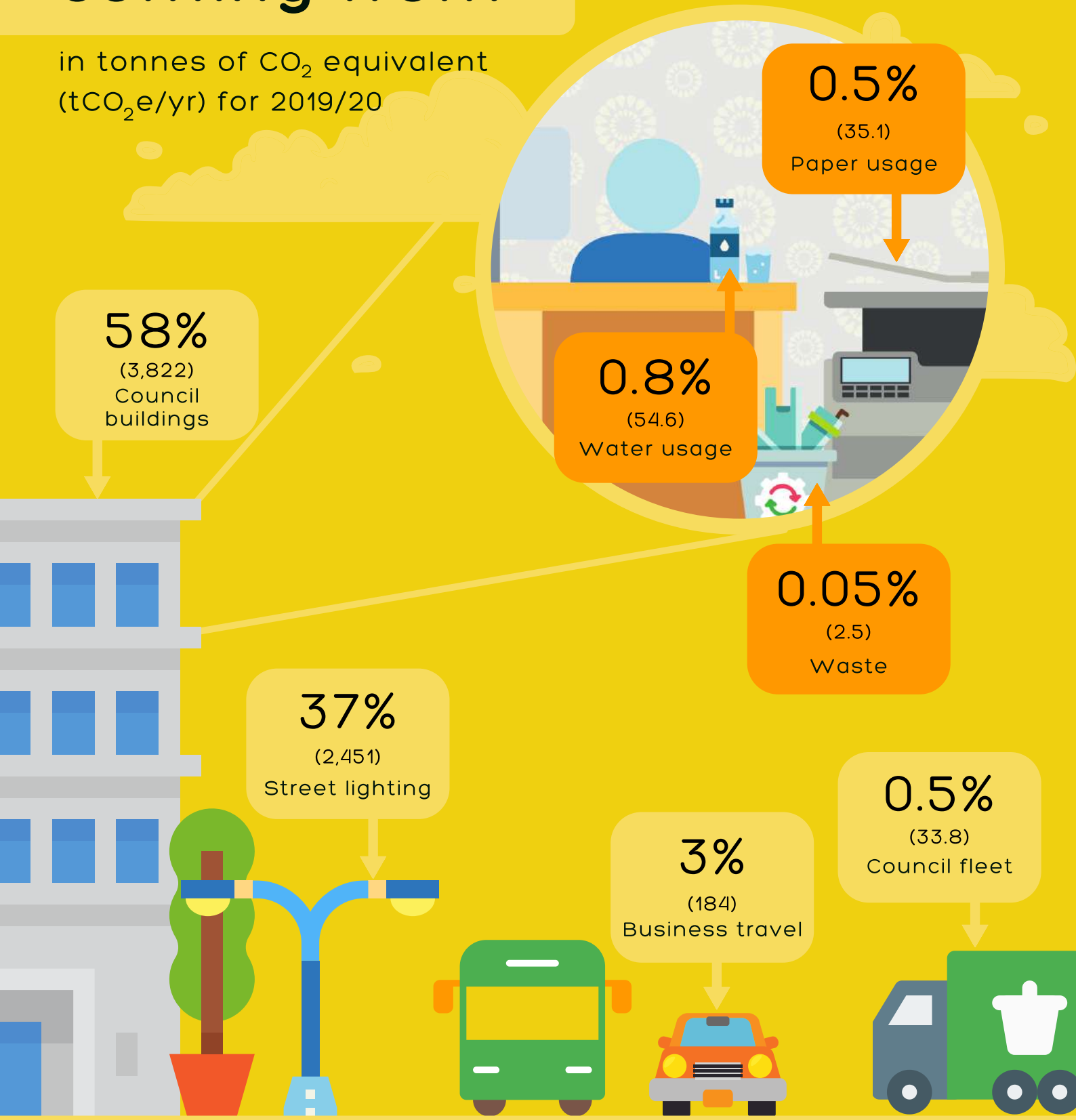
Council's net zero emissions baseline and year 1 comparison

Source	2018/19 CMP3 Baseline Year tCO ₂ e/yr	2019/20 CMP3 Year 1 tCO ₂ e/yr	Percentage change tCO ₂ e/yr
 Buildings	3,954.0	3,822.0	-3%
 Street lighting	2,888.0	2,451.0	-15%
 Council fleet	60.9	33.8	-44%
 Waste	3.4	2.5	-26%
 Water	54.6	54.6	0%
 Paper	44.4	35.1	-21%
 Business travel	190.7	184.0	3%
 Total (tCO₂e/yr)	7,196	6,584	



Where our emissions are coming from

in tonnes of CO₂ equivalent (tCO₂e/yr) for 2019/20



Summary

This chapter has provided an overview of the policy and regulatory context, which has driven the establishment of the Council's net zero action plan. Before going into any further detail, it has also illustrated 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.



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. This simultaneously reduces energy costs, while moving away from fossil fuel-based energy, towards a green energy supply.



Leadership by example

Bromley Council aim 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

The Fifth 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 will act as a natural way to capture CO₂. If planned correctly this measure could also be used to support biodiversity and support improvements in air quality. This aligns with objectives of the Council’s Air Quality Action Plan, the Open Space Strategy and objectives in Bromley’s local planning document i.e. Bromley’s Local Plan.

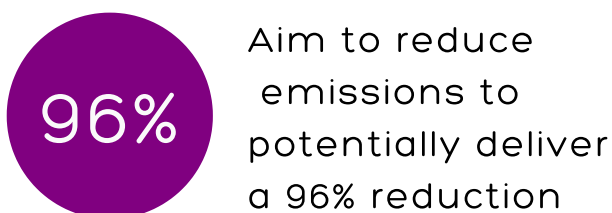
Priority actions

Various factors have informed the proposed projects which we will implement to achieve net zero by 2029, such as:

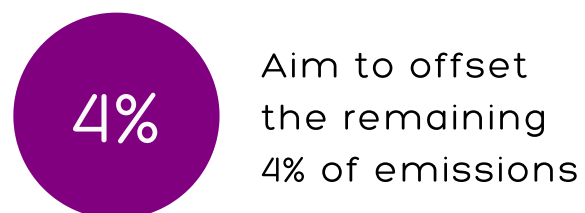
- the potential carbon, energy and cost savings of initiatives
- available funding
- the priorities identified in terms of mobilising medium to large scale projects

In line with best practice, we aim to reduce our emissions as much as possible, then offset any remaining emissions through seven priority initiatives:

Primary initiatives 1 to 4



Secondary initiatives 5 to 7



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%



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

offset

Reduction

against the 2018/19 baseline

1



Initiative 1

Street lighting LED upgrades

2



Initiative 2

Energy efficiency in our buildings

3



Initiative 3

100% renewable energy

4



Initiative 4

Zero Emissions Fleet



STREET LIGHTING LED UPGRADES



2026 target

**Phased upgrade of remaining
10,000 non-LEDs**



Intermediary target

Feasibility assessment for upgrade of remaining street-lights before the end of 2022.



Cost

£4.5million



Emissions reductions

6 to 9%

Of the 2019/20 emissions profile, electricity consumption from Bromley's 28,000 street lights accounted for approximately 37% of the Council's carbon emissions. Of the 28,000 lights, 18,000 have now been replaced with energy efficient LED lanterns, achieving annual cost savings in excess of £670,000.

The Council are now keen to build on past achievements and convert the remaining 10,000 street lights to LEDs that could achieve an estimated 18% reduction in total organisational carbon emissions.



Key actions

Upgrade all 10m and 8m traffic route lanterns

Develop/deliver a phased upgrade programme for updating the remaining 10,000 non-LED lights. The potential carbon and energy savings potential will be assessed, however it is worth noting that the remaining columns will predominantly be 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

A project to upgrade a further 3,638 traffic route street lights (10m and 8m columns) to LEDs with dimming capability and photocells was approved in 2019. During early 2020 the design was tweaked to improve upon the original design - better energy efficient lanterns were sourced, and a different dimming profile adopted. The new design will help realise a further £130k annual cost savings and a 220 tCO₂e reduction in carbon, all for the same total project cost.

Due to COVID-19 lockdown measures, the production/supply of the new lights was impacted, consequently delaying the planned installation date. 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: £360k
- Annual carbon saving: 663 tCO₂e
- Project payback: 3.1 years



ENERGY EFFICIENCY IN OUR BUILDINGS



2029 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%

Energy consumption from the operation of the Council's buildings account for 58% of the total carbon emissions profile, comprising: electricity (22%) and gas (36%). To realise 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 (heating) and vehicles switch towards electricity, it becomes increasingly important to ensure that electricity is supplied by renewable sources to not only relieve pressure on the national grid, but to also provide security of electricity supply and protect against electricity price increases.



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.

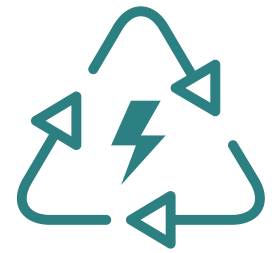
Roll out an Automated Meter Reading (AMR) installation programme to achieve more accurate and timely billing and energy monitoring capability.

During 2020 the Carbon Management Team developed a project for the design and installation of a solar photovoltaic (pv) system on the rooftop of the Civic Centre's North Block building, that will help supply the Council with its own generated electricity. A tender exercise to find a contractor to undertake the work is currently underway. Supposing the proposed solar pv system fulfils our specification, funding is released and approval is received, this project will be a first for the Council and will be used as a template for further solar rooftop projects across the Council's estate.

An exercise to assess the Council's most energy intensive properties in 2020 has been delayed due to COVID-19 restrictions. The Council's Energy Manager is now aiming to deliver a planned assessment of the Council's estate in 2021 and develop a programme to install AMR meters at strategic sites. Based on the energy efficiency assessment findings, a planned upgrade programme will be developed that will in turn inform accurate carbon savings.



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. Electricity associated emissions currently account for nearly 60% of the Council's total net zero profile emissions, whilst gas emissions account for 36%. Procuring 100% renewable energy therefore offers the most impactful opportunity for carbon reduction – a potential 96% reduction.

Approximately 25-30% of the national grid's electricity comes from renewables (not to be confused with zero-carbon electricity that includes nuclear). The most credible way to purchase 100% renewable energy is to switch to a green supply that directly leads to increased renewable generation (i.e. where demand translates into new sources of green, renewable energy being built).



Key actions

- Quantify any additional costs for switching to 100% renewable energy.
- Review green energy options for both gas and electricity when the existing energy contract nears expiry, including Power Purchase Agreement options to purchase directly from a renewable energy generator.

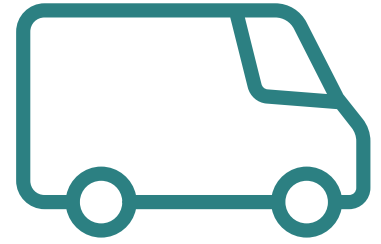
Progress

The intention of the Council is to procure 100% green energy.

A tender exercise is being undertaken via an energy procurement framework, and a preference for renewable energy specified. Initial offers received suggested an increased cost for green gas which could be offset by a decreased green electricity tariff. Hence, the additional costs for switching to credible green energy could potentially be minimal to the Council.



ZERO EMISSIONS FLEET



2029 target

100% Zero emissions fleet and accompanying infrastructure



Intermediary target

Install minimum of five electric charge points 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 remaining fleet operated directly by the Council now consists of a mixture of light vehicles, minibuses operated at three educational establishments, and several pool cars. Our gritters are owned by the Council but operated by our contractor as part of the Highways contract.

Although the Council's fleet accounts for less than 1% of the Council's net zero 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 both 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 zero emissions fleet.

Progress

The Council continues to assess electric vehicle options as and when existing fleet vehicles are either decommissioned or lease agreements renewed.

The installation of electric charge points has been included in the Council's capital works programme for the depot, which will begin in 2022.

The Council will also continually evaluate the use of emerging technologies, such as Hydrogen powered fleet, if this becomes the preferred industry standard for certain types of vehicle, such as HGVs."

Our approach to delivering zero emissions vehicles is technology neutral, as we anticipate a future where a mixture of different technologies could be required.





Offset

5



Initiative 5

Alternative Technologies and
Renewables Investment

6



Initiative 6

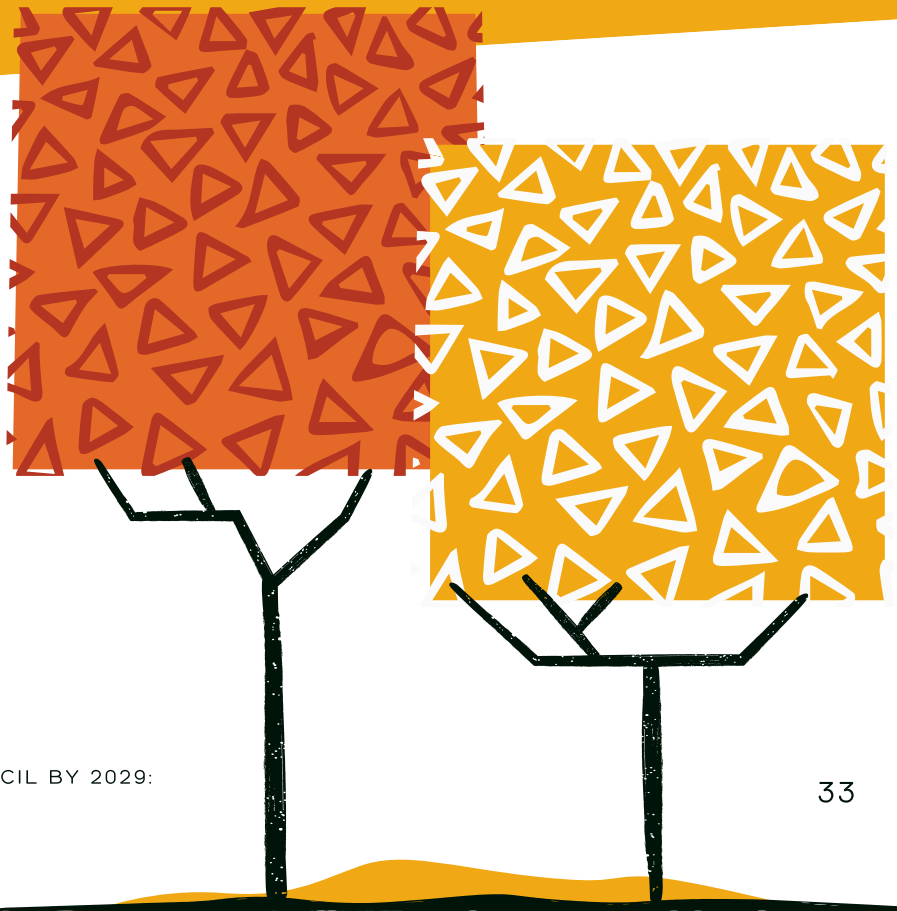
Woodlands, parks and greenspaces

7

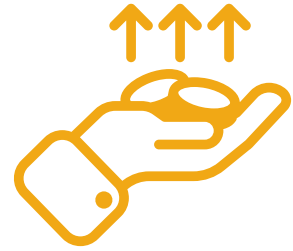


Initiative 7

Certified Carbon Offsets



ALTERNATIVE TECHNOLOGIES AND RENEWABLES INVESTMENT



2029 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. Early stage feasibility assessments are being undertaken to determine the suitability for renewable opportunities in the Borough, with the Council also monitoring the market for opportunities elsewhere.



WOODLANDS, PARKS AND GREENSPACES



2029 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 2029

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 ten year 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 greenspaces, 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 2029 and reduce borough wide emissions.



Key actions

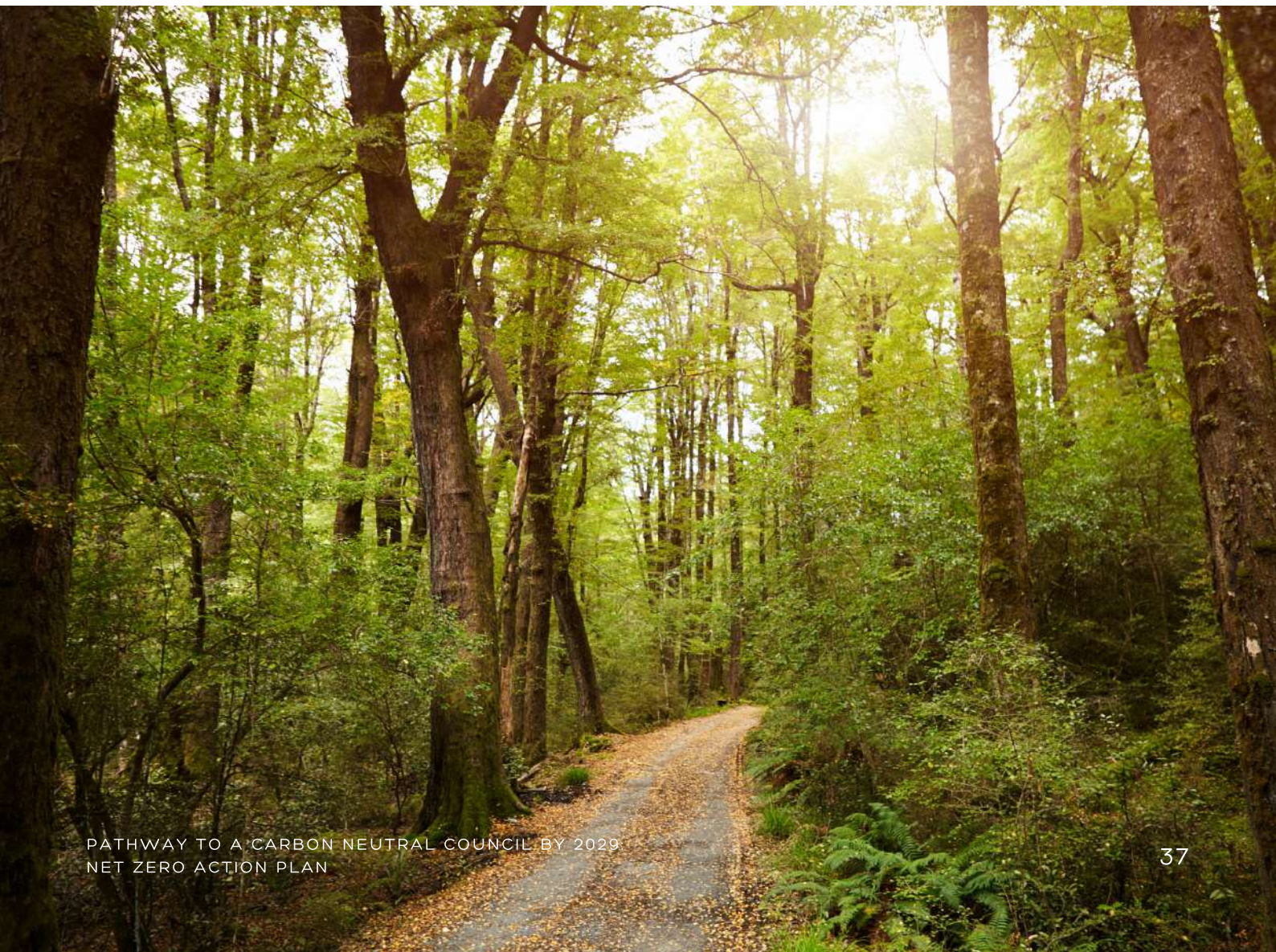
- Produce a new Tree Management Strategy
- Consider offsetting opportunities associated with registering new tree planting under the government approved Woodland Carbon Code
- Quantify and compare carbon sequestration levels for native trees, grasslands, wild meadows, hedgerows, verges
- Conduct feasibility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

The Council's Arboriculture team are currently producing a new Tree Management Strategy to take forward from 2021 onwards.

The Council's Parks and Greenspaces team are currently preparing applications for a range of woodland and other habitat grants to manage the rare and priority habitats overseen by our contractor's countryside team. In addition, a few large projects are being prepared ready for funding applications along with a range of smaller ones.

The Carbon Management team has begun joining up its carbon mitigation objectives with the Parks and Greenspaces and Arboriculture teams, their respective service providers, the public, and Councillors to develop and implement a holistic strategy that is able to satisfy cross service objectives.

A shortlist of potential sites has been produced for further consideration to develop natural ecosystems (woodlands/grasslands/meadows or otherwise) that will deliver carbon reductions against the Council's Net Zero Carbon target.



CERTIFIED CARBON OFFSETS



2029 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 – 7. 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.



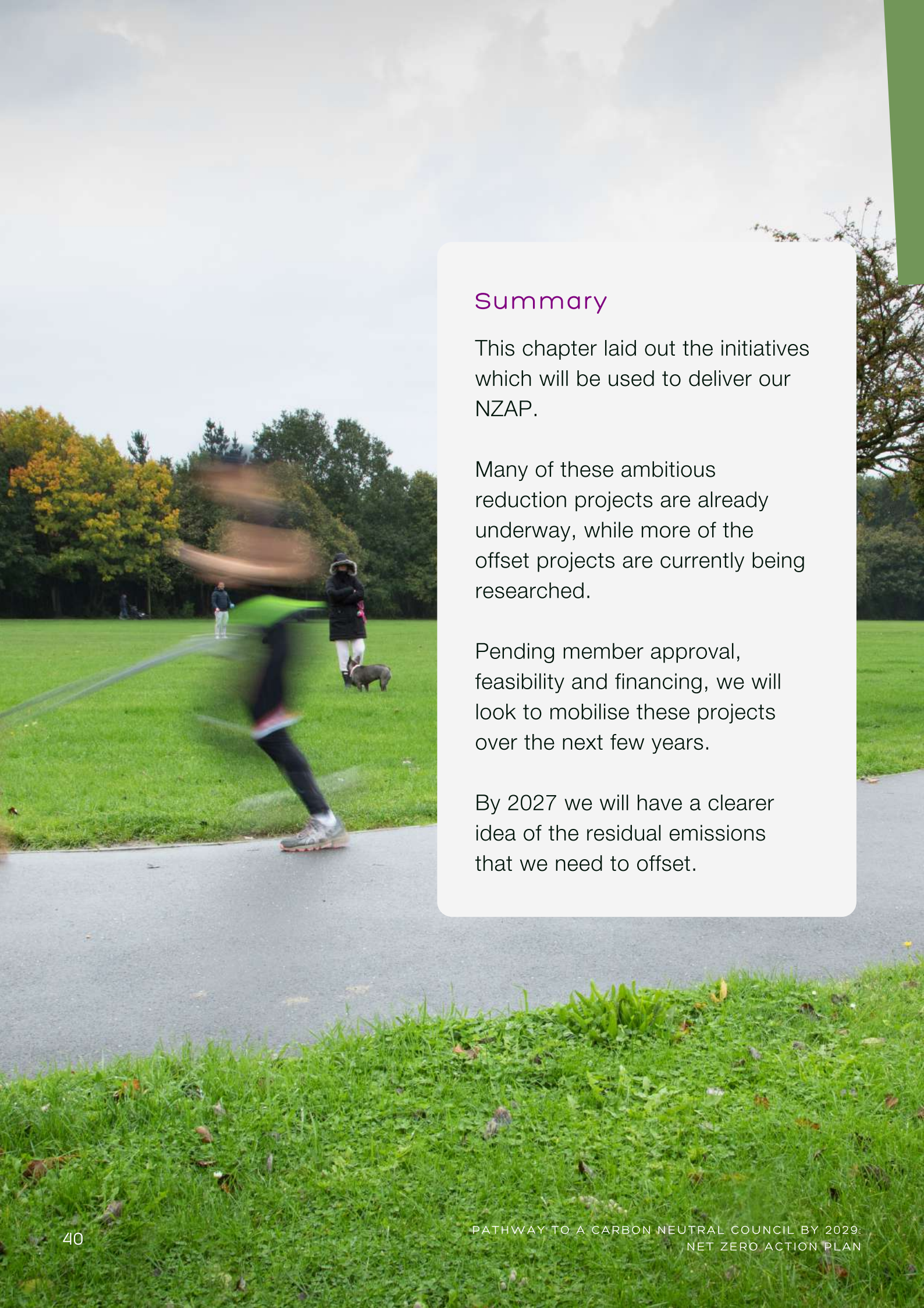
Key actions

- 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 the ten year 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 ambitious 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 2027 we will have a clearer idea of the residual emissions that we need to offset.

ENABLING FACTORS AND IMPLEMENTATION

Enabling factors

Implied at the end of the last chapter there are a network of financial mechanisms and decisions, as well as governance and partnerships, required to enable the progression of projects in our NZAP. Some of these mechanisms are explored in this chapter.

Financial factors

At this point in time it is difficult to know the amount of funding required for the Council to become a carbon neutral Council due to the uncertainty of which projects will be most suitable. However, feasibility assessments are being conducted to identify and help inform the most viable and cost-effective projects/initiatives to take forward.

While we develop our seven priority actions, we must keep sight of the funding streams, which will enable us to deliver these projects. Fortunately, more financial options have become available over time as the government introduces further green deals to accelerate national and regional decarbonisation.

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



1

Carbon Management Recycling Fund

Although the total fund amount (£500,000) has been committed to priority action number 1, our Street Lighting LED upgrade project, the Council will start paying back the fund from the energy savings. Hence, the fund will start building up again, and the money will be made available for further invest-to-save projects.

2

The Mayor of London's Energy Efficiency Fund (MEEF)

An investment fund, established by the GLA, which will help achieve London's ambition of being a zero carbon city by 2050. MEEF has been developed with Local Authorities as a core sector given their leadership in the low carbon development industry. MEEF has access to £500m of financing that can provide funding for up to 100% of the capital cost of a project. Features of the fund include a minimum investment size of £1m and a fixed term interest rate. MEEF can also fund estate wide maintenance and refurbishment.

3

Carbon Offsetting Funds (s106 contributions)

The release of Carbon Offsetting Funds (COF) are based on the cost of reducing a metric tonne of carbon. This is currently set by the GLA at £60 per tonne of CO₂ offset. It is to be used on a variety of carbon reduction projects across the borough. Projects can include energy efficiency measures on Council property and street lighting. The current available balance is approximately £332,000 and over £1M in approved planning applications.

4

The GLA's "accelerator" frameworks

These aim to finance projects in their development stage, such as the commissioning of feasibility studies, consultation services, public engagement etc. 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.

5

Carbon Neutral Fund

In recognition of new investment being required to achieve the Council's 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.

6

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.



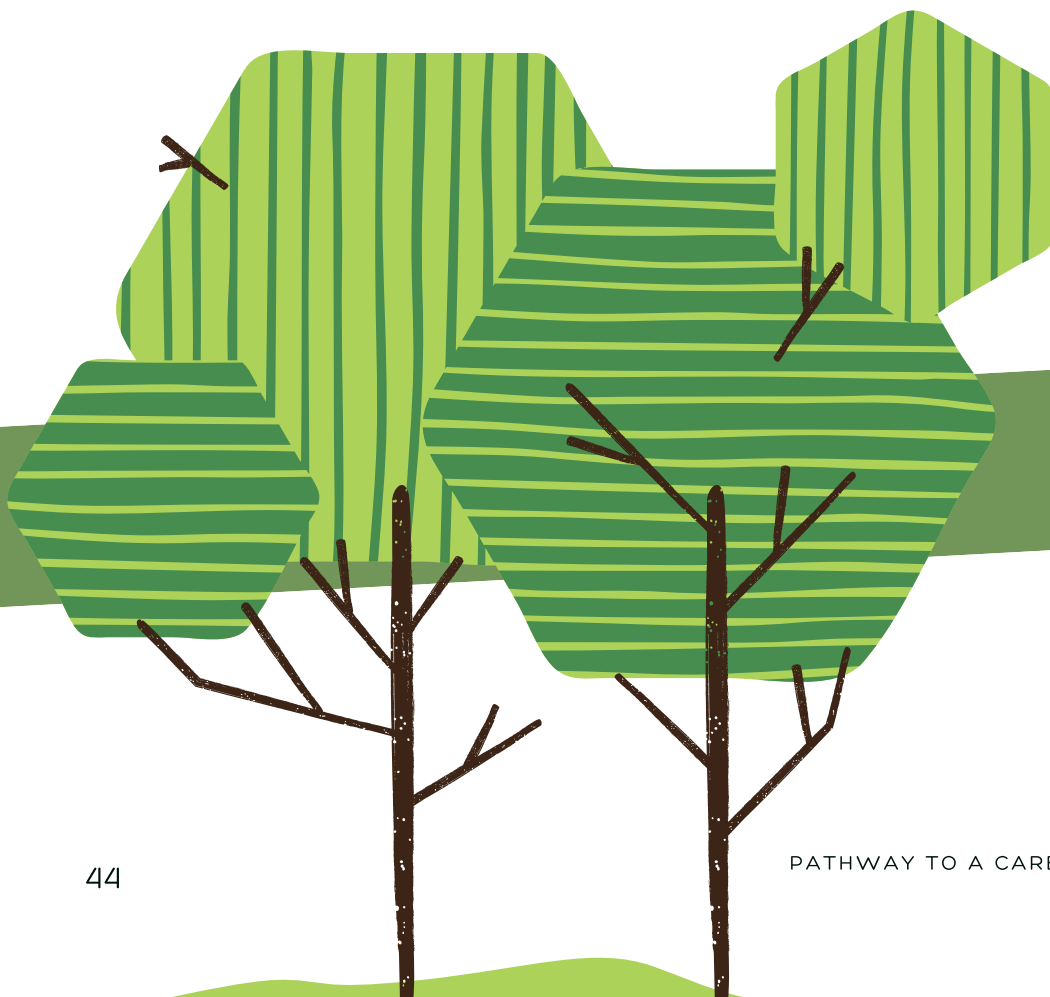
Governance and partnerships

Achieving net zero emissions will be iterative, 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 2029 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.

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.



Priority area number 4 of the Joint Statement, Renewable power for London, was focused in securing 100% renewable energy for London's public sector. This aligns with the Council's ambition to achieve carbon neutrality by 2029, through the purchase and supply of renewable energy to council owned estate. The remaining six action areas require significant investment and the engagement of individuals and businesses, through to national government.

Local councils, including Bromley, are already starting to positively influence the remaining TEC-LEDNet action areas, for example, supporting the roll out of electric vehicle (EV) charging infrastructure. This will help to achieve ambition number 3 in the Joint Statement to halve petrol and diesel road journeys between 2020 and 2030. However, this is outside the scope of Council's organisational NZAP.

More detail on borough-wide emissions, as well as all organisational emissions, procured services and other projects will follow in the forthcoming carbon management programme (CMP3) report. In addition, the Carbon Management Team are beginning to engage with consultants to map out a suitable borough-wide emissions reduction strategy. This will provide the guidance and a roadmap for the whole borough to work towards carbon neutrality before 2050, with the emphasis on partnerships and collaboration between all stakeholders in Bromley and beyond, to realise this goal.



Monitoring, verification and reporting

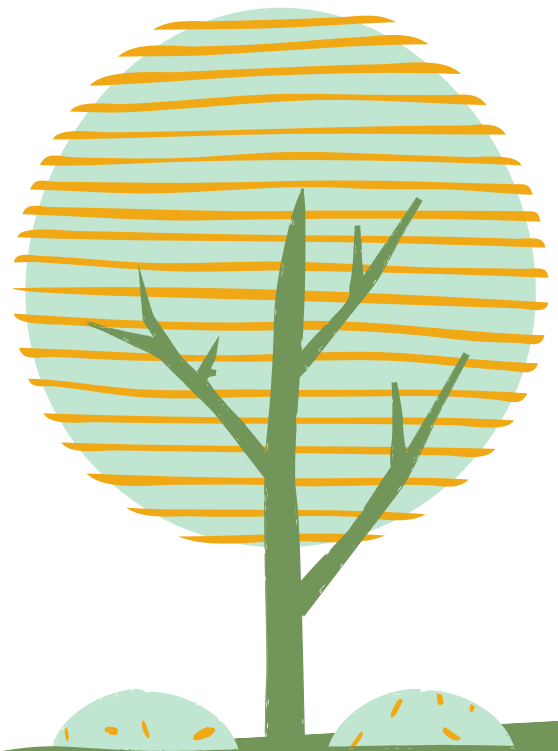
Performance against the Council's 2029 Net Zero Carbon target will be closely monitored, measured and reported by the Carbon Management Team.

How we will we monitor?

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 on a monthly basis 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 Policy Development and Scrutiny (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's GHG Emissions Performance report will continue to quantify the Council's performance in reducing their emissions and provide yearly progress statistics against the net zero target. It will include project specific information and report on actions taken to help reduce both scope 3 and borough-wide emissions, ensuring that reporting is accurate, complete and transparent (via the Council's website).

Existing obligations

When reporting on their emissions, local authorities are advised to use the international guidance on accounting and reporting, known as the GHG protocol. This guidance will apply to reporting carried out under the NZAP, in the same way it is incorporated into our CMP reports.

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 2029.

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 reads 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.

Carbon management programme

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

Carbon neutral

The aim of having no carbon dioxide emissions produced.

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 offsetting

Reducing emissions or capturing carbon in one sector, to compensate for an inability to reduce emissions in another sector.

Carbon sequestering/sequestration

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

Decarbonisation

The process of removing all energy sources that produce carbon emissions from the energy grid.

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 of their power from large, rechargeable batteries.

Greater London Authority (GLA)

The regional governance body of London.

Green energy

Any energy source that does not produce a high amount of carbon dioxide emissions, preferentially producing none at all. Often synonymous with renewable energy.

Green house 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.

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.

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 having no carbon dioxide emissions produced, and if any are produced, that 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.

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 petrol/diesel vehicle emissions.

Scope 2 Emissions

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

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

Solar photovoltaic (pv) system

Solar pv panels convert light from the sun into electricity as a form of green energy.



Pathway to a
**CARBON
NEUTRAL**
Council by 2029

Net Zero Action Plan



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