LAMBETH'S

CLIMATE ACTION PLAN

Tackling the climate and ecological emergency together

Lambeth

CONTENTS

FOREWORD

Dear friends,

Over the last decade our borough has faced some significant challenges. The effects of a global financial crash, a decade of austerity from central government, the impacts of Brexit and a devastating pandemic have had enormous impacts on the residents of Lambeth, their health and their financial security. And we have tackled these challenges head on and protected our residents from the worse effects. However, it is in the decisions we take over the decade to come which will define our future as we grapple with the greatest challenge of our time - man-made global heating and its effects on people and our planet.

These effects will not be confined to some faraway place. We have already begun to feel the effects of climate change right here in our borough. The flooding we have experienced over the last couple of years is a clear early warning sign that more extreme weather is on its way, more regularly. If we do not reduce emissions and take action to adapt our neighbourhoods and way of life we will all feel the effects right here in Lambeth, on our economy, our health and our prosperity. The Intergovernmental Panel on Climate Change's most recent report made it crystal clear that the situation is worse than experts originally predicted.

However, urban areas like Lambeth offer a beacon of hope in the fight against climate change. For decades, the people of Lambeth have displayed their determination, resolve and progressive values and I know they are committed to taking action to reduce emissions and prepare our borough for the challenges of the future. It will be the passion, commitment and creativity of our residents, businesses and major institutions that will lead us forward, through to a more just and sustainable future. And that is where this plan comes in: it is our collective plan as a borough to tackle the climate emergency here in Lambeth, and to do it fairly and swiftly.

Our role as the council is to provide that municipal leadership that brings together the community from every corner of Lambeth. This plan is the beginning of this. It does not just set out broad principles, goals and a vision for what Lambeth will look like in a decade – it has concrete steps and actions that we expect and need everyone to take. It builds on the recommendations from Lambeth's first Citizens' Assembly, where a representative group of residents set out a path to net zero emissions in a way that is just and fair, reducing the inherent inequities in our society at the same time. From retrofitting buildings and decarbonising our transport system to adapting our borough for the impacts of climate change and reducing consumption, this plan sets out the actions to build a prosperous, fair and climate resilient Lambeth. I am proud to lead our fantastic borough, where our biggest hospitals Kings College and Guy's and St. Thomas'; world-renowned universities such as King's College London and London South Bank University; major housing associations such as Hyde and Metropolitan Thames Valley Homes; Lambeth's cultural institutions such as the National Theatre; our business community and, of course, our committed voluntary and community organisations have come together to commit to urgent action.

It is now up to all of us, together, to deliver.

Cllr Claire Holland
Leader of Lambeth Council

EXECUTIVE SUMMARY

We are in the middle of a global climate crisis. We are witnessing the breakdown of climate and ecological systems resulting in increasing numbers of extreme weather events, growing conflict over scarce resources, and rapidly declining biodiversity. The winter of 2021 saw dramatic rises in the cost of gas used to heat our homes, which has exacerbated fuel poverty amongst our most vulnerable.

Our streets are congested with cars creating noise, taking up space, affecting safety and air quality. As the 5th most densely populated borough in the UK, Lambeth faces increased risks of exposure to hotter temperatures, as well as risk of flooding during increasingly frequent heavy rainfall events. We can overcome this, but it will take action now to reduce greenhouse gas emissions from all sources and build our resilience to the impacts of climate change that we have already locked in. We need to support each other through this transition, so we can protect and positively influence the future of our borough, our own livelihoods and those of our children.

Key message 1: This Climate Action Plan (CAP) has been developed by a wide range of community groups and businesses across the borough for everyone who lives in, works in and visits Lambeth. Lambeth council has coordinated the process but the ownership of the goals and actions are shared across a number of important, named stakeholders.

In January 2019, Lambeth Council was the first London borough to declare a climate and ecological emergency and committed to ensuring the council's operations are net zero by 2030. Since then, as well as developing and implementing its own plan to reduce emissions, the council has reached out to residents and organisations in Lambeth; residents through the **Citizens' Assembly on the Climate Crisis** and online public consultation; specific groups such as faith communities and young people; and key organisations including healthcare and educational institutions and businesses.

Out of this collaboration, we have developed Lambeth's first climate partnership, bringing together the borough's large public, private and third sector organisations to work together to oversee the development and implementation of this Climate Action Plan. The climate partnership will work with climate experts and community groups to ensure Lambeth achieves its goal of a more sustainable and just future.

This plan has been developed for everyone in the borough, but it also recognises that climate change does not affect everyone equally. Women, younger and older people, multi-ethnic groups and disabled people are more likely to be exposed to the impacts of climate change and climate policy, such as rising energy prices, air pollution, or changes in the labour market. As we implement this plan, we need to make sure we understand and consider the impacts on different population groups. It highlights the importance of hearing all voices, such that everyone in Lambeth can understand and play their role in creating a borough that is **prosperous, fair, low carbon** and **climate resilient**.

Key message 2: This CAP sets measurable goals to cover the depth and breadth of collaborative climate action needed.

This CAP also sets out Lambeth's goal to become **net zero** compatible by 2030. This means the borough (residents, businesses and the council) will be as close as possible to zero overall emissions, by prioritising emissions reductions, and compensating for any remaining emissions through offsetting activities, such as planting trees. Achieving this goal to become a prosperous, fair and climate resilient Lambeth requires action to be broken down into sub-goals that sit under clearly defined priority areas:

1. **Adaptation**
2. **Buildings and energy**
3. **Transport**
4. **Waste, consumption and food**
5. **Biodiversity and environmental quality**

No single organisation can achieve these goals alone; it will require close collaboration between organisations within Lambeth, and regional and central government. Each organisation will need significant increases in resources to play their part – people, funding and finances. Achieving these goals will require a commitment to collaboration; developing effective financial mechanisms; engagement of national government and others outside of the borough; and monitoring and reporting systems.

Key message 3: Securing the future of our borough will be a journey. We must all learn from and support each other.

We have a huge challenge and much learning ahead of us. The work needs to begin now and happen fast. Supporting and learning from each other means we will need strong channels of communication, governance structures that encourage **learning and collaboration**, and the confidence to hold each other to account. We will also need leadership throughout our community. Lambeth Council has an important role providing civic leadership and helping to bring together different organisations and communities, but we also need leadership from our businesses, big institutions such as our hospitals and universities, voluntary and community sector and residents themselves. This CAP is designed to set us off in the right direction, but it will continue to be developed to keep pace with shifts across society, technology and wider policy, including the changing needs of communities, groups and organisations in Lambeth.

This is an opportunity for everyone to play their part, no matter how large or small, in securing a more just and sustainable future.

INTRODUCTION TO THE CLIMATE ACTION PLAN

We are already seeing the impact that the global **climate and ecological emergency** is having on our communities, from widespread flash flooding to deaths caused by high levels of air pollution and unprecedented heat waves. Taking action to cut our emissions, clean our air and adapt to extreme weather events requires system change, and everyone needs to play their part. In other words, a **radical transition** is needed in the way people live and interact with each other, the planet and its resources. Taking this action will deliver tangible benefits to Lambeth's communities, from **revitalising our natural spaces** with biodiversity, to streets that are quieter and safer for walking and cycling, to affordable and accessible public transport, to fixing our inefficient building stock to eliminate fuel poverty and unlocking **green job opportunities**.

Governments across the world are strengthening their climate commitments, including the UK. The UK has introduced legislation to support one of the "world's most ambitious climate change targets", to cut emissions by 78% by 2035 compared to 1990 levels. The Glasgow Climate Pact, drawn up at the United Nations 26th annual Conference of the Parties (COP 26), saw a number of countries sign up to measures to **mitigate and adapt** to climate change such as by phasing out coal, and stopping deforestation by 2030.

National governments cannot achieve these climate goals alone. It is estimated that over half of the emissions cuts needed in the UK rely on local people and businesses adopting low-carbon solutions. That is why Lambeth has developed its own Climate Action Plan; to set out how, as a local area, we can play our part in reducing emissions and improving climate resilience.

As a borough, we will aim to be a net zero compatible borough as soon as possible after 2030. This means we will need to eliminate all direct emissions, whilst reducing our contribution to indirect emissions as far as possible. We will aim to reduce consumption-based emissions in the borough by two thirds by 2030.

Lambeth's response

The Climate Action Plan is the borough's response to the climate and ecological emergency and to what our communities have asked for. Climate action is supported by nine out of ten Lambeth residents. This demonstrates a vast majority of support in the borough, with some groups already delivering transformative projects and initiatives towards a net .zero and climate resilient future.

The plan has been prepared with the input of a large number of people from all over Lambeth and sets a clear direction for a **sustainable and just recovery** that contributes to local, national and global climate targets. Crucially, we are also responding to Lambeth's Citizens' Assembly by creating a plan that responds to their recommendations.

Our Climate Action Plan will be a strategic, living document that will serve as a launchpad for future activity and detailed plans for delivery. It will be reviewed annually alongside progress and will be updated when necessary.

Aims of the Climate Action Plan

Lambeth's CAP sets out a clear vision and high-level goals that have been developed in collaboration with many groups across the borough. The Plan aims to:

1. **Elevate the urgency of and opportunities related to climate action**
   By setting out goals that are proportional to the speed and scale of action required, delivering clear benefits to our communities in an equitable way.

2. **Empower communities to take climate action and ensure that every resident and organisation can see their place in a climate-resilient future for the borough**
   By continuing to engage across our communities and businesses widely and openly as we work to deliver the plan.

3. **Kick-start delivering the net zero transition**
   By providing an overarching guide from which all community leaders and organisations across all sectors can agree, develop and collaborate on detailed, tangible actions, programmes and financial mechanisms. Key to this will be establishing a system for monitoring and evaluation.

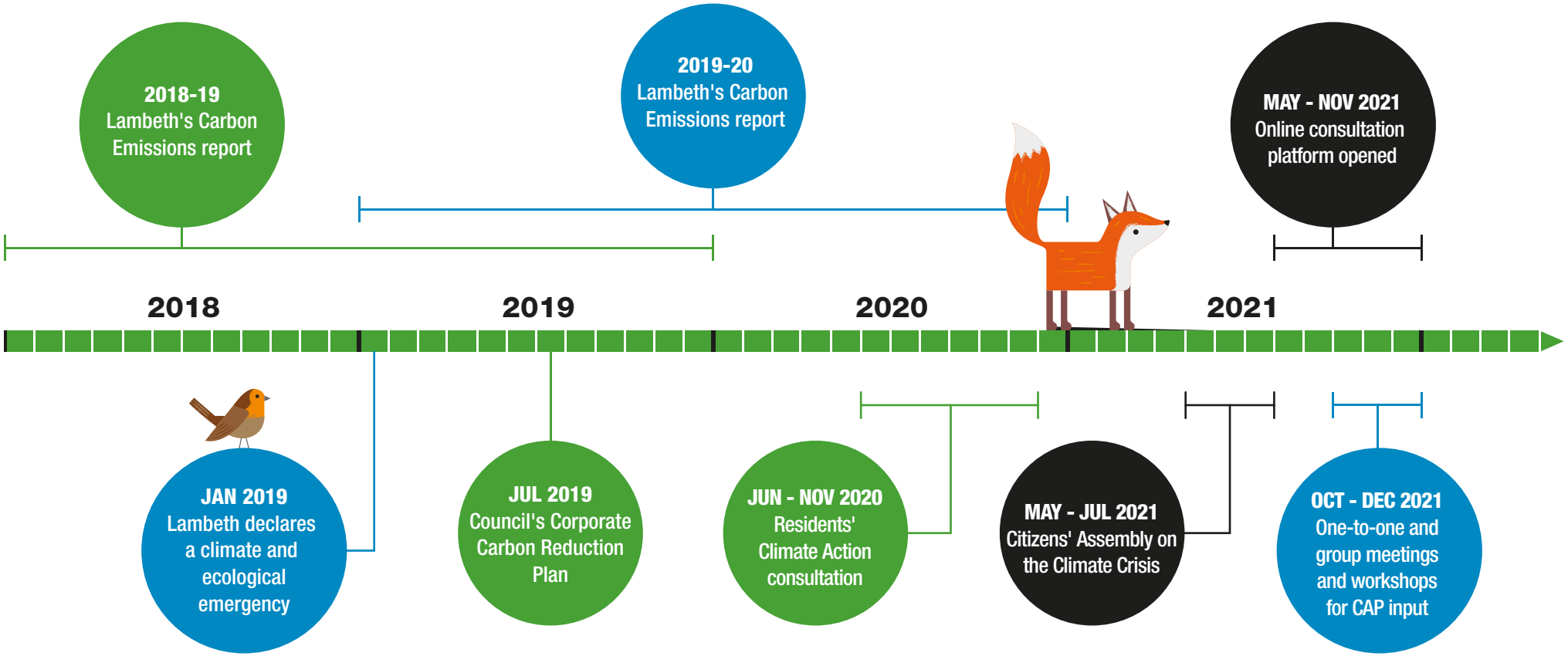
Climate Pledge

What can you do?
We are asking all organisations and businesses across Lambeth to sign up to the following pledges:[1]

1. Publicly endorse the following Principles:
   - We recognise the global climate and ecological emergency.
   - We are committed to putting inclusive climate action at the centre of our decisions.
2. Pledge to work towards reaching net zero compatibility by 2030 in line with global efforts to limit warming to 1.5°Celsius.
3. Immediately proceed to planning at least one significant climate action and begin implementation no later than 2022.

1 Based on the Climate Pledge from the Race to Zero (c40knowledgehub.org)

Development of the Climate Action Plan



CAP = Climate Action Plan

Figure 1: Timeline of Lambeth's Climate Action Plan development

In January 2019, Lambeth Council declared a **climate and ecological emergency** and committed to ensuring the council's estate and operations would be net zero by 2030. As well as being responsible for reducing its own carbon emissions, the council recognised its role in bringing together residents, partners, businesses, voluntary, community and faith groups to agree how to reduce carbon emissions across the borough. The process that has followed over the past year has involved a wide range of activities, including technical data analysis (including the publication of a 2019-20 emissions profile for the borough) and broad community engagement, including through the **Lambeth's Citizens' Assembly on the Climate Crisis.** Between May and July 2021, 47 Lambeth residents, selected to reflect the borough's population, came together as part of the Assembly through online workshops and activities delivered over six weeks. The assembly members developed a set of **13 recommendations** for the borough to reduce carbon emissions to **net zero.** These recommendations, alongside key principles for change, have been incorporated into this plan.

Co-creation of a borough-wide Climate Action Plan

During the development of the Climate Action Plan a series of workshops, interviews and other engagement events were held to co-create the **vision for Lambeth in 2030**, and start exploring how collective action could begin to achieve this. This encompassed key partners and those providing leadership in the borough such as housing associations, Business Improvement Districts and smaller businesses, large businesses, charities and funding bodies, healthcare providers, educational and academic institutions, trades unions, and arts and cultural institutions. The co-creation process also engaged voluntary and community organisations, including faith groups, charities for younger and older people in the borough, organisations working with refugees and minority groups, as well as environmental groups and community-based cultural societies.

Workshops varied in the method of delivery and exact activities, but all focused primarily on developing a collective vision for the borough and understanding what action needs to happen to deliver on the vision, and how each group can play a part – acknowledging progress that has been made and also identifying opportunities to raise ambition. The outputs from these workshops fed directly into the emerging Climate Action Plan and represent a strong foundation for ongoing collaboration.

Principles of the plan

The three principles set out below have underpinned the way in which this Climate Action Plan has been developed and will continue to influence the way in which everyone in Lambeth will need to work together to deliver the vision. These principles were agreed in Lambeth's Citizens' Assembly on the Climate Crisis and have been developed for the Climate Action Plan.

1.Fairness

We know that the effects of climate change are not felt equally, with those who are least responsible often being worst affected by the impacts. Almost a third of residents are living in poverty once housing costs are taken into account, and 20% of people in Lambeth are paid below the London Living Wage. Climate change risk can intersect with existing inequalities, meaning that women, multi-ethnic groups, older and younger people, and disabled people are also more likely to be vulnerable to the impacts of climate change and climate policy. Putting fairness at the centre of any climate crisis response is vital. When we talk about fairness and climate justice, it is important to focus on **equitable outcomes** meaning the costs and benefits are distributed in a way which takes account of people's differing capabilities and circumstances. This will help redress imbalances caused by **structural inequality.** Fairness can also mean putting poorer and more vulnerable residents at the heart of any emerging strategy, ensuring that the wealthiest and highest polluting contribute the earliest, and the most, towards steps to decarbonize, and ensuring that the wider necessary action is easy and affordable for all.

2.Impact-focused

This principle combines the importance of both **speed** and **effectiveness** and recognises the urgency of responding to the climate and ecological crisis. Climate action in Lambeth needs to focus on implementing impactful change at the appropriate speed and at scale. Action will be prioritised according to impact over timelines, including 'quick win' policies, as well as implementing short-term actions to take steps towards longer-term change, such as large-scale behaviour change.

Lambeth's Citizens' Assembly identified the following main elements to ensure that climate action is effective:

- Lambeth residents' understanding of why climate action is important and the impact it will have
- Climate action owners will need to be responsible and accountable
- Climate action must be clearly relevant and applicable to the borough of Lambeth
- Climate action must be measurable

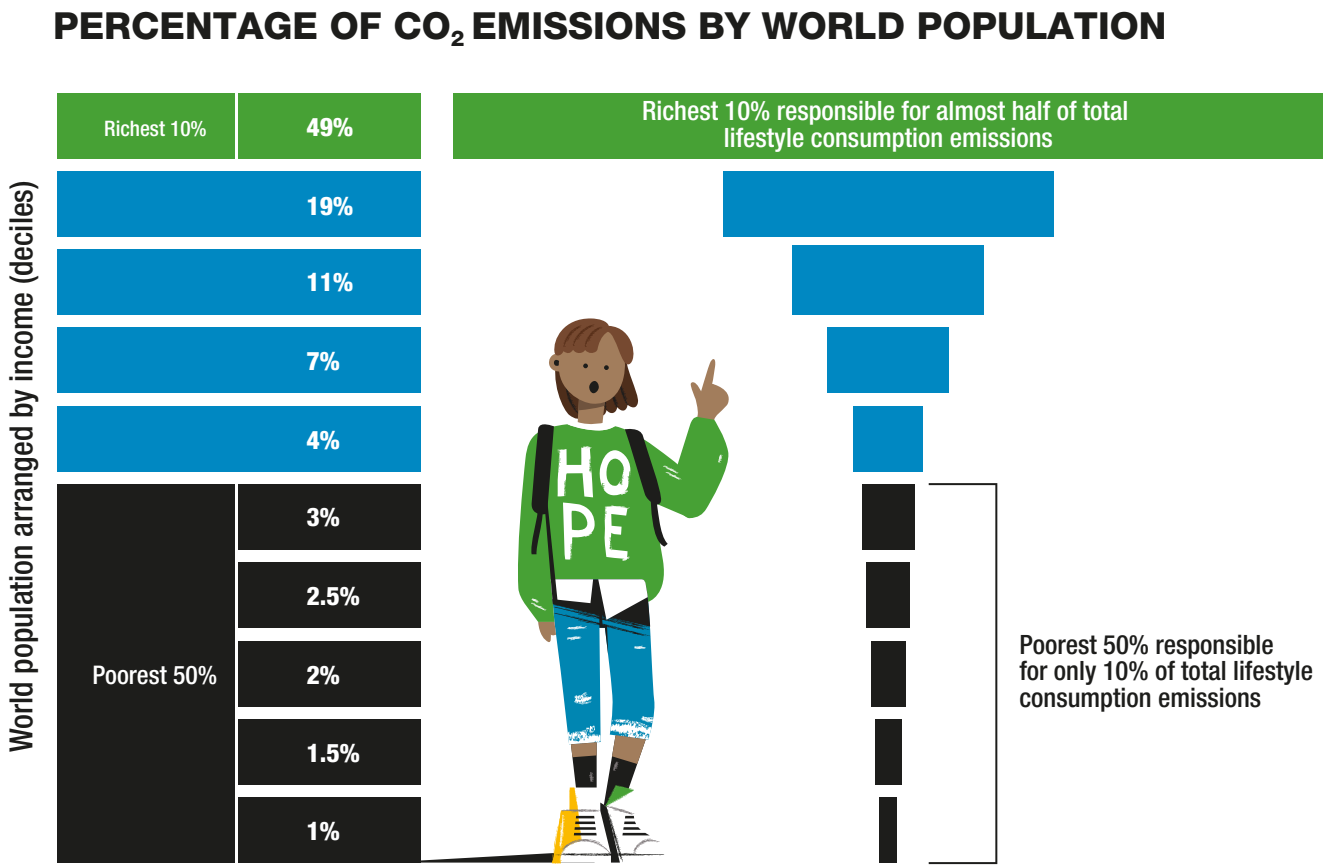
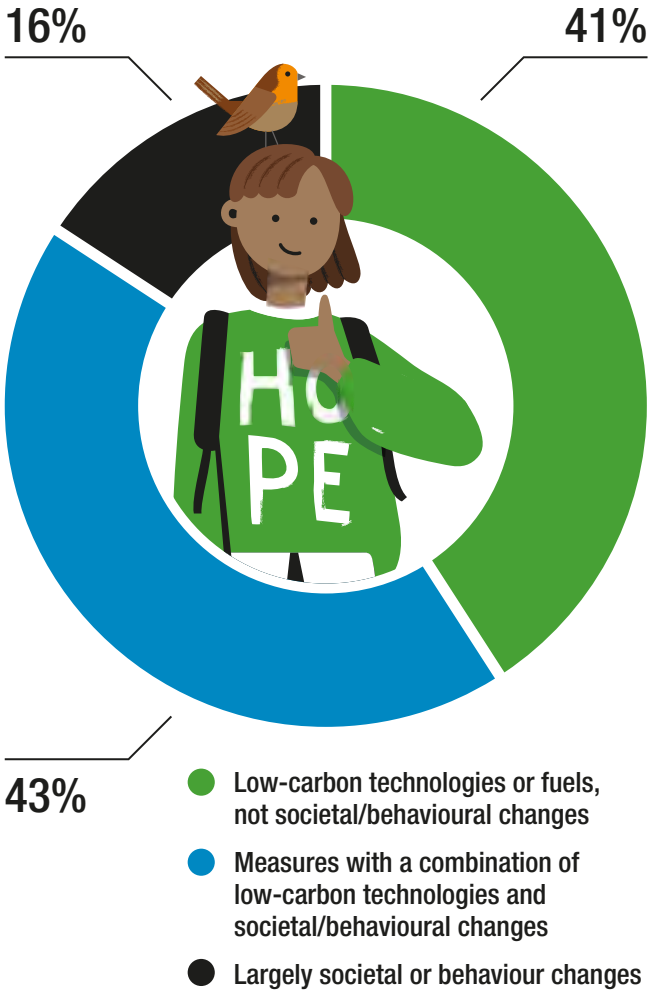


Figure 2: Percentage of CO_2 emissions by world population. Source: Oxfam

3.Collaboration

Responding to the climate and ecological emergency is a huge task. No one organisation, government body, or industry can solve the problem alone. That is why collaboration will be so important; by **working together** we will be able to find the financial resources, solutions, learning and support to make the necessary changes. Collaboration is also important because it will help to make sure that the climate solutions we develop work well in our local area, and do not have unintended consequences. Our Citizens' Assembly demonstrated the value of bringing the **expertise of local people** into the policy-making process, helping us to collectively consider how to implement climate action in a way that is fair and takes account of the resources within our communities.

While we require the deployment of physical low-carbon solutions, only 41% of action can be achieved by technology alone. The remaining 59% of action relies partially or wholly on **behaviour change**, and requires us all to become agents of change, taking every step we can and influencing others to do the same. Working collaboratively means we will have a greater impact together, and ensure that we deliver co-benefits through increased health, wellbeing and equity.



Source: CCC analysis.

Figure 3: The role of societal and behavioural changes in the Climate Change Committee's Balanced Net Zero Pathway for the UK (2035). From the Sixth Carbon Budget – The UK's path to Net Zero (2020): https://www.theccc.org.uk/publication/sixth-carbon-budget/

Who needs to collaborate?

For this plan to work, everyone needs to play a part. Lambeth is fortunate to have **large businesses, cultural** and **public sector institutions** who are able to have a significant influence through their employees, customers and supply chain. Lambeth also has a large number of **small to medium enterprises** (SMEs). Many of the benefits associated with climate action can make a positive difference to our local businesses and help build their resilience – from increasing local footfall in our town centres, to developing new markets for low-carbon goods and services. It will be important that we help support our smaller businesses who may lack the capacity to take steps alone, by looking at collective action which can result in economies of scale.

Lambeth has a whole ecosystem of **interconnected** and very active **citizen-led groups, charities** and other **community organisations**. Many of these groups have been proactively engaging on climate change for years, and the CAP has already benefitted from their input and support to this process. We have also recognised the importance of engaging with groups representing marginalised and under-represented or minority groups in the borough, including groups focused on race, nationality, faith, sex and gender, age, disability and sexual orientation. These groups have added huge value to the work so far and we need to ensure they remain a key part of the development of climate action in Lambeth, ensuring that we deliver equitable outcomes and avoid introducing or exacerbating existing inequalities.

Finally, the **people of Lambeth**; with over 325,000 people living in the borough, we have a huge **collective power** to change. We want to help give residents the tools and knowledge they need and empower them to make a difference in their own lives. We know that it is not always easy or possible to make low carbon choices, and we want to change that by helping create an environment where the right thing to do for the climate is also the easiest and most affordable choice. We expect those who can take greater action to do so, recognising the inequality that lies at the heart of the climate crisis. And we will design our plans, programmes and policies so that they not only reduce emissions and increase our climate resilience, but also ensure that we meet people's essential needs and distribute the costs and benefits fairly.

THE CLIMATE ACTION PLAN IN NUMBERS

5 themes

10 housing associations representing 63,000 homes

3 principles

20 ambitious goals

7 BIDs representing over 2,800 businesses

13 organisations representing over 56,000 employees

47 Citizen Assembly members developed 13 recommendations

10 environmental groups

1

OUR 2030 VISION

Lambeth will be a place where we can live, work, learn and enjoy life in our local areas, where we can travel safely and easily by foot, bike and public transport, in an environment with clean, green and nature-rich spaces. Our homes and workplaces will be comfortable and affordable to run, with good jobs and strong, inclusive, resilient communities where everyone's needs are met, and everyone plays a part.

A VIEW FROM 2030

Grace is getting ready for work; she's going to be on site today delivering the last of the major retrofit jobs in the borough for a block of flats that was originally built in the 1970s. The work will mean that current and future residents can stay warm and comfortable in the winter without spending lots of money on energy bills. In the summer, the living walls also help to reduce high temperatures in the heat waves that have become more frequent in the last few years.

The asphalt carparks that used to surround the building are now play areas for children with wildflowers and space for exercise and a weekly market supplying locally grown, affordable food.

On her way out the door with her daughter, she says goodbye to Isaiah – he's getting ready to begin his monthly volunteer day helping children learn planting in the local community garden – an initiative started through his workplace that's helped him to feel more of a part of the local neighbourhood. Grace unlocks the shared cargo bike that she booked from its storage locker on the street and buckles Alex into the front and they head off.

The street that was once full of cars is now lined with trees, pocket gardens, outdoor community spaces, and cycle parking. Breathing in the clean air, Grace remembers when she was growing up – the streets were too busy and her mum wouldn't let her walk to school, despite it being less than a mile away. They seemed to always be stuck in stressful traffic.

She stops outside her friend's house, and they cycle the last part of the way together in a lane separated from the electric buses which are quicker, quieter and more reliable now that they don't need to compete with so many cars.

Deliveries are being made by cargo bikes and small electric vans, and there is a much wider variety of cycles on the roads now, adapted to suit many different needs. They reach the school – now an oasis of calm with cleaner air and the noise of children's play instead of engines. Grace waves goodbye and heads on to the rest of her day.

2

THE CASE FOR LOCAL CLIMATE ACTION

This chapter of the Climate Action Plan sets out why local action on climate change makes sense. We look at the benefits it will bring but also from the risks of inaction. Climate action contributes to our wider priorities for the borough, and is set in a broader picture requiring city-level, regional and national action.

EIGHT PRIORITY AREAS OF CLIMATE RELATED RISK REQUIRING URGENT ACTION

Risk to natural carbon stores and sequestration from multiple hazards, leading to increased emissions

Risk to crops, livestock and commercial trees from multiple climate hazards

Risk to viability and diversity of terrestrial and freshwater habitats and species from multiple hazards

Multiple risks to the UK from climate change impacts overseas

Risk to soil health from increased flooding and drought

Risk to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks

Risk to people and the economy from climate-related failure of the power system

Risk to human health, productivity and wellbeing from increased exposure to heat in homes and other buildings

Figure 4: Eight priority areas of climate related risk requiring urgent action

Lambeth's carbon emissions have fallen on average 3.5% annually since 2005. Continuing at this rate, emissions would be approximately 60% below 2005 levels by 2030 and approximately 80% below 2005 levels by 2050.[2] Despite this, if Lambeth follows its current trajectory, we will not reach net zero emissions even by 2050. We must do more across the board, and especially focusing on our main sources of emissions – **buildings and transport** (Figure 5 shows the breakdown of emissions sources in the borough). These emissions do not take into account emissions which are produced outside of Lambeth, for example, purchasing clothes in Lambeth, which have been imported into the UK, have emissions from cotton cultivation and garment factories overseas. These emissions can be referred to as **"consumption-based" emissions**. These are really important in Lambeth as they are significantly more than the emissions we produce directly in Lambeth. Consumption-based emissions are created by a huge range of activity, for example, the clothes and furniture we buy, the food we eat, the medicine we take and the material we use for art and cultural purposes across Lambeth.

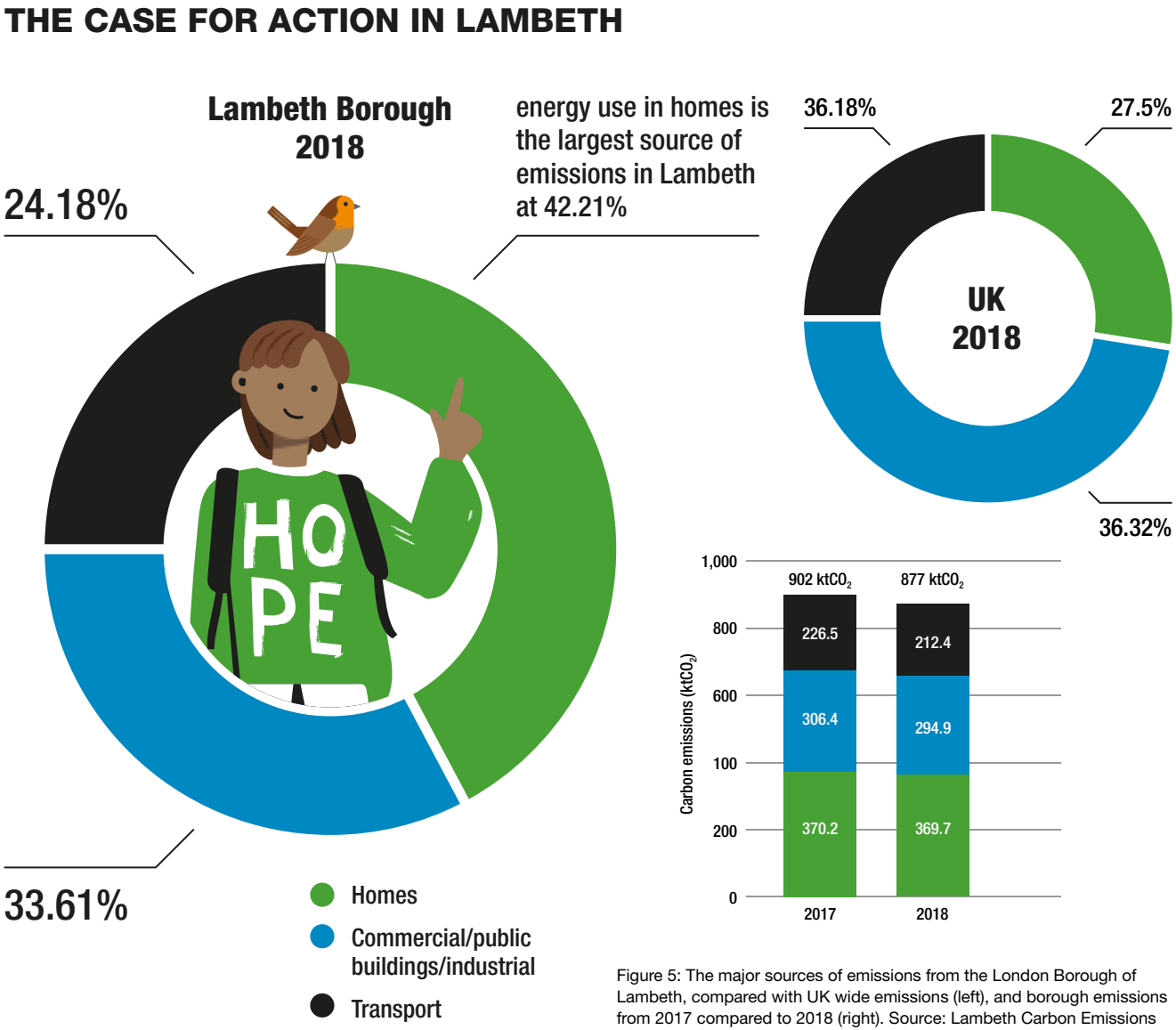


Figure 5: The major sources of emissions from the London Borough of Lambeth, compared with UK wide emissions (left), and borough emissions from 2017 compared to 2018 (right). Source: Lambeth Carbon Emissions Report 2019-2020.

2 Lambeth Carbon Emissions Report 2019-2020 (November 2021)

There are important reasons for us to act at a local level. If we do not take action to reduce emissions and prepare for the future we will face significant costs to the public sector, our economy and communities as we experience more frequent climate events. Without supportive action, our local population and businesses may be left behind as the economy changes in response to the drive to decarbonise, further widening inequality. Figure 4 sets out the Committee on Climate Change's assessment of the **urgent climate risks** all areas need to respond to.

Lambeth is the fifth most densely populated borough in England and Wales and along with other parts of the city, experiences the **Urban Heat Island** (UHI) effect, whereby heat is absorbed and retained in the artificial surfaces that make up our buildings, roads, pavements and other urban structures. The UHI effect means that cities the size of London can be up to 10°C warmer than surrounding areas, and therefore a greater proportion of our residents are more exposed to the health risks of hotter temperatures than people living in rural areas or with access to gardens. Extended high temperatures not only put the health of our residents at risk, particularly when combined with poor air quality, but also our habitats and wildlife. Above certain temperatures, our infrastructure - meaning our roads, railway and underground lines, utilities and telecommunications - is vulnerable to disruption.

Climate change is increasing the likelihood and severity of flood events in Lambeth. **Flooding** from rivers and tidal flooding from the Thames are both recognised risks that will increase in the future due to climate change. Increased rainfall also raises the risk of surface water flooding across the borough - a type of flooding which happens when rainwater overflows drainage systems and cannot soak into the ground fast enough. Although Lambeth has the fifth highest green surface area out of the London boroughs (44%), which helps water to soak away from the surface, it also has the seventh highest coverage of impermeable surfaces, such as roads, pavements, buildings and driveways (56%). These types of surfaces exacerbate the risk of all types of flooding.

While everyone who lives and works in Lambeth will experience the impacts of climate change to some degree, the impacts will not be borne equally or fairly. The elderly and the very young, and those of us who are poorer, or female, or disabled, or part of a minority whether through race or sexuality, are disproportionately located in environments that are more vulnerable to risks, and have fewer resources available to prepare for, adapt to and recover from climate shocks. Figure 6 illustrates how **vulnerability to climate change** impacts varies across the borough.

Let's channel going bolder and moving first. A Lambeth that makes change happen and considers the climate in every decision will benefit everyone. Let's build a new model

Charlie, Brixton Project

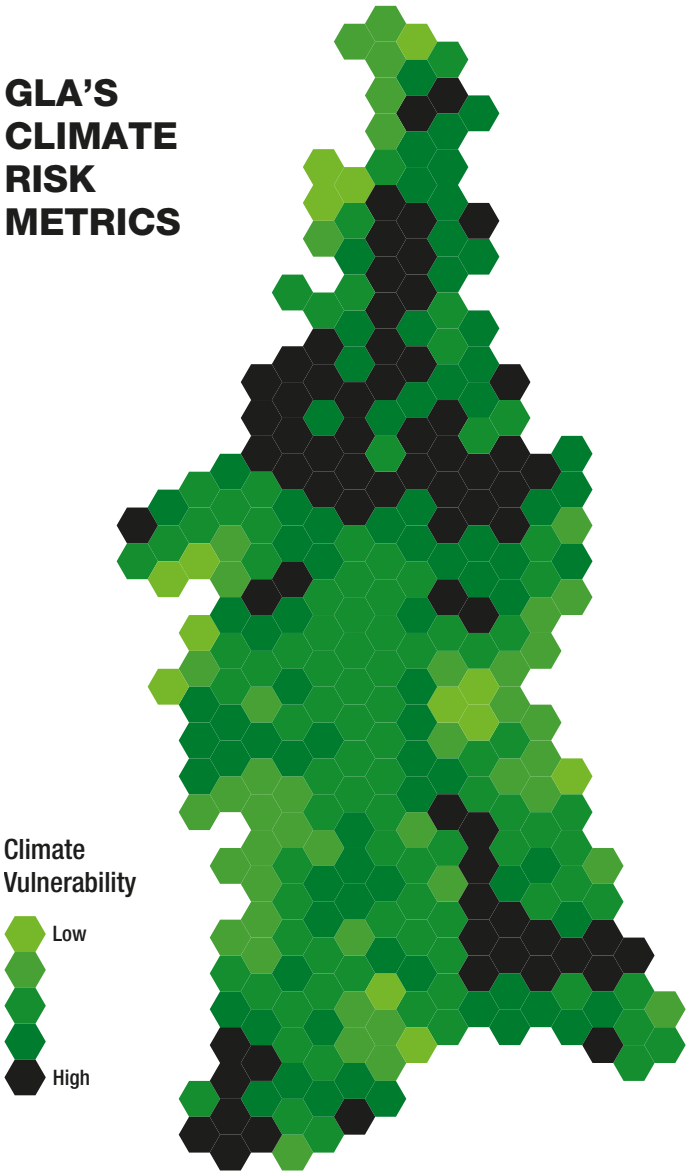


Figure 6: GLA's climate risk metrics

The actions we take to respond to climate change can contribute to broader goals we have for our borough, such as **improving health** and **wellbeing**, **increasing prosperity and opportunity**, and **reducing inequality**. The goals set out in this CAP are intended to contribute to these wider goals and maximise the benefits of climate action for local people.

Actions to reduce our emissions will also improve our **air quality**, resulting in fewer instances of asthma, better overall health and longer livelihoods in Lambeth. By upgrading and insulating our buildings and energy systems we can lower energy bills, improve comfort and **living conditions**, and reduce our exposure to the impacts of uncertain energy prices. Improving our roads and streets by **reducing** the number of vehicles and **congestion** and creating safer cycling and walking routes will help us move around the borough more easily, quickly and cheaply, whilst considering the needs of people who require access to a vehicle.

Creating more **green space** in the borough filled with trees, plants and wildlife will help keep our buildings cooler during heat waves, which particularly impact the older people, children and people with existing health conditions. It also provides more opportunities for us to spend time in nature, such as through food growing or outdoor exercise, which benefits our mental and physical health. Reducing our waste can help us save money, and sharing and repairing items rather than buying new and throwing away can bring us together and create **stronger communities**.

A note on offsetting: We have not undertaken detailed modelling across all of the themes to determine the exact level of emissions reductions we will be able to make through these goals. Even with significant action to reduce emissions, we will likely still have some residual emissions in the borough by 2030, from activities which are particularly hard to decarbonise and also from our expectation that the national power grid will not yet be fully decarbonised. In a best-case scenario, we estimate that this will be around 200 $ktCO_2$ annually. We will be looking into the potential to offset these residual emissions in a way that is fair, equitable and cost-effective, and ideally which has local benefits.

3

CLIMATE GOALS FOR LAMBETH

In developing this plan, we have identified five core themes around which to focus climate action across the borough. The following sections contains more detail on each of these themes, along with some specific goals:

Our **themes** are clearly defined areas where we know that we need to prioritise action to achieve our vision.

Our **goals** are observable or measurable objectives which relate to outcomes aligned with our vision.

These will need to be delivered through **actions**, some of which we are already starting, others which will need to be defined in detail in the next stages of work.

Adaptation

As well as reducing emissions across the borough, we must also prepare for the impacts of climate change. We know that weather patterns are changing, and our infrastructure, habitats, and communities are at risk from higher temperatures, increased rainfall and more unpredictable weather. These impacts typically affect poorer and more vulnerable groups in Lambeth who have fewer resources to adapt.

Buildings and Energy

Our greatest use of energy is in heating and powering our buildings, and best-practice climate action requires us to reduce energy demand by retrofitting buildings to be warmer, more efficient and comfortable. We also need to ensure that the borough maximises the use and generation of low carbon and renewable energy

Transport

Emissions from transport make up almost a quarter of the total emissions from the borough, primarily from motor vehicles on our roads. Shifting how we travel towards walking, cycling and public transport, means that we can reduce the number of cars on our roads, reduce congestion (making bus rides quicker and more reliable) and improve our air quality. For those vehicles that will be necessary in the future, a switch to electric or other zero-emissions fuels will help to eliminate greenhouse gas emissions within the borough, as will last mile deliveries via cargo bikes.

Waste, consumption and food

When we create waste by disposing of unwanted materials, this has a climate impact not only in terms of how that waste is disposed of, but it is also wasting all of the energy and resulting emissions that were generated in the production of that item. This also links to consumption – every purchase we make – as individuals or organisations - drives demand for production, which increases emissions (often elsewhere – outside Lambeth or even the UK). By reducing our consumption and switching to lower carbon goods, we can have an even greater influence on the emissions within and beyond our borough. Through climate action in the borough, we hope to influence and enable more people and businesses to make better decisions about what they buy, use and waste.

Biodiversity and environmental quality

The climate crisis is closely intertwined with the ecological crisis, with biodiversity plummeting globally. Green space, and nature, is important to us all; it helps to lower temperature and provide clean air, supports local wildlife and absorbs rainfall to reduce flood risk. Spending time outdoors in nature has proven benefits on both our physical and mental health. We want to ensure that as we tackle climate change, we also improve environmental quality and increase biodiversity in Lambeth.

ADAPTATION

2030 Vision

Lambeth is a resilient borough, where communities feel confident in their ability to withstand extreme weather events. Equity is at the heart of adaptive action taken by Lambeth Council and its partner organisations, meaning that no-one is unfairly disadvantaged.

Adaptation refers to anticipating the negative impacts of climate change and **taking action to minimise their effects**. Adaptive action leads to stronger communities and economies, that are resilient not just to climate change but to other shocks and stresses, such as economic recessions. Even if collective global effort achieves the ambition set out in the **Paris Agreement** on climate change, we should expect warming of at least **1.5 degrees Celsius**. This may not sound like much, but every fraction of a degree matters and will influence our future and the future of our children.

Lambeth can expect hotter and drier summers, warmer and wetter winters, more **extreme weather** events such as intense storms and heatwaves, and higher sea levels affecting the River Thames. Climate change also poses many risks to the natural environment, from biodiversity loss, environmental degradation, increased incidence of pests and disease, and flooding. Accordingly, while adaptation is a theme which cuts across each of the other themes in this Climate Action Plan, it has its own chapter in recognition of the urgent need for action. We also know that not planning for climate shocks will **exacerbate existing inequalities** in Lambeth.

Adaptation will require active cooperation between large institutions across the borough, the Mayor of London, Transport for London, the Environment Agency, Network Rail, district grid network operators, Thames Water and community and neighbourhood groups. All will play a part in achieving a more resilient Lambeth. We will continue to take proactive action to embed adaptation considerations across those areas where we have the most power to act.

To adapt to the **climate risks** described here, and in chapter 2, we will need to consider a wide range of interventions including ways to **minimise overheating** (such as increased greenery and shading, cooler buildings, and provision of dedicated cool spaces for people to seek refuge in heatwaves), **reduce flood risk** and surface-water runoff (through flood alleviation measures, better strategic management of surface water, implementing sustainable drainage solutions, de-paving areas and increasing the amount of permeable and green space in the borough), **improve water use efficiency** and re-use (such as through low-flow fittings, reducing leaks, drought-tolerant planting and greywater re-use), and increase **community resilience** and preparedness.

There are important links between adaptation and some of the other themes within this collective Climate Action Plan for Lambeth. In particular, our built environment offers opportunities to implement **sustainable urban drainage systems** and **green infrastructure** solutions that will help keep our homes and workplaces cool, reduce flood risk and increase resilience to extreme weather events. In Waste, Consumption and Food the opportunities for urban food growing that can support more sustainable diets will also be important opportunities to increase the amount of green and vegetated space in the borough. These opportunities to support nature-based solutions and increased green and blue infrastructure within the borough are also evident in our Biodiversity and Environmental Quality theme. We have set out four goals for adaptation action to help Lambeth on its way to achieving the 2030 vision of a resilient and equitable borough.

There is a lack of greenery in Brixton centre, but there is plenty of under-used concreted space. If we could create even small areas of greenery, this will help to improve the environment as well as improving wellbeing

Polly, We Rise

ADAPTATION 2030 GOALS

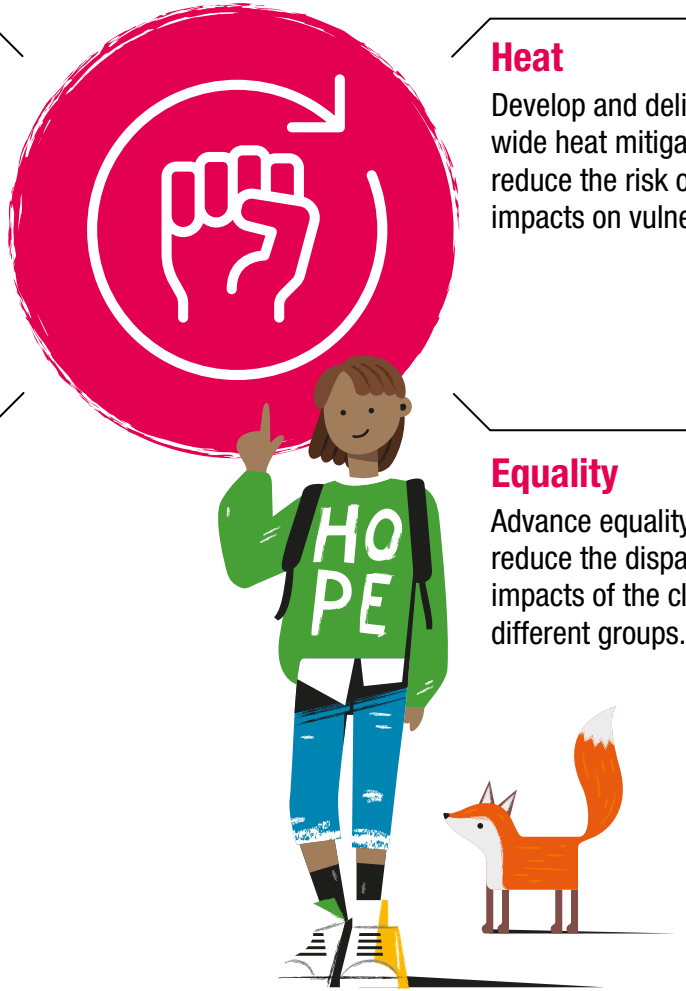
Lambeth is a resilient borough, where all its communities feel confident in their ability to withstand extreme weather events. Equity is at the heart of adaptive action taken by the Council and its partner organisations, meaning that no-one is unfairly disadvantaged.

Rainwater

10% of all rainwater on impermeable surfaces in Lambeth to be sustainably managed by 2030.

Heat

Develop and deliver a borough-wide heat mitigation plan to reduce the risk of extreme heat impacts on vulnerable groups.



Resilient Communities

Work with the health sector, major organisations and VCS to identify risks and strengthen community connections and improving businesses and communities' ability to prepare and respond to climate shocks.

Equality

Advance equality in Lambeth to reduce the disparity in the impacts of the climate crisis on different groups.

What can I do to help?

- Think about how comfortable your home or workplace is in very hot weather. Are there ways you can make it cooler, such as improving **insulation**? This should help with fuel bills too. Could you add shutters to your windows, paint the roof or walls white, or improve green spaces around your building?

- Think about how much **water** you use in an average day. Are there ways you can make savings? The Energy Saving Trust has some useful tips **here**.

- Do you have a front drive or a garden for your home or business that has been paved over or covered in artificial material? Replacing impermeable surfaces with permeable paving – or even better grass or **biodiverse planting** – can help water drain into the ground rather than running off and creating a risk of flooding.

CASE STUDY: National Theatre

The National Theatre is a Grade II* listed building located next to Waterloo Bridge on the South Bank. The Theatre's mission is to make world-class theatre, for everyone.

Since 2011, the National Theatre has taken steps to reduce their environmental impact and adapt for the future:

- Moving to a Display Energy Certificate B from G through measures such as replacing the uninsulated roof and single glazed windows of the construction workshops
- Heating and cooling the new building (The Max Rayne Centre) with a ground source heat pump.
- Reducing reliance on mains water by 50% with a new bore hole fed from the London aquifer, and reusing both the waste-water from its filtration plant and rain water collection for toilets.
- Installing green infrastructure including a sedum roof stretching a distance of 95 metres (or 380 sqm) and pollinator planting on the terraces, providing foraging for three beehives and supporting biodiversity. All of which decreases the impact of the Urban Heat Island effect.

*A Grade 2 listed building is defined as a UK building or structure that is "of special interest, warranting every effort to preserve it".

Images © Sam Mellish 2020

BUILDINGS AND ENERGY

2030 Vision

Lambeth is a borough where people live, work and learn in comfortable, affordable and efficient buildings that are powered by renewable energy and are adaptable to the changing climate.

Everyone deserves the right to live, work and learn in comfortable, affordable and efficient buildings. Modernising our energy use and building performance is not just about reducing emissions – it will mean **healthier, warmer** homes workplaces and cultural and leisure facilities. It will mean lower energy bills and result in **cleaner air** as we dramatically reduce gas consumption; a major source of local air pollution. Supported by wider strategies such as the London Plan 2021, the Lambeth Local Plan 2021 and associated planning guidance, we will aim for **net zero compatible buildings and energy systems** across Lambeth, while ensuring that **we increase resilience** to future climate related shocks like flooding and overheating.

Emissions from energy use in homes, commercial, public, and industrial buildings accounts for the largest proportion of CO¬2 emissions within Lambeth.[3] In 2018, energy within homes accounted for 42% of our emissions, which is a notably higher share than the UK average of only 27.5%.[3] Most of the energy we use in homes is to provide heat, and in the majority of buildings in Lambeth this is through gas powered heating systems. By decarbonising heat within the borough and improving building energy efficiency, we can have a significant impact on the overall emissions and accelerate our transition towards being a just and net zero borough. Large-scale **retrofitting**, responding to our Citizens' Assembly recommendation with a focus on lower income homes, will create local **green jobs** in skilled trades for the future.

As we improve the energy performance of our existing buildings, and build new ones, we also need to consider **embodied emissions**. These emissions are associated with the production, transport and use of materials, and in the construction of new buildings are already responsible for 20-50% of the **whole life** cycle emissions. As we reduce the **operational emissions** from heating and powering our buildings, embodied emissions will become an even more significant proportion of overall emissions. To reduce embodied emissions, we need to support and enable retrofit wherever possible, and also work with our partners in the construction industry to ensure that where there are opportunities to re-use existing assets or materials as opposed to developing or procuring from scratch, these are taken. Where new buildings are necessary, we will ensure they are built to be exemplary in meeting net zero carbon requirements.

Lots of older people do not have the luxury of warm homes – a climate friendly future needs to be an age-friendly future

Cathi, Age UK

3 Lambeth Carbon Emissions Report 2018, Page 7 – BEIS (June 2020)

Fuel poverty is linked to energy and emissions

Fuel poverty is caused by the combination of low incomes, poor energy efficiency of homes, and high energy prices. In 2019, the proportion of Lambeth households in fuel poverty was **15.8%**.[4] Living in a cold home has been associated with negative health impacts such as mental health issues, respiratory illness and circulatory problems alongside decreased educational attainment[5]. Heavy reliance on natural gas poses a potential future risk of **fuel insecurity** and fuel poverty.

This is because of the effect that system shocks (such as severely cold weather causing higher demand for heating coupled with restricted storage/ supply of gas) have on gas prices – as seen in 2021 across the UK.

Collaboration is key to energy efficiency and decarbonisation

These ambitious goals to decarbonise our building stock and green our energy use requires many different people and organisations to make the right decisions, together. The Citizens' Assembly highlighted the role that Lambeth Council can play in bringing together these different groups.

Some of the borough's most significant asset owners have already begun to work together through the development of this plan, including Lambeth Housing Partnership, which is responsible for 63,667 households across the borough, Becoming net zero compatible will involve large scale decarbonisation projects by big institutions across the borough, strategic planning of the energy system, local skills development, investment by owner-occupiers, landlords, and the private sector such as through joint **power purchase agreements (PPAs)** or achieving economies of scale through joint retrofit schemes and **renewable energy** in the community.

Lambeth will continue to work with neighbouring boroughs to address key green skills shortages and maximise resident and local SME participation. It will also require central government support, as well as action from those responsible for decarbonising the grid. Without a net zero grid, Lambeth will be unable to reach its net zero goals as we will still be using electricity generated by fossil fuel power stations. Collaboration, support and encouragement for residents and businesses to improve the energy efficiency of their buildings will be key to decarbonising and optimising resilience in our buildings, infrastructure and energy system.

Residents are an integral part of the solution – we need to upgrade our housing, but we cannot to this to or for residents, we must work with them to achieve the level and speed of upgrades required

Housing Association in Lambeth

4 Sub-regional fuel poverty 2019 data, Department for Business, Energy & Industrial Strategy (BEIS), 2019
5 The Co-Benefits of Climate Action by Towns and Cities by Dr Neil Jennings at Green High Street 2050, May 2020

Technology and infrastructure improvements can help

The necessary expansion of **low carbon infrastructure** and improvements to buildings is both a challenge and an opportunity. The existing electricity grid does not have enough capacity to allow for the transition from use of fossil fuels to electricity for powering buildings and transport that a net zero future depends upon, without costly and complex upgrades. We can help mitigate this by reducing the demand for electricity through improving the **energy efficiency** of our homes; a best practice retrofit can reduce the energy demand of a building by 80%, alongside improving indoor air quality., We also need to prioritise energy-free forms of transport, and implement smart technologies and policies that help to redistribute peak demand.

Alongside addressing energy efficiency, we also need to look at how we heat our buildings. Most of us currently use gas – which is a fossil fuel and as such will need to be replaced with other forms of heating for a zero-carbon compatible borough. The main alternative to gas is currently electrification of our heating, using efficient technologies such as **heat pumps** (which use electricity to generate heat from the air). The government's ambition on heat pump deployment is for 600,000 heat pump systems per year by 2028; to meet our ambition in Lambeth alone we will need to collectively install around **39,000 by 2030**. The government has said they are committed to working with industry to reduce the costs of heat pumps this decade, to reach parity with current gas boiler prices. Heat pumps may not be suitable for all building types, and where they are not, we will need to explore other forms of low-carbon heating.

Heat networks can offer a cost effective and efficient method of low carbon heating where the right conditions exist – benefits which have potential to increase as the network size increases. They are a unique opportunity to harness waste or recovered heat from a heat source and redistribute it to a heat demand, with low or no additional carbon emissions. However, they must be cost- and carbon-effective. We will continue work to investigate the potential for heat networks in Lambeth as a route to a low-cost, low-carbon future.

The future of energy generation will also play a large role in reducing fuel poverty and reliance on natural gas. More buildings across the borough need to utilise their roof space for solar PV; generating clean energy and helping to reduce energy bills for building occupiers. Community projects such as the community funded, installed and managed solar power stations delivered by locally based organisations such as Repowering London and Brixton Energy have an important role to play in engaging local communities and giving them a stake in the energy system.

BUILDINGS AND ENERGY 2030 GOALS

Lambeth is a borough where people live, work and learn in comfortable, affordable, efficient buildings that are powered by renewable energy and are adaptable to the changing climate.

Retrofit

Retrofit all of Lambeth's existing buildings (residential & non-residential) to an average of EPC level C or higher by 2030

Net Zero Buildings

Take every practical opportunity to re-use and retrofit existing buildings and ensure all new development meets net zero standards.

Energy

Develop a Local Area Energy Plan (LAEP) for whole energy system decarbonisation, including upgrading key utilities and electricity infrastructure to enable our energy to come from 100% renewable and zero carbon sources.

Fuel Poverty

Take all local action possible to eliminate fuel poverty among the borough's lowest income households.

What can I do to help?

- How energy efficient is your home? Many homes will have an EPC certificate that tells you how well your home performs in terms of energy use, and what improvements could be made – you can find out if your home has one **here**.
  Check out our energy savings **tips**.

- The council has also created an online tool to support homeowners with understanding their home's retrofit potential. You can explore solutions for reducing emissions from your home and also reducing your energy bills. See the resource **here**

- Got a roof? Why not consider installing solar panels? Solar Together London **(STL)** is a collective purchasing scheme which Lambeth residents can participate in – it can help bring the initial costs down, and you'll make savings on your energy bills in the long run. STL also gives you the option to buy battery storage affordably to make your renewably-generated energy go further for your household. Solar is a key way to increase local clean energy generation and increase Lambeth's independence from fossil fuel-generated electricity.

CASE STUDY: King's College London

King's College London is committed to addressing the climate emergency and has been taking action to reduce their carbon emissions. They exceeded their 2020 carbon reduction target, reducing scope 1 and 2 emissions by 53% compared to a 2005-06 baseline.

Decarbonisation efforts across King's campuses include:

- Energy efficiency measures such as lighting upgrades, and embedding carbon into construction and refurbishment by applying BREEAM and SKA assessments
- Engagement of staff Sustainability Champions across campuses, including in energy-intensive laboratories
- Continually improving energy sourcing such as installing solar panels as well as directly purchasing electricity from UK wind power through a Power Purchase Agreement with other UK universities and TEC (The Energy Consortium)

After achieving their 2020 target, King's are now taking steps towards net zero, including the co-creation of their Climate Action Plan with students and staff, and a Heat Decarbonisation Plan to reduce carbon emissions from heating their buildings.

TRANSPORT

2030 Vision

Lambeth's streets are safe and welcoming public places so it's easy to choose healthier, low carbon ways to get around. They are places to meet, to sit, to walk, scoot, wheel and cycle; adaptable and resilient to the changing climate. Safer, quieter streets are complemented by convenient, zero emission shared mobility and public transport services that are accessible to all. We've taken care to meet the needs of everyone, and across our borough people are feeling the benefits of less traffic, less noise and less pollution as we decarbonise our transport network.

Lambeth is one of the leading boroughs for **sustainable travel** with almost 4 out of 5 trips by our residents already made by **walking, cycling** and **public transport**, and 6 out of 10 households are car free. We know there's great potential to increase this further. Many of us are already leading low carbon lifestyles, for example, rarely using a car, and this is a good position to be in as a starting point. We are also fortunate that our community is engaged and energised and wants to get involved. There's a lot to be proud of and much progress has been made in recent years.

In other respects, however, little has changed. The way most streets in Lambeth are used today, and the way they are designed is the result of decisions made decades ago. Most streets are still dominated by cars, either passing through or sitting at the side of the road going nowhere. Our main roads are often congested, polluted and dangerous. There's a significant amount of through traffic and neighbourhoods are carved up by busy strategic routes. These things make it hard to make the leap we need to take to get to **net zero** and improve the borough's **climate resilience**, and we need to tackle them. Moreover, while certain communities and businesses have already begun a transition to lower carbon modes, more needs to be done to help others achieve this transition.

Above all, we can only achieve our objectives if we are all willing to consider the change we need to make to deliver a climate secure borough for current and future generations. That means all of us thinking about how we travel and arrange our lives. We need to build a consensus for the changes we want to make to our streets and create opportunities for local people to shape and help deliver that change through increased **participation** at every stage.

53% of emissions from transport in Lambeth come from private cars and taxis.

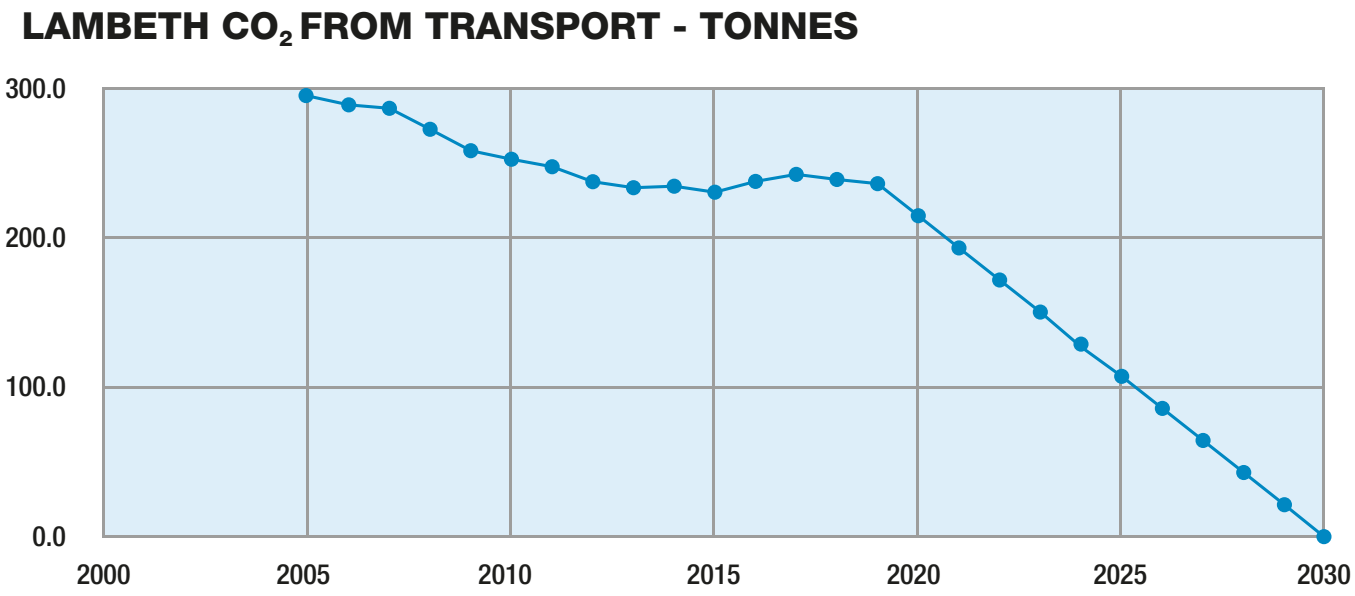
Lambeth Carbon Emissions Report 2019-2020 (November 2021)

Emissions

In 2019, there were over **half a billion vehicle** miles driven on Lambeth streets[6]. This produced over **230,000 tonnes of carbon**[7].

The proportion of emissions from transport in Lambeth is lower than the national average, but emissions from this sector have been the slowest to fall and transport still represents a quarter of total CO_2 emissions generated in Lambeth.

Almost half of the on-road emissions in Lambeth come from private car use. Commercial freight vehicles make up 30% of all traffic in central London, and in 2016 emissions from HGVs and LGVs in Lambeth accounted for over 20% of on-road emissions. High levels of traffic and space allocated for this limits the opportunity to deliver climate resilient, adaptable, liveable spaces and **free up space** for people to walk, scoot, wheel and cycle.



Source: BAEI.

Figure 7: Lambeth CO_2 from transport

6 Department for Transport, 2021
7 BEIS, 2018

Benefits

Responding to the climate emergency will be one of the greatest challenges our borough has ever faced. However, it is equally an opportunity to rethink how our streets are used and to deliver a range of significant benefits.

A net zero transport system is:

- **Equitable:** Reducing the carbon footprint of our transport network will ensure we protect the most vulnerable in society from the harmful impacts of climate change, both within Lambeth and beyond. Making low-cost travel modes a real option for more people, while protecting essential mobility, will benefit the most vulnerable and reduce traffic. A low carbon transport network is a fair transport network
- **Adaptable:** As the climate changes, so our streets will need to change. Reducing traffic and space taken up by parking creates the opportunity for a more flexible approach, repurposing space on our streets according to current and future needs and priorities. A low carbon transport network adapts to changing needs
- **Responsive:** Helping deliver people's aspirations to improve the local environment and create better, more liveable places through community led design brings people together. A low carbon transport network is designed by communities, for communities
- **Healthy:** Reduced traffic means cleaner air and less noise, more physical activity and better mental health, fewer deaths and injuries on our roads. A low carbon transport network is a no harm transport network
- **Accessible:** The current transport network is exclusive – unusable for many. A low carbon transport system is a people centred transport network where many more people can walk, scoot, wheel and cycle and use public transport with ease and comfort

Approach to transformation

The current trajectory will not get us where we need to be quickly enough and we need to re-set our ambition accordingly. We will need to go beyond traditional approaches to transport planning and overcome inertia in existing systems and processes, drawing on learning from the borough's response to the Covid-19 emergency.

New analysis recently published by the Mayor [8], suggests that a more ambitious trajectory for the reduction in car vehicle kilometres (vkm) is required to reach net zero by 2030. It will be necessary to bring forward the Mayor's Transport Strategy target by 10 years from 2041 and this in turn will require a **27% reduction in car vkm by 2030**. These calculations are based on an intermediate scenario which will still require a significant amount of off-setting to deliver

8 Analysis of a

net zero. A side effect of the Covid-19 pandemic has been a renewed interest and appetite for spending time locally rather than making longer trips for work and leisure, with an improvement in air quality. One of the ways to reduce transport emissions is by adopting the concept of the **'15-minute city'**, which encourages the principle that all local facilities and destinations should be within a 15-minute walk or cycle from someone's home and can be an important measure in avoiding polluting journeys. Interventions to promote 15 minute cities include working through the planning system to deliver appropriate mixed-use development, supporting local businesses and organisations by investing in local town centres and working with the logistics sector to make delivery services more efficient and decarbonised, for example by installing more community lockers where packages can be dropped off. We will also need to improve the connectivity of our neighbourhood **walking and cycling networks** by tackling barriers such as busy main roads, all in all reducing the need for short motor vehicle trips.

At a broad scale we need to **reduce demand** for driving and to be open minded about the options to achieve this. Smart road user charging is an option that will need to be considered, but this would need to happen at a larger scale than just the borough of Lambeth and it will need TFL to work with boroughs to explore this further. It will be essential that future forms of **road pricing** are equitable and do not reduce access and opportunity for disadvantaged groups. In the shorter term it may be necessary to extend the coverage of existing schemes, such as the ULEZ. The Council has long advocated that emissions reductions schemes should cover the whole of Lambeth, rather than just part of the borough, so that all our residents can benefit.

The amount of space allocated for parking and traffic is also a key factor influencing demand. We will need to **re-imagine our streets and public spaces**, shaking off preconceptions that roads are just for cars. This is particularly important as we look to manage floods and heatwaves more effectively by installing more SuDS, trees and other green infrastructure. Even though cars, electric or not, have a large carbon footprint, in certain parts of the borough there is no cost or charge to store such a vehicle on the street, or it is more expensive to store a bicycle in a cycle hangar than it is to park a car on the same street. Regulation of the kerbside should reflect the **carbon cost** of the choices we make e.g. it should be cheaper to store a cycle than a car.
We will need to build a better network of **shared modes** like **electric car clubs** and **cargo bike hire**, as well as repurposing existing parking spaces to other uses which support the implementation of this plan, such as green spaces, rain gardens and cycle parking. We will also need to test, trial and deliver initiatives incorporating new trends and transport modes such as **e-scooters** and emerging technologies.

For the remaining trips that are more difficult to switch to sustainable modes we need to make sure that these are low and zero emission as far as possible. We will aim for the early creation of Zero Emissions Zones within Lambeth, stepping up the London-wide ambition to implement these by 2040.

Let's create a high-quality walking environment by developing safe, attractive and car-lite walking routes across Lambeth to link residents to the local high streets and their green and open spaces to enable a higher quality of life in the borough!

Workshop attendee

It is estimated that, across London, **34-40,000 public chargers** will be required to meet demand for Electric Vehicles in 2039[9] and the public and private sector will need work together towards this objective. However, we need to challenge the idea that a net zero transport system simply requires all vehicles to be converted to electric (and in some cases hydrogen) and the provision of new infrastructure to support this – reaching net zero cannot be achieved by technology alone. Even EVs have a considerable carbon footprint, impacts on air quality through tire-wear and also contribute to congestion and road danger. Replacing all vehicles with EVs would also put considerable strain on the grid, which may not be sustainable. All things considered, improving the vehicle fleet is important, but we must do so while also reducing car ownership and vehicle miles driven, switching as many journeys as possible to other modes of transport.

Working with others

The council has an important role in planning the local transport network and shaping development and infrastructure to reduce the need for long journeys. But a net zero Lambeth will not happen with council actions alone. It will require the **close collaboration** of the Mayor, TfL, central government and partner boroughs.

We need to make sure that businesses and organisations in the borough continue to play a leading role and can thrive as a result of the changes we need to make. There are already great examples to draw on, around freight consolidation and cargo bikes that we can learn from this. Our engagement with Business Improvement Districts in Lambeth has showed that our businesses want to see the benefits of more attractive streets and public realm which can increase footfall and prolong dwell-time, resulting in more **prosperous high-streets and town centres**.

High quality, affordable, **low carbon public transport** is critical for Lambeth to reach its net zero goals. Lambeth will need to work closely with TFL, rail service providers and the DfT to decarbonise public transport modes in line with our 2030 target and increase the frequency and quality of services, ensuring communities can make the trips they want to via decarbonised public transport.

Goals

We have identified four main strands that support the objectives of our net zero vision for transport in Lambeth and the goals and measures that relate to these.

The variety, pace and scale of delivery of these measures is linked directly to the emissions reductions required year-on-year to 2030. We need to achieve a net reduction of emissions of 26,000 tonnes for each year of the Climate Action Plan - every year we do not meet these targets the greater the challenge becomes.

> I felt very upbeat after we heard from Tessa Khan who made a comment that I will never forget, 'if you design the city for the less able, you design for everybody

Participant, Lambeth Climate Assembly

9 Element Energy Report

TRANSPORT 2030 GOALS

Our streets are safe and welcoming public places so it's easy to choose healthier, low carbon ways to get around. They are places to meet, to sit, to walk, scoot, wheel and cycle, adaptable and resilient to the changing climate. Safer, quieter streets are complemented by convenient, zero emission shared mobility and public transport services that are accessible to all. We've taken care to meet the needs of everyone, according to their needs, and across our borough people are feeling the benefits of less traffic, less noise, less pollution as we decarbonise our transport network.

Reduce traffic

Plan and develop local areas to ensure residents and businesses' essential needs can be met locally. Improve public and safe active travel provision and shared vehicle access to reduce car dependency and decrease motor traffic by 27% in the borough.

Shift modes

At least 85% of journeys in Lambeth are made by walking, cycling or other public transport modes by 2030.

Climate friendly streets

Enable 25% of kerbside space on Lambeth streets to be allocated to uses that enhance community and business resilience to climate change e.g. tree planting, Suds, cycle parking, children's play, parklets, shared spaces.

Net zero freight

Achieve zero direct emissions from freight, delivery and trade by 2030 by working with our business community to develop and deliver freight consolidation solutions, de-carbonisation of vehicle fleets, and increased uptake of zero-carbon delivery solutions such as cargo bikes.

What can I do to help?

- **Walk or get on your wheels** – using a bike to get around can be convenient, fun and often quicker than driving or public transport. A journey of 5km can be completed in around 15 minutes on a bike. If you're not convinced, Peddle My Wheels offer a 'try before you bike' service – give it a go!

- **Got a car? Do you really need it?** Many local trips can easily be made by foot, bike, public transport – or cargo bike if you carry heavier loads. Think of the savings you'd make on insurance, tax and maintenance costs – in addition to the cost of fuel and parking If you can't do without it entirely, consider signing up to a shared car scheme – this might be enough and work out more cost effective for infrequent trips.

CASE STUDY: Decarbonising transport and improving air quality at Guy's and St. Thomas' hospital

As the largest employer in the borough, Guy's and St. Thomas' NHS Foundation Trust recognise their contribution to carbon emissions and local air pollution from travel and transport linked to inter-site deliveries, patient transport and staff commuting. The Trust is committed to reducing the negative impact these operations have on local communities and publicly launched its commitments through a new Sustainability strategy (2021-2031).

To understand the impact of the Trust's vehicle fleet, they conducted a full fleet review in 2021, and as a result, will now actively drive Trust fleet data consolidation, vehicle re-moding, downsizing and electrification transition. This work is steered by a Transport emissions working group led by a Sustainable Fleet Manager – an entirely new role.

The Trust is also committed to reducing exposure of staff and patients to poor air quality so is measuring air quality at its acute sites. At pedestrian entrances, nitrogen dioxide and particulate matter 2.5 are measured through Breathe London, and at loading bays nitrogen dioxide, particulate matter 10 and 2.5 are measured through the TfL Freight Lab project with Emsol.

A green ivy screen was installed around the Guy's and St Thomas' Day Nursery playground. The Trust is also monitoring air quality around the playground, which is situated facing the crossing of Lambeth Palace Road and Westminster Bridge Road. This air quality monitoring will inform the impact assessment of ongoing work; the design of future projects; and support the build-up of a London-wide picture of hyperlocal air pollution levels.

WASTE, CONSUMPTION AND FOOD

2030 Vision

Lambeth is a zero-waste borough with reducing, reusing, and recycling prioritised. People in Lambeth are able to make better choices about what they buy, and businesses support repair and refurbishment. Lambeth plays its part in a sustainable food system which includes thriving local food production, and fresh, healthy, local food is affordable for residents across all communities.

When we consider the **indirect emissions** associated with the goods and services consumed by people in Lambeth (such as food, clothing, and flights), the average **per-person emissions** 'footprint' is **8.32tCO$_2$** per year [10], which is equivalent to roughly three return flights from London to Tokyo. Much of this is associated with housing and power, and transport – so many of the goals within the previous sections on these topics will already support a reduction in our emissions footprints (for example, more people choosing to travel by foot, bike or public transport rather than owning a private car). When we talk about indirect emissions, this also refers to the products, services and materials purchased and used by businesses and organisations in Lambeth.

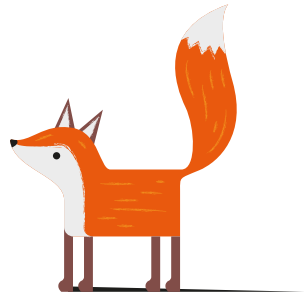
> I have always appreciated the environment, but contributed to its preservation minimally. Now I am finding myself actively researching ways to lower my emissions in my day to day activities, creating awareness within my friend and family groups.

Participant, Lambeth Climate Assembly

Waste is an issue linked closely to **consumption**. When we dispose of things without using them to their full potential by reusing or recycling them, this not only results in emissions from disposal itself, but is also 'wasting' all of the emissions that were produced in the creation of that item. This is because the emissions would need to re-occur to produce it again – from mining raw materials through to the manufacturing, storage, and delivery – so that it can be re-purchased new.

Food

Food is one of the other large components of this footprint, and 65% of all food and drink emissions in Lambeth is attributable to the consumption of meat.11 The most significant emissions (after housing and power) are associated with food, restaurants and hotels. We need to support people to make **healthier and more sustainable** decisions about what to eat. It has been shown that a 'planet friendly diet' shares many similarities with a healthy diet – rich in plant-based foods, much lower meat than the current average UK consumption, and whole rather than processed and refined foods. This dietary shift needs to go hand-in-hand with ensuring that fresh, healthy, local and culturally appropriate food is **accessible and affordable** to everyone in Lambeth, including by actively supporting sustainable food production in the borough. Opportunities to increase the availability of good food (e.g. through procurement and catering contracts), as well as limit the availability of damaging foods (e.g. through licensing and planning rules) can help, as could banning harmful advertising, building on TfL's ban on junk food advertisements across its network in 2019. **Lambeth's Food Poverty** and Insecurity Action Plan sets out more detail of action being taken in the borough to ensure access to good food for all. Local food production can increase green space and have multiple benefits for local communities and wildlife, and can also present opportunities for making use of unavoidable food waste through home or community composting and the council's food waste recycling service.



10 Anne Owen, University of Leeds 'Consumption-based greenhouse gas emissions profiles for London's boroughs' (2021), using 2018 data. Available at: https://www.londoncouncils.gov.uk/node/38613

We are not all equally responsible

The average figure for consumption-based emissions per person disguises the fact there is a wide variation in consumption-based emissions between Lambeth residents, with the wealthy responsible for a much greater proportion of the impact, driven by spending on goods such as clothing, air travel, recreation and other services. Research from Oxfam has shown that globally, the **richest 10%** - those with a net income of more than about £28,000 – are **responsible for over half of all emissions**. There is an important opportunity to reduce this through the choices we all make. This was reflected by the importance attributed by our Citizens' Assembly to individual accountability and responsibility. Every time we decide to purchase something, that decision can have a much bigger impact on emissions than we may realise.

Working with others

The first step towards **sustainable consumption** for many people and organisations in Lambeth should be reducing the number of new items we purchase. Building a **circular local economy** based on sharing, repairing and re-use has benefits not only by saving us money individually but also offers opportunities to get to know our neighbours more through participating in community-based repair cafes, upcycling classes or by becoming members of borrowing clubs or 'libraries of things'.

Businesses also have an important role to play – manufacturers and producers have a responsibility to reduce the emissions associated with the production of the goods and services which are consumed in Lambeth, and retailers can choose to supply more **sustainable products** with lower emissions, that are built to last and may offer **repair services** to keep products in use for longer. We want to see all businesses in Lambeth playing a role to support sustainable consumption, reduced waste and increased re-use by 2030. Businesses should also support increased recycling and more sustainable methods of waste treatment such as through composting, or deposit return schemes.

Goals

Below are four goals for action on waste, consumption and food to help Lambeth on its way to achieving the 2030 vision of a resilient and equitable borough.

> I was in ignorance also of the impact that is felt by those on lower incomes, who contribute least to global warming but suffer the most
>
> Participant, Lambeth Climate Assembly

WASTE, CONSUMPTION AND FOOD 2030 GOALS

Lambeth is a zero-waste borough that prioritizes reducing, reusing and recycling. People in Lambeth are able to make better choices about what they buy, and businesses support repair and refurbishment. Lambeth plays its part in a sustainable food system which includes thriving local food production, and fresh, healthy, local food is affordable to all residents.

Consumption

Reduce consumption-based emissions by 2/3rds by 2030, through increasing opportunities for reuse and repair, alongside residents, producers, businesses and organisations reducing consumption and making low carbon choices.

Procurement

Procured goods and services to specify and measure lifecycle emissions minimisation, and embed circular economy principles into contracts to reduce consumption - based emissions.

Waste

Minimize waste and improve recycling to reach the following targets:

- Increase the diversion rate away from landfill and incineration to at least 70%
- Reduce organics disposal to landfill and incinerators by 25%
- Enable 3-stream segregated waste collection including food/ recyclables/ residual by 2026

Food

Increase the consumption of healthy plant-based food in Lambeth through procurement power, individual and organisational choices.

What can I do to help?

- Firstly think about how much you **consume** and where you spend your money – could you choose lower carbon choices? For example, reducing how often you fly abroad or how many journeys you make by car. When you buy new things whether you could source them **second-hand**, and if you are going to replace something, you could try and **repair** or **upcycle** it first.

- Try and reduce your household waste, take the One Bag a Week **Challenge**. Avoid food waste by following **these tips**, and make sure that any waste you do create is separated - recyclable materials and organic waste can be turned into something useful!

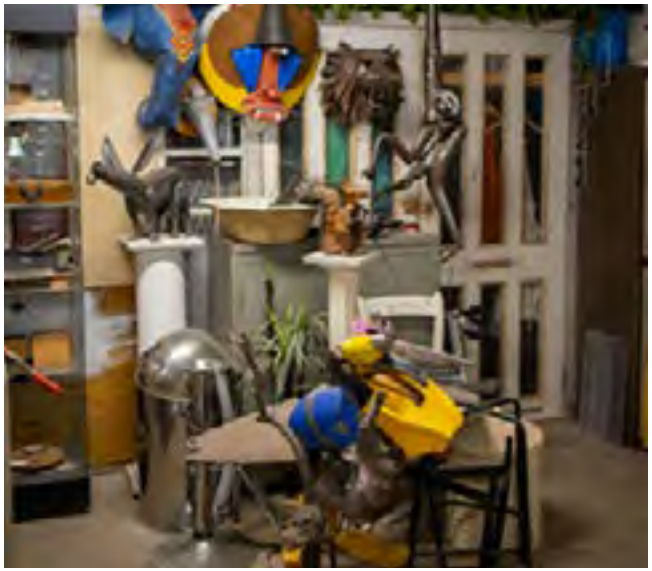
- Adjust your diet – take a look at the **planetary health** diet for guidance on how to reduce the impact of your **food choices**.

CASE STUDY: Remakery Lambeth

The Remakery is a social enterprise bringing together a community of artists, makers and local businesses creatively rethinking, recovering, reusing and redistributing surplus materials destined for landfill or incineration. The space hosts workshops, talks and projects where Lambeth residents work together to find solutions to tackle waste and learn crucial "carbon neutral" skills for a circular economy.

"Our work is a very tangible and valuable solution to supporting people with mental health issues, particularly with regard to climate anxiety - suffered by 60% of young people. Responses from people attending workshops say they have more confidence and positivity, and the words often used when visiting our space are **'feeling inspired'**"

Mark, Remakery Founder



BIODIVERSITY AND ENVIRONMENTAL QUALITY

2030 Vision

Lambeth is a borough where green spaces are celebrated, the air is clean, and our wildlife is thriving. All residents live within walking distance of a high-quality green space to support their mental and physical well-being.

Lambeth is home to a biodiverse network of green infrastructure. **Biodiversity** refers to the **richness and abundance** of wildlife, while **green infrastructure** refers to the network of parks, trees, woodlands, gardens, allotments, cemeteries and railway line sides that crisscross our borough, as well as building-level assets such as green roofs and living walls. We are fortunate to have 49 'Sites of Importance for Nature Conservation' as well as a designated Local Nature Reserve within Streatham Common (with five new local nature reserves expected to be designated by 2024) and over 850 hectares of parks, commons, recreation grounds, public open spaces, allotments, community and private gardens, and more than 5 hectares of ponds, lakes, wetlands, streams and rivers.[11,12]

Lambeth Council declared an '**ecological emergency**' in January 2019, recognizing that nearly half of Britain's biodiversity has been lost in the 200 years since the industrial revolution.[13] As Lambeth's population has grown, pressures to develop our open, green spaces into homes, schools, hospitals and business units have also grown.[14] The impacts of climate change will only worsen biological decline: the IPCC estimates that 20-30% of the species on Earth may be at risk of extinction once the climate warms by an average of 1.5°C. If the planet warms by more than 2°C, most ecosystems will struggle.[15]

Environmental quality also includes **clear air**, clean and abundant water and healthy, living soils. These are things that are important to both wildlife and people – for example it is estimated that each year, air pollution kills over 100 Lambeth residents,[16] and causes over 750 emergency hospital admissions from lung and heart disease.[17] Lambeth's targets for improving air quality are among the most ambitious in London. It will require a huge collective effort to achieve them, but the health benefits of doing so will be significant. In urban environments that have been shaped by the pressures of people and development, clean air, water, and space for nature can be scarce in supply – but this doesn't have to be the case.

11 London Wildlife Trust and Greenspace Information for Greater London (2007) London Boroughs Habitat Survey. Available at: mgla110918-2522_-.pdf (london.gov.uk)
12 Lambeth Council 'Update on Lambeth's Biodiversity Action Plan 2019-2024', available at: https://beta.lambeth.gov.uk/sites/default/files/2021-05/lambeth-biodiversity-action-plan-update-2020.pdf
13 Natural History Museum (2021) Biodiversity Trends Explorer. Available at: Biodiversity indicators | Natural History Museum (nhm.ac.uk)
14 Lambeth Landscapes and Lambeth Council (2019) Lambeth Biodiversity Action Plan 2019 - 2024. Available at: Lambeth Biodiversity Action Plan 2019 - 2024
15 Intergovernmental Panel on Climate Change (2007) Climate Change Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC. Available at: ar4_syr_full_report.pdf (ipcc.ch)
16 Intergovernmental Panel on Climate Change (2007) Climate Change Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC. Available at: ar4_syr_full_report.pdf (ipcc.ch)
17 Imperial College London (2021) 'London Health Burden of Current Air Pollution and Future Health Benefits of Mayoral Air Quality Policies'. Available at: http://erg.ic.ac.uk/research/home/resources/ERG_ImperialCollegeLondon_HIA_AQ_LDN_11012021.pdf

Restoring and improving our environment for nature and people

Green infrastructure, just like traditional forms of infrastructure, provides **essential support** to every living being on the planet. Trees, shrubs and plants **absorb carbon dioxide** and pollutant gases, **purifying the air we breathe**. Green spaces slow the rate of water runoff, reducing pressure on drainage systems and regulating flooding. Urban greenery provide habitats for birds, insects and other species and cools surrounding areas, providing relief from hotter temperatures. Insects break down leaves and detritus to create fertile soils - and more than 75% of the food crops we eat are dependent on insect pollination. Spending time in nature has been shown increasingly to benefit our physical health and mental wellbeing.

The covid-19 pandemic highlighted the importance of access to nature and green space, but also issues of inequality with many people unable to access to such spaces. We need to ensure there is more high-quality, accessible and **inclusive green space** for people and nature in Lambeth. Enhancing green spaces and reclaiming them for communities to use in promoting biodiversity is one of the 13 recommendations from Lambeth's Climate Assembly. Green spaces that provide for people and nature can be small or large, and can include green roofs, living walls, 'parklets', urban meadows, or greenways. The connectivity of green spaces as habitat is important for **thriving urban ecosystems**, and so linking these spaces up and creating dedicated wildlife corridors is crucial.

And it is not just about green space, but improving the quality of our wider environment. Preserving and restoring our waterways, managing our green and open spaces in ways that are sensitive to nature, and improving our air quality through reducing the use of fossil fuels in heating our homes and the vehicles we drive – all covered in other sections of this action plan, will help to create better spaces for people and wildlife.

Everyone can make a difference and create some outdoor space for wildlife – whether it's a sports field, institutional grounds, or a church yard, a back garden or a windowsill. Lambeth's newly launched Biodiversity Forum is helping to create partnerships across the borough to protect, conserve and enhance biodiversity across Lambeth and increase access to nature.

Goals

Together, we have developed four goals which represent important stepping-stones towards a Lambeth where nature has space to recover and thrive and our health and well-being is prioritised. These goals have been informed by and complement the actions contained in **Lambeth's Biodiversity Action Plan 2019 - 2024**.

BIODIVERSITY & ENVIRONMENTAL QUALITY 2030 GOALS

Lambeth is a borough where green spaces are celebrated, the air is clean, and our wildlife is thriving. All residents live within walking distance of a high-quality green space to support their mental and physical well-being.

Nature

At least 30% of open land and waterways in Lambeth is naturalised for the benefit of wildlife by 2030, including phasing out pesticide use by 2023. Community groups are supported by the council, landowners and the VCS to manage land in a way that benefits people and nature.

Green Infrastructure

Increase the amount of resilient, green coverage* in Lambeth by 15% by 2028, ensuring that everyone lives within 400m of high-quality green infrastructure, with wildlife networks throughout the borough.

Biodiversity

All new development incorporates space for nature, designing in green infrastructure and achieving at least a 10% increase in biodiversity on each site.

Air Quality

Break the association between inner-London living and poor air quality, pursuing World Health Organisation Air Quality targets.

*Green coverage refers to areas that are covered partially or fully by greenery e.g. green walls, roofs, green space, raised planters, trees etc

What can I do to help?

- Do you have a balcony, garden or any outdoor space? See what you could include or change to make it even **friendlier to wildlife** – for example including plants that provide food and habitats for pollinators and birds, or making sure any fencing has some gaps in it to allow animals like hedgehogs to pass through as they forage and explore.

- Get involved in local **community initiatives** to support wildlife and get to know your neighbours. From joining the friends group at your local park, to volunteering through conservation charities, to local food growing, to litter picking groups – there is something for everyone.

- You can improve local air quality by leaving the car at home, turning off your engine when stationary and avoiding burning solid fuels like wood and coal. If you are a business in Lambeth, you can think about using electric vehicles or cargo bikes to make deliveries as well as using local renewable energy.

CASE STUDY: Lambeth Parks Biodiversity Projects

Lambeth Council Parks and Open Spaces service manages and maintains over 140 parks, commons and open spaces. Brockwell Park and Clapham Common recently won Green Flag awards for improvements to biodiversity, climate resilience and flood defences for the borough. The local community have commented on the mental health benefits these beautiful natural spaces have brought to them.

Brockwell Park Wildflower Meadow used to be a compacted clay football pitch, and is now a species-rich space providing rich sources of pollen and nectar for pollinators. The meadow's plants and soil capture rain water, reducing the risk of flooding in surrounding areas.

Battersea Rise and Nursery Woods are restored mosaics of woodland, where plants and grasses can now thrive. The woodlands have protected mature trees and allowed new trees to grow, reducing flood risk in Clapham Common and capturing carbon, improving air quality. All of these changes have positive mental and physical well being for Lambeth residents.

4

THE ROLE OF NATIONAL AND CITY-WIDE GOVERNMENT

The science is clear: the UK will only meet its emissions reduction targets if national government, regional bodies and local authorities work together.

Significant challenges to delivering the scale of change required exist due to inertia in existing systems, pre-existing policy environments, and limited budgets. Yet multiple sources including the Bank of England and the Office of Budget Responsibility (OBR) have emphasised the importance of taking early action to enhance overall economic benefits, reduce the cost to public debt and maximise opportunities for 'first-mover' benefits such as in manufacturing and service jobs.

We need **central government** to act now on its intentions and ensure that national policy and delivery plans, regulation, and tax regimes are updated to **support net zero**. These supporting instruments at a national level also need to make provision for encouraging a greater ambition at local level – in Lambeth we have shown we have the appetite and courage to lead the way and aim for net zero by a much earlier date, but will not be able to reach net zero without central government action. National efforts on accelerating action will help us, for example government support for industry to bring the cost of new technologies down, accelerating grid decarbonisation, reviewing and revising current subsidies and levies to rebalance costs in favour of lower-carbon, supporting mobilisation of finance through new and existing mechanisms such as the UK Infrastructure Bank and the Green Finance Institute, as well as direct investment into schemes to support local decarbonisation, such as the Public Sector Decarbonisation Scheme and the Heat Networks Transformation Scheme.[18,19], **Open and participatory dialogue** between local communities, local government and national government will enable **transformative change** at a local and national level as council's, communities and supply chains will be ready to deliver the changes needed. By working collaboratively, the risk of wasted investments, poor planning and unintended consequences. can be avoided.

18 UK Government 'Net Zero Strategy' (October 2021). Available at: zhttps://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf
19 UK Government 'Heat and Buildings Strategy' (October 2021). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1036227/E02666137_CP_388_Heat_and_Buildings_Elay.pdf

We share a common goal with national government to deliver net zero. Yet we urgently need central government to show greater ambition and clarity in policy and legislation, and to provide long-term financing appropriate to tackling the climate emergency. We expect our asks of government to evolve as we progress our Climate Action Plan, but we will actively lobby government to:

- Provide funding for **resource, capacity and skills development** to help Lambeth Council grow its climate change expertise and support the delivery of the Climate Action Plan
- Provide **long-term certainty** to underpin public and private sector investment decisions, catalysing the delivery of net zero projects.
- Make available significant, **non-competitive funding** for emissions reductions and adaptation measures. Short-term funding competitions are not delivering the transformation required and the money often has to be spent so rapidly that local supply chains cannot meet demand.
- Establish a policy environment that is **net zero compliant** and flexible. Policies from central government must not conflict with or hamper local efforts to reduce emissions. Where local authorities are willing to show greater ambition, for example through setting higher energy efficiency requirements in Local Plans, this should be encouraged.
- Increase funding to enable homeowners and housing associations to **retrofit their domestic properties** to EPC band C or above by 2030.
- **Cut VAT** for owners, residents and business groups on retrofitting energy efficiency and installing renewable energy in properties from 20% to a maximum of 5%.
- Expand the provision of funding for **electric vehicle charge points**.
- Increase the capacity and **accelerate the decarbonisation** of UK power networks and co-ordinate the deployment of large-scale renewable energy and storage technologies.
- Develop a **national education and training programme** to equip the workforce with the skills necessary to deliver large-scale retrofitting, to implement new and emerging technologies and to build in a more environmentally friendly way.
- Continue to reform the **Producer Responsibility** system (including packaging waste regulations) to ensure producers take greater responsibility for the environmental impacts of their products and promote the market for recycled and reused products.

5

FINANCING THE TRANSITION

Scale of finance needed

The cost of delivering net zero by 2050 in the UK is estimated to be £1.4 trillion.[20], but over 30 years, this is less than 0.5% of GDP, and the **costs of inaction** are recognised to be far greater. Using existing estimates for core UK cities, we can expect the cost of delivering the borough's climate action plan to be somewhere between £2-8bn, or an estimate of around £14,000 per person over the next 10 years.[21]

Local areas have a huge role to play in reaching net zero, and the ability to to start implementation quickly, but they do not have the funding they need. We need central government to provide certainty on its **long-term funding** plans for key areas such as retrofit. Without this, it is impossible for local areas to play their part in building the skills, capacity and engagement needed to meet the challenge. Our analysis shows that **retrofitting all buildings** in Lambeth would require investment of approximately **£3 billion** in the building stock. To achieve this Lambeth will require significant public funding, particularly for public sector assets and social housing. But it will also need homeowners and other landlords to be able to access affordable financial products, such as loans and green mortgages, and for large organisations to be able to work together to attract private investment where there is an investable proposition. Lambeth Council and its partners will lobby central government to make the case for the comprehensive investment we need to work at scale and pace. Having certainty of funding will allow for innovation, and public funds can be used to draw in private investment in Lambeth.

Lambeth's Approach

In Lambeth every opportunity will be taken to maximise funding made available by central government and other sources. Across the borough there are many businesses, organisations and individuals committed to helping drive change, and willing to invest in the transition to create a better future. We will encourage and support organisations across Lambeth to prioritise planned investment in climate mitigation and adaptation. We will build on recent work carried out by the UK Cities Climate Investment Commission, which set out potential solutions using blended finance and a place-making approach that local authorities can play a key role in, to create bundles of green investment opportunities that attract investment through offering savings and additional revenue streams alongside social and environmental benefits for the local area. In developing this approach, we will seek collaboration with our neighbouring boroughs, pooling resources and widening the potential investment opportunities.

As a borough we recognise that the delivery of climate action leads to many other co-benefits, see Figure 8. Through taking a holistic approach to financing climate action, we can build an **integrated investment plan** that cuts across many disciplines to **maximise the impact** for residents and businesses. For example, reducing congestion results in better air quality, reduced respiratory and cardiovascular illnesses, reducing absenteeism and health care spending and increasing productivity– but it can also free up space for parklets and green areas to increase resilience, and make it easier for people to walk or cycle, which allows them to save money they might otherwise spend on fuel and car expenses. By considering these **systemic interactions**, we can get a better understanding of the overall investment needs and associated benefits, which will then allow us to establish a hierarchy of initiatives to reach our collective goal. We will prioritise actions which have maximum impact and **deliver multiple co-benefits**.

20 Office of Budget Responsibility 'Fiscal Risks Report' (July 2021). Available at: https://obr.uk/docs/dlm_uploads/Fiscal_risks_report_July_2021.pdf
21 UK Core Cities.Available at https://www.corecities.com/sites/default/files/field/attachment/UKCCIC_Final_Report-1.pdf

CO-BENEFITS ARISING FROM INVESTMENT IN CLIMATE ACTION

Net Zero Infrastructure Sector	Currant suitability for private sector Investment*	Principle-Agent issue to address?**	Carbon co-benefit payments?	Health co-benefit payments?	Biodiversity co-benefit payments?	Need for policy development to enhance private finance flows	Key Enabling Actions to Increase Private Flows
Domestic Building Decarbonisation	●	✓	✓	✓	✗	High	• Blending private finance, public funding, and co-benefit payments • Aggregating to street neighbourhood level to achieve economic efficiencies
Commercial Building Decarbonisation	●	✓	✓	✗	✗	High	• Blending private finance, public funding, and co-benefit payments • Developing financing arrangements between tenants and landlords, with commercial real-estate companies playing a key role
Renewable Electricity Generation	●	✗	✓	✗	✗	Low	• Aggregating project types and processes across cities • Integrating with other infrastructure types to support projects with poorer returns
Transport Decarbonisation	●	✓	✓	✓	✗	High	• Blending private finance, public funding, and co-benefit payments for active travel infrastructure • Using policy to incentivise the provision of charging infrastructure for electric buses
Waste Management Decarbonisation	●	✓	✓	✓	✗	High	• Combining market mechanisms and policy to increase the cost of higher emitting management practices • Using policy to require green design criteria to minimise waste and maximise re-use and recycling maximise re-use and recycling
Green Infrastructure	●	✓	✓	✓	✓	High	• Effectively pricing co-benefits to develop additional revenue streams • Implementing projects alongside those with direct revenue sources

* ● Strong existing business case with tangible and predictable financial or investors.
● Some consistent predictable revenue to provide investors with a return, but lower than desired.
● Limited to no financial returns.
** Refers to misalignments between those financing projects, and those receiving any associated savings or benefits.

Figure 8: An example of the co-benefits arising from investment in climate action. Source: City Investment Analysis report (netdna-ssl.com):https://1hir952z6ozmkc7ej3xlcfsc-wpengine.netdna-ssl.com/wp-content/uploads/2021/10/UKCCIC_Final_Report.pdf?utm_campaign=ukccic-&utm_source=website&utm_medium=download-final-report

Financing options

With a clear set of actions and economic case for investment, the next step is to identify sources of funding and capital investment. Each organisation across Lambeth will need to engage in this task to find the best way to fund their net zero plans, but there are also opportunities to work together. There are a number of options that can be explored including:

- Grant funding from central government, this is limited but will be particularly important for low income and social housing.
- Income from funding and revenue streams which could be hypothecated for climate action in the borough. The use of policy mechanisms to deliver new revenue streams such as planning net gain (where developers must demonstrate improved biodiversity on development sites or pay to offset where this is not possible) could generate income to fund the biodiversity enhancements set out within this plan.
- Local climate bonds, can raise significant amounts of capital whilst allowing local people to invest in their area and directly benefit from the projects delivered.[22]
- Citizens Participatory Bonds (which can be set up as a crowd fund).
- Private sector impact capital (e.g. from businesses looking to fulfil commitments they have made to investors).
- Organisations within the borough reviewing their planned expenditure and investment and reviewing this to ensure it is consistent with net zero goals
- Development of financial products that allow homeowners and other landlords to access finance to improve energy efficiency in their buildings.
- Voluntary carbon offsets – Investment of carbon offsets in local decarbonisation and adaptation schemes.

Repayment of initial capital can be supported through direct financial savings delivered by the actions, for example reductions in energy and maintenance costs. Action from central government is needed to ensure that the decarbonisation of our homes and the wider energy system is affordable and accessible, with costs and benefits spread in a way that is fair. We will work collaboratively with partners to ensure we pool resources and maximise the opportunities to secure equitable inward investment into the borough.

22 Green Finance Institute 'Local Climate Bonds programme': https://www.greenfinanceinstitute.co.uk/programmes/ceeb/lcbs/

6

MONITORING AND REPORTING

To deliver Lambeth's Climate Action Plan effectively, we will need to **monitor, evaluate, and report** the progress of delivering this plan, both in the context of outcomes for the climate (reduced emissions and increased resilience) as well as the delivery of co-benefits and to ensure that the three principles of the CAP are upheld.

We recognise that **transparency** is critical for building trust and helping people and organisations to develop their own climate action, as well as for holding ourselves and each other accountable. Good monitoring and reporting can also help us to identify what has worked well, and what hasn't - we shouldn't be afraid to trial new approaches, but we must make sure we are able to evaluate their outcomes to inform future action.

The significance of **data and monitoring** are a core part of the Citizens' Assembly's recommendations. We intend to develop a full approach to monitoring and reporting in the coming months, which will enable a collective approach to evaluating progress across the borough.

The detail of the framework will be defined in 2022, but we expect at a minimum to undertake the following:

- Annual monitoring and reporting on the borough's emissions inventory (where are the borough's emissions coming from, how are they changing over time and what the implications are for our net zero target).
- Devising with our residents, businesses and other organisations the best metrics to measure the success of climate action in delivering wider environmental, social and economic co-benefits.
- Working with partners to gather the information and evidence for measuring the borough's progress to each goal.
- Publishing annually the progress made on achieving the goals set out in each of our five action themes.
- Utilising open reporting channels, such as our Climate Action commonplace webpage, targeted workshops, and physical events to publicise our findings and seek feedback from the widest possible range of perspectives within the borough.

7

GOVERNANCE

We need governance structures that provide accountability and transparency, but also encourage **collaboration, shared learning, and support**. Through the Citizens' Assembly and development of the CAP, the council has worked closely with a group of organisations who have a significant leadership and stewardship role in the borough. These organisations have agreed to join Lambeth's first **climate partnership**. Each has agreed to help lead and oversee the implementation of the CAP, recognising their shared interest and responsibility in ensuring the borough's future. Lambeth Council will act as secretariat for this group. The founding members of this group include:

- Guy's and St. Thomas' Foundation
- King's College Hospital
- King's College London
- LSBU Group
- Hyde Housing Association
- Metropolitan Thames Valley Housing Association
- National Theatre
- Southbank Centre
- Lambeth Schools Partnership
- Guy's and St. Thomas' NHS Foundation Trust

The Citizens' Assembly recommendations emphasised the importance of accountability and transparency. Throughout the development of the CAP Lambeth has benefited from the advice and guidance of a range of experts – on climate policy, sustainable development, community engagement and climate solutions. We would like to continue this practice by establishing an **independent advisory group**. The group will review the actions and progress being made towards the goals, and provide advice on how this could be strengthened.

Throughout the CAP we have referred to the **vital role communities** and individuals have to play in our climate response. Climate solutions developed by communities will often work best for those communities. We have also referred to the importance of ensuring that the voices of those people most exposed to climate impacts are heard in the development and implementation of our CAP. To do this, we will establish a **community climate action forum** to bring together organisations working with communities to share learning, support greater action, and collectively deliver on the ambitions of the CAP.

8

WHAT NEXT?

This document represents the first iteration of Lambeth's Climate Action Plan. It is a living document that will evolve to set out clear and measurable actions to achieve our 2030 vision for Lambeth. It also reinforces the collective commitment of Lambeth Council, our partner organisations, our local businesses and our residents to bring about a fairer, greener and cleaner Lambeth, where everyone plays their part in achieving net zero emissions and environmental richness.

Over the next few months, we are planning further work to develop supporting analysis and tools for delivering this plan. This will include detailed financial analysis, assessments to inform the selection and prioritisation of specific delivery actions and programmes across our five themes, and the development of a monitoring and reporting framework for evaluating and improving the actions we will collectively be taking.

We welcome feedback on this Climate Action Plan if you would like to provide any feedback, please email sustainability@lambeth.gov.uk.

Are you inspired to do more? Here's a few ideas of how everyone can get involved in creating the future for Lambeth we outline in this plan:

As an individual in your day-to-day life: Think about how you currently travel, how much you buy and what food you eat. Maybe there are some easy and cost-effective home improvements you could make such as insulating your loft or fixing draughty windows or doors. There are websites to help you on your journey – see https://www.wearedonation.com/en-gb/ or www.takethejump.org for inspiration!

Through your work: Are you an employee of a company or a business owner? How about investigating whether your work offers any incentives for being more climate-friendly? Are there ways you can get involved with other employees to help reduce office waste, improve energy efficiency, or encourage people to cycle and walk to work? If you're a business owner or you work in a field where decisions you make can have a difference, why not think about how you can make lower-carbon choices, or help your customers, suppliers and partners to make lower-carbon choices and commitments too?

As a community leader or member of an active community group: Communities are at the heart of our action plan, and we'd love to see everyone getting involved. Think about the things your community really cares about or improvements you want to see in your neighbourhood, and whether these could also help reduce emissions or improve climate resilience if done in the right way? More than likely, there will be other residents, businesses or community groups that share your values and by teaming up, big differences can be made! If you are part of a faith community, think about how the work that you do with your own faith group and others could help address climate change and make our world better for people and nature!

By influencing others to join in: If you're already active in any of the above ways, how about talking to others and persuading them to join in too. Every little helps, and each person who joins the movement is important. Imagine if you spoke to five people and got them to make a small change or join your group – then if each of them spoke to five more people – and so on.

> Ordinary people like myself hear about climate change on the news and read about it in the newspaper - you change the channel or turn the page and feel 'well there are people who deal with that, so I won't have to worry about it'. But how wrong are we if we all think like this?

Participant, Lambeth Climate Assembly

GLOSSARY

Adaptation - the process of adjusting to current or expected climate change and its effects

Biodiversity - the biological diversity of life on Earth

Blue infrastructure - water elements, like rivers, canals, ponds, wetlands, floodplains, water treatment facilities, which provide infrastructure functions or services

Climate and ecological crisis (also referred to as climate/ecological emergency) - the multiple threats from rising emissions and destruction of nature which will lead to destabilisation or destruction of life on earth as we know it

Climate Justice - Justice that links development and human rights to achieve a human-centred approach to addressing climate change, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly.

Consumption-based emissions - the indirect emissions associated with the goods and services imported to and used within the area.

Embodied Carbon/Emissions - the sum of all the energy required to produce any goods or services, considered as if that energy was incorporated or 'embodied' in the final product itself.

Environmental richness -is used to describe the variety and interconnectedness of life on Earth. It includes genetic diversity, species diversity, and ecosystem diversity around the world.

Energy efficiency - for buildings, this is the rate at which energy is lost from the building, and the rate at which energy is used to meet the needs of occupants. Lower energy efficiency means energy is lost faster from the building, which means you need more energy overall to keep warm.

Equitable - promotion of fairness through treating people differently dependent on need and current or historic inequality.

Fuel poverty - situation where people are at risk of being unable to afford fuel to heat and power their homes. Often defined in technical terms as households with income below the poverty line (including if meeting it's required energy bill would push it below the poverty line) and higher than typical energy costs.[23]

Governance - is the framework of authority and accountability that defines and controls the outputs, outcomes and benefits from projects, programmes and plans.[24]

Green infrastructure - the network of multi-functional green space and other green features, urban and rural, which can deliver quality of life and environmental benefits for communities.

Greenhouse gas emissions (also referred to as just 'emissions') - gases which get trapped in the atmosphere resulting in increasing global average temperatures. The primary greenhouse gases include carbon dioxide (CO^2), methane (CH_4), and nitrous oxide N^2O, and are emitted predominantly from human activities such as burning fossil fuels and agriculture.

Heat networks - a heat network is a distribution system of insulated pipes which takes heat from a central source (an energy centre, or source of waste heat) and delivers it to a number of domestic or non-domestic buildings.

Heat pumps - a device that transfers heat from a colder area to a hotter area by using mechanical energy. Heat pumps are very efficient ways of producing heat - each unit of electricity used to power the heat pump is typically transformed into 3-4 times the amount of heat, meaning you need much less electricity than direct electrical heaters.

23 https://www.gov.uk/government/collections/fuel-poverty-sta.tistics
24 https://www.apm.org.uk/resources/what-is-project-management/what-is-governance/

Impermeable - not allowing fluid to pass through. Impermeable surfaces include concrete and asphalt and when rain falls on these surfaces it quickly flows off, gathering at the lowest points and causing a risk of surface water flooding, or rapidly entering watercourses and increasing the risk of fluvial (river) flooding. Permeable surfaces like grass, vegetation or engineered permeable paving allow water to pass through and drain away more slowly underground, reducing this risk.

Industrial revolution - the period of time in the 18th and 19th centuries where our economy changed from being based on agrarian activities to manufacturing industries. This period marked the start of when human-driven climate change began to significantly increase, with a rapid increase in fossil fuels being burned to power the new machinery.

Infrastructure - the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.

Mitigate - to make (something bad) less severe, serious, or painful. In climate change terms, mitigation is predominantly associated with the reduction and removal of greenhouse gas emissions from the atmosphere.

Net zero emissions - a point that is reached when overall emissions are zero, through prioritising emissions reductions and compensating for any residual emissions through offsetting activities.

Operational emissions - emissions associated with the use or operation of an asset or building.

Paris Agreement - a legally binding international treaty on climate change, adopted by 196 Parties at COP 21 in Paris, on 12 December 2015. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C.

Pollination - the transfer of pollen between plants to allow fertilisation and reproduction.

Power Purchase Agreements (PPAs) - a long-term electricity supply agreement between two parties, usually between a power producer and a customer (an electricity consumer or trader).

Producer responsibility - a policy approach under which producers are given a significant responsibility - financial and/or physical - for the treatment or disposal of products and packaging at the end of their life.

Resilient (also as 'climate resilient') - the degree to which a system is able to survive, adapt and recover from shocks and stresses whilst maintaining its function(s). Climate resilience is resilience specifically related to climate impacts.

Retrofit - adding or upgrading components of a building to improve its performance. This typically includes adding insulation, upgrading windows and other aspects of the building shell, upgrading or replacing the heating system and lighting/appliances.

Structural inequality - the system of unequal privilege which has been created through embedded bias in society, institutions and organisations over many years, resulting in certain sections of society being consistently disadvantaged.

Systems change - an intentional process designed to alter the status quo by shifting the function or structure of an identified system over the long-term with purposeful interventions. It is a journey which can require a radical change in people's attitudes.[25]

Whole life-cycle - consideration over the entire life cycle of a product or building, from raw materials through to construction/assembly, use and disposal. Whole life-cycle emissions are all of the emissions generated through the whole life cycle of a building or product.

25 Foster-Fishman, P., Nowell, B. and Yang, H. (2007) 'Putting the system back into systems change; a framework for understanding and changing organizational and community system'