Climate Action Plan
2023–2030

Hackney

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Foreword

When it comes to tackling the climate crisis, we see ourselves as one of the most ambitious councils in the country.

Since we declared a climate emergency in 2019, we've planted thousands of new trees, installed new zero-carbon energy on many of our buildings and transformed more than half of Hackney's streets to make them better for walking and cycling.

A cleaner and greener Hackney has emerged from the pandemic, yet the dangers of catastrophic climate change – where increased drought, flooding and higher sea levels cause risk to lives and habitats in the UK and further afield – are only increasing.

To tackle these dangers, everyone in Hackney must work together to: change what and how we buy and consume; make our buildings more energy efficient; change how we get around; adapt our infrastructure and protect the most vulnerable; and make sure Hackney's public spaces are greener, cleaner and more biodiverse.

This will be challenging. We will have to overcome significant financial and other barriers, and we must all work hard to make sure that the transition to net zero has fairness at its heart for residents and businesses. However, the benefits of climate action could be significant.

Reducing emissions from transport will help to improve air quality and reduce respiratory illness. Making Hackney's buildings more energy efficient will help to tackle the cost of living crisis, cut bills in the long-term and the risk of ill health. New green skills and jobs could be created from the need for our society to make this transition.

This Climate Action Plan aims to unlock these benefits for Hackney. Under five key themes – adaptation, buildings, transport, consumption and environmental quality – it sets out how residents, businesses and institutions, community groups and organisations and the Council can work together to tackle the climate and ecological crisis.

The plan is for everyone – and, through our future continued engagement and the ongoing goals and objectives in the plan, we want to make sure that everyone knows how they can influence and benefit from a greener Hackney.

We also want you to know that we'll continue to lead the way, which is why we have now included key actions from the Council's initial implementation plan in the Climate Action Plan – highlighting specifically some of the key actions we will take to tackle climate change over the next three years. The implementation plan will be updated every year, extending to 2030. Progress with delivering the Council Implementation Plan will also be a key part of the report to Full Council in July each year in line with our climate emergency declaration.

We recognise that even though we only contribute to 5% of the borough's territorial emissions, we must continue to lead by example. That's why we have rejoined the UK100 network of councils, committing us to reaching 'net zero' emissions by 2030 for Council office buildings and its vehicle fleet as the first step. Notwithstanding this, it is our intention that the scope of our net zero emissions commitment is to be regularly reviewed as part of annual update on progress with decarbonisation commitments, allowing us to expand this commitment to other key functions over time.

From speaking to many Hackney residents, it's clear that people know that we can only tackle the climate and ecological crisis through collective action – sharing knowledge, building expertise and working together.

This Climate Action Plan is designed as a guide that everyone can refer to and that we can work together on. We welcome your continued comments, your scrutiny and, above all, your participation in tackling the climate and ecological crisis.

Join us in creating a greener, healthier Hackney.

Philip Glanville, Mayor of Hackney
Cllr Mete Coban, Cabinet Member for Environment and Transport

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Summary

Introduction

Despite the significant impact of the climate and ecological crisis on Hackney and the world, the Council continues to respond to this emergency with determination. Increased frequency of extreme weather events such as flooding and extreme heat pose risks to communities, ecosystems, and natural resources. However, it remains optimistic that through drastic reductions in emissions and adaptation to higher rainfall and warmer temperatures, together we can mitigate the worst effects of climate change. Declaring a climate emergency in 2019[1], together with a vision to rebuild a greener Hackney in the wake of the pandemic, and most recently this Climate Action Plan, demonstrates the Council's commitment to a sustainable future for Hackney's existing residents and future generations.

Hackney has made progress in reducing emissions over the last decade. Since 2010, emissions from buildings and road transport in Hackney have fallen by about 27%. Consumption emissions – from the things we all buy and use – have fallen by about 10–15% in the UK overall. Nevertheless, without faster action, driven by ambitious policies and targets, we won't be able to protect communities and ecosystems from the effects of climate change.

Since declaring a climate emergency, the Council has led some of the UK's most innovative work to tackle climate change: ending the dominance of motor vehicle traffic across large parts of Hackney; switching our energy supply to 100% renewable; and generating more renewable energy on its buildings. While the Council's emissions only account for about 5% of the borough's territorial emissions, its climate emergency declaration commits the Council to a 45% reduction in Council emissions by 2030 against 2010 levels and net zero – where it will no longer be a net contributor to climate change – by 2040. Rejoining the UK100 network of councils, requires the initial commitment to reach net zero emissions by 2030 for the Council's own office buildings and vehicle fleet. Notwithstanding, it is the intention that the scope of its net zero emissions be regularly reviewed as part of annual update on progress with decarbonisation commitments, allowing the Council to expand this scope to further key functions over time.

This work is just the beginning. Across the borough, we must now all work together so residents, community groups and organisations, businesses and institutions can tackle climate change together, and support each other to reduce emissions and become more resilient to the effects of climate change. This will be challenging but the long-term benefits, such as better health and more sustainable jobs, will help create a fairer and more inclusive borough.

The science is clear: we must act now so we can harness these benefits locally and prevent the worst impacts of climate change.

[1] Hackney Council pledges to reach net zero emissions by 2040

What is the Climate Action Plan?

The Climate Action Plan (CAP) sets out an integrated approach for tackling the climate and ecological crisis. It provides a framework for everyone to take action to reduce emissions and adapt to the climate change that is already occurring, driven by an ambitious vision for a greener Hackney in 2030. This CAP is designed to set us 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 Hackney.

Purpose and aims

The CAP aims to:

- Outline what a greener Hackney could look like by 2030 based on a fair and just transition.
- Build a shared understanding of the problem we face as a borough – and how we can work together to reduce emissions and adapt to climate change.
- Help residents, businesses and other organisations to see their place in our shared response to climate change.
- Identify areas where local partners can collaborate on key strategic challenges such as financing and policy change.
- Confirm monitoring and reporting arrangements, as well as steps to support future stakeholder engagement requirements.
- Use the plan to shape agreements on how to work together to achieve shared goals.

Throughout this CAP, there are four key principles that will guide our approach.

Change is possible: Achieving the ambitions of the Paris Agreement, the international treaty that aims to limit global temperature rise to 1.5°C above pre-industrial levels, will require collective action at a rapid pace and large scale. The good news is that there is still a path to avoid the worst impacts of the climate emergency and still an opportunity to effectively prepare and adapt to cope with rising temperatures.

Collaboration is key: We can only address the climate emergency by working together to tackle emissions and adapt our borough to the changes already occurring. There are many opportunities to work collectively to reduce emissions and make our neighbourhoods more resilient.

Fairness must be at the heart: We must ensure that those who are most vulnerable and affected by the climate emergency get the support they need. Although there are many benefits to taking action on the climate emergency, the risks are not distributed equally. To be effective, climate actions must be designed with attention to who might be most negatively affected, and how.

Climate leadership: There will be a need for leadership throughout our communities from: businesses; big institutions such as our hospitals; the voluntary and community sector; and residents themselves. Notwithstanding this, the Council can provide the civic leadership for

the collective effort needed to tackle the climate emergency in the borough, helping to bring together different organisations and communities.

What are the main sources of emissions in Hackney?

The chart below shows the main sources of borough-wide emissions in Hackney, and how they are broken down by sector. Nearly three-quarters of emissions are from consumption emissions – the things we buy, use and sell.

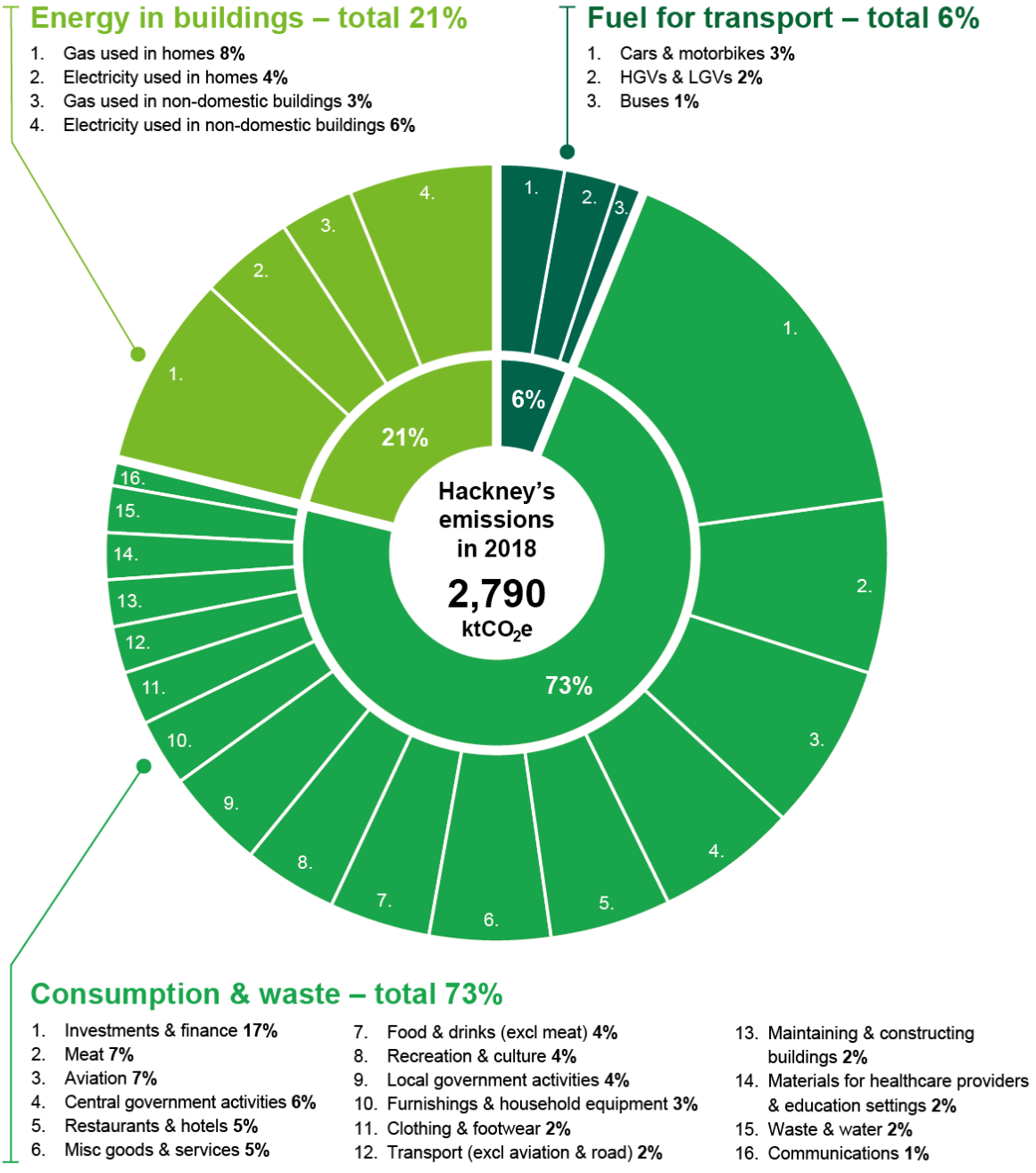


Figure 1: Hackney's main sources of borough-wide greenhouse gas emissions in 2018.

Themes, goals and objectives of the Climate Action Plan

The CAP is broken down into themes, goals and objectives.

Themes

The CAP sets out the ambitious, science-based changes that we can work towards achieving by 2030. All of these changes are organised into five themes. Within each theme, we have identified a set of ambitious 2030 goals, which are described on page 13:

- Adaptation.
- Buildings.
- Transport.
- Consumption.
- Environmental quality.

The themes define the broad areas of focus within the CAP, reflecting the need to reduce emissions, protect the natural environment and build resilience to climate change alongside wider benefits to responding to climate change, such as the potential to improve public health. At every stage, we also consider the impact on developing a local green economy and how we can ensure the response to climate change is fair and socially just.

Goals

Across the five themes in this document, there are 21 goals which set out the ambitious changes that we collectively need to make by 2030. This will require significant changes in all of our behaviour, infrastructure, business models, and co-operation. These goals are ambitious, borough-wide and aligned with the Paris Agreement. Reaching these goals at a local level doesn't rely on action by a single organisation, they are for everyone: residents, community groups and organisations, businesses and institutions.

Currently, not all of the necessary infrastructure, finance and regulation is in place to enable these changes. The UK will only meet its emissions reduction targets if central government, regional bodies and local authorities, amongst others, work together to resolve some of these key barriers.

Objectives

Each goal has a number of key objectives for the next three years. Objectives are the activities that we will need to work on together to progress towards realising the 2030 goals. They are made up of objectives for all Hackney stakeholders, as well as some specific Hackney Council objectives where it would have the lead responsibility. Together, it is intended that the themes, goals and objectives provide a framework that shapes future action planning and decision making for all Hackney stakeholders.

Council Implementation Plan

Alongside this plan is a Hackney Council Implementation Plan. This provides a detailed set of proposed actions for the Council to undertake over the next three years that contribute to delivering the goals and objectives, considering where the Council has direct control and most influence to maintain momentum with its own climate response. The Implementation Plan, whilst for an initial 3-year period, will be updated every year, extending to 2030.

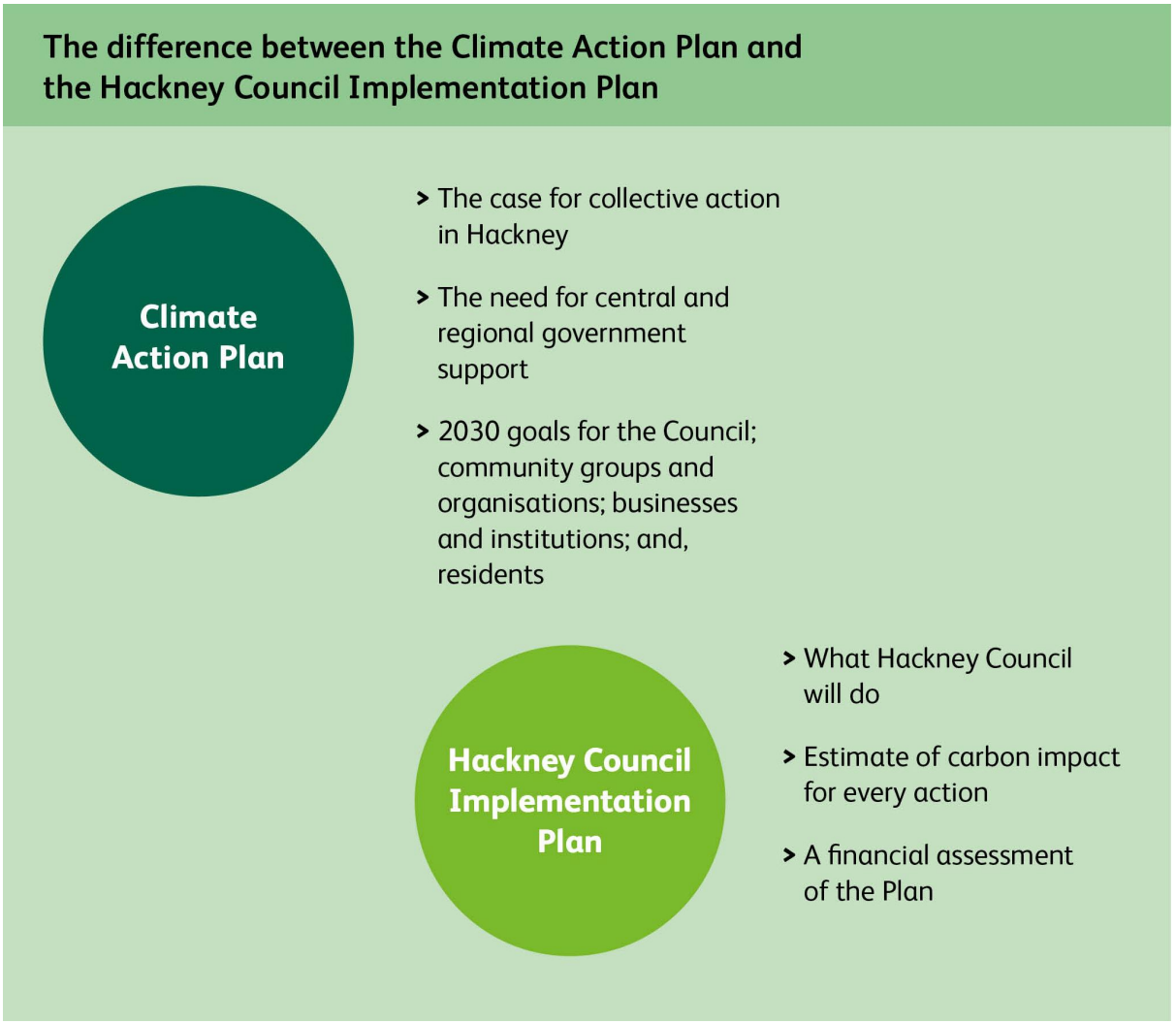


Figure 2: Relationship between the Hackney Council Implementation Plan and this borough-wide Climate Action Plan.

The five themes in the Climate Action Plan

1.

Adaptation

Ensuring that we are prepared for and resilient to the impacts of the climate emergency, protecting our most vulnerable residents.

2.

Buildings

Removing gas boilers, adding solar panels and decreasing energy use in our buildings, reducing fuel poverty.

3.

Transport

Reducing emissions from the transport network, improving air quality and helping residents live active and healthy lifestyles.

4.

Consumption

Changing what and how we buy, use and sell, creating a new green economy in Hackney.

5.

Environmental quality

Maximising the potential for biodiversity in our green spaces, reducing pollution and helping local ecosystems thrive.

Read the goals and objectives for each theme

You can read the themes and objectives for each theme later on in this document. Please use the links below to navigate to this:

- Adaptation
- Buildings
- Transport
- Consumption
- Environmental Quality

What does the Climate Action Plan mean for you?

Achieving our goals will require changes to how we all live, work and travel in Hackney. This will not be possible without collective action. Some suggested next steps are outlined below.

Who	What can you learn in this document?	What might your next steps be?
Residents	• An overview of where emissions in Hackney come from, and why we need to make changes. • What Hackney will look and feel like to live in by 2030. • Some of the changes you might need to explore to your home, transport routes and the products and services you buy and use to reduce emissions.	• Talk to your friends, neighbours, families, and community groups about whether they are aware of what they can do about the climate emergency, and work with them to take action. • Work out who is responsible for removing gas boilers and reducing energy consumption in your home, and discuss how and when you might start doing this. • Ask your employer what their plans are for decarbonising. • Implement small changes into your day to day life. • Read through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!

Who	What can you learn in this document?	What might your next steps be?
Community groups and organisations	• An overview of where emissions in Hackney come from, and why we need to make changes. • What Hackney will look and feel like to live and work in by 2030. • Some of the changes to your buildings, vehicles, and activities you might need to explore to reduce emissions.	• Work out where you are using fossil fuels in your activities, and who you need to work with to swap them for alternatives. • Talk to your members about whether they are aware of what they can do about the climate emergency, and work with them to take action. • Create local projects that contribute to the themes in this document, reducing emissions, conserving biodiversity or spreading awareness, for example. • Read through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!
Businesses and institutions	• An overview of where emissions in Hackney come from, and why we need to make changes. • What Hackney will look and feel like to operate in by 2030. • Some of the changes to your buildings, vehicles, and services you might need to explore to reduce emissions and contribute to tackling the climate emergency.	• Work out where you are using fossil fuels in your operations, and how to swap them for green alternatives and develop your own plans to get to net zero. • Better understand your vulnerabilities to extreme weather to become more prepared. • Talk to your employees about whether they are aware of what they can do about the climate emergency, and work with them to take action. • Consider whether you can offer green services, such as installing heat pumps, repairing goods or selling greener devices. • Read through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!

Who	What can you learn in this document?	What might your next steps be?
Council staff	● An overview of where emissions in Hackney come from, and why we need to make changes. ● How the Council's activities can unlock wider changes in Hackney, and enable other groups in Hackney to decarbonise. ● Learn from those we live and work alongside and capture best practices to inform future decisions.	● Ensure this plan is used to guide the decisions and actions across Hackney Council. ● Deliver alongside others the Council Implementation Plan. ● Provide the civic leadership for the collective effort needed to tackle the climate emergency in the borough helping to bring together different organisations and communities. ● Run projects and programmes to reduce emissions across the borough ● Decarbonise buildings, vehicles, procurement, investment and activities. ● Lobby the UK government and regulatory bodies for systemic change and reducing barriers to change.

What could Hackney look like in 2030?

Heating, flooding and other climate risks

- Buildings are protected from overheating
- We work together as a community to keep everyone safe from heat and flooding
- Streets are cool and shaded
- Flood risk is reduced throughout the borough

Clean and green transport

- We all mostly cycle, wheel, walk, and use public transport
- Most vehicles are powered using electricity
- More parking spaces changed to lower carbon uses
- There is less traffic and noise throughout the borough

Warm, low-carbon buildings

- All buildings are comfortable and safe
- Buildings are maintained and repaired regularly, with demolition only used in exceptional situations
- Most buildings are free from fossil fuels and have solar panels
- Construction workers trained to deliver low carbon buildings
- Energy use and fuel poverty are reduced

A green, community-led economy

- Goods are repaired and reused and we only buy what we need
- Healthy, plant-based diets are widespread
- Pensions and investments are fossil-free
- The Hackney green economy doubles in size
- There are more local, sustainable and cooperatively run projects

Wildlife and pollution

- Air is clean and safe to breathe
- We all only use the water we need
- Plants and animals are thriving
- Ponds, rivers and reservoirs are clean and healthy

Introduction

Call to action

The climate emergency is the most serious issue of our time, along with catastrophic biodiversity loss, much of which is a result of climate change. In late 2018, the Intergovernmental Panel on Climate Change (IPCC) issued a stark warning, stating that global warming could reach 1.5°C as soon as 2030 if global greenhouse gas emissions continue to increase at their current rate.[2]

Global warming of 1.5°C is likely to have devastating impacts on our planet's ecosystems and communities. These include:

- Increased sea levels.
- Species loss and extinction.
- Increased rates of droughts in drier regions, culminating in increased rates and severity of wildfires.
- Higher frequency and intensity of rainfall, causing flash flooding.

To avoid the current climate emergency from worsening, we will all need to make changes to the way we live, operate our businesses and run our institutions. This plan sets the goals and objectives which we can all contribute to begin to make a difference.

Climate action in the UK

In 2018, the government set a target of achieving net zero by 2050.[3] To guide this transition, government has published its Net Zero Strategy, which sets out UK policies and proposals to reduce greenhouse gas emissions for each sector.

Local authority leadership will be essential to deliver net zero at the local level. However, central government is key to unlocking certain barriers, and it recognises that local authorities can achieve more through collective and coordinated action. The climate emergency can only be solved by collective action at all levels.

Collaboration is needed to help local communities, businesses and other local stakeholders to take the bold steps needed. By listening to each other's concerns and co-creating solutions together we can create a more supportive environment for meaningful and lasting climate action.

[2] Global Warming of 1.5°C | IPCC
[3] UK becomes first major economy to pass net zero emissions law

Change is possible

Achieving the ambitions of the Paris Agreement[4], the international treaty that aims to limit global temperature rise to 1.5°C above pre-industrial levels, will require action at a rapid pace and large scale. The good news is that there is still a path to avoid the catastrophic impacts of the climate emergency and still an opportunity to effectively prepare and adapt to cope with rising temperatures.

By the middle of this century, the world has to reduce greenhouse gas emissions to as close to zero as possible, with the small amount of remaining greenhouse gas emissions absorbed through natural carbon sinks like forests, and new technologies like carbon capture. If we can achieve this, global greenhouse gas emissions will be 'net zero'.

This ambition can be supported by what we do in Hackney and go hand in hand with helping eradicate poverty, improving quality of life and reducing inequality. There are many health benefits of efforts to reduce greenhouse gas emissions and adapt to the impacts of the climate emergency. We want to ensure that everyone in Hackney can benefit from these actions, and that everyone is empowered to make behaviour changes that can deliver our goals.

A fair transition

Although there are many benefits to taking action on the climate emergency, the risks of the climate emergency are not distributed equally. Some communities, families and individuals are more vulnerable to the impacts of climate change because the impacts are felt more acutely by those already experiencing poverty and/or poor health. Hackney is one of two London boroughs in the 10 most deprived authorities in England.[5] Environmental health effects are experienced more strongly by poorer communities, this shows the importance of equitable action directly within the borough.

[4] The Paris Agreement | UNFCCC
[5] Indices of Deprivation 2019

Purpose of this document

This plan sets out the themes, goals and objectives to address the climate emergency across the borough. It aims to:

- Outline what a greener Hackney could look like by 2030 based on a fair and just transition.
- Build a shared understanding of the problem we face as a borough – and how we can work together to reduce emissions and adapt to climate change.
- Help residents, businesses and other organisations to see their place in our shared response to climate change.
- Identify areas where local partners can collaborate on key strategic challenges such as financing and policy change.
- Confirm monitoring and reporting arrangements, as well as steps to support future stakeholder engagement requirements.
- Use the plan to shape agreements on how to work together to achieve shared goals.

This plan is not a strategy document or an implementation plan. It seeks to establish the common vision for the collective action that is required across Hackney.

The Climate Action Plan Themes

The plan sets out five themes.

Adaptation – Irrespective of our actions to reduce our carbon emissions we need to adapt to some of the impacts of climate change that we are already experiencing. Our infrastructure, services, ecosystems, and communities are at risk from higher temperatures, increased rainfall and more unpredictable weather. This theme looks at collectively designing new ways of managing our streets and buildings, supporting our most vulnerable neighbours, minimising health risks, and working to better understand the challenges that the climate emergency may bring to make us better prepared.

Buildings – Energy use in Hackney's buildings is responsible for 21% of the borough's total emissions. This includes the electricity powering lights and appliances and the heat for warming water and spaces. This theme looks at how to reduce these emissions, including improving the thermal performance of buildings to reduce the amount of energy required to heat and cool them, and using and generating renewable energy. The theme also looks at the additional emissions from materials used to create buildings, promoting building retention and retrofit over demolition where appropriate. Taking action on all emissions from buildings will greatly improve the quality of life in Hackney, help to reduce fuel poverty and keep our homes well-maintained and running at a comfortable temperature.

Transport – Transport is responsible for circa 6% of the borough's greenhouse gas emissions. Even though over half of all trips starting in Hackney are by walking or cycling, 70% of transport-related greenhouse gases are emitted by private cars and motorbikes. 20% of greenhouse gas emissions are from freight and through traffic not caused by Hackney residents or businesses. This theme explores how Hackney can further the ambition to be a model for sustainable urban living in London, with high levels of cycling and walking, accessible and resilient public transport networks and provision of infrastructure for low carbon vehicles.

Consumption – 73% of Hackney's total greenhouse gas emissions are associated with the goods and services we buy and use. Most of the emissions are created in places outside of Hackney, for example in factories, farms and the transport networks used to bring goods into Hackney. Individuals and organisations in Hackney can still help influence the reduction of these greenhouse gas emissions through changing behaviours. This theme will explore ways to help reduce the environmental impact of the things that we buy and use and help drive a greener economy in Hackney.

Environmental Quality – Climate change accelerates ecological decline and can exacerbate the pollution of our air and water. Changing weather patterns and shifting seasons disrupt ecological cycles, air pollution gets worse during heatwaves and summer storms wash contaminants into our rivers and canals. This theme outlines key activities to protect and improve Hackney's natural environment, air and waterways, and to support community groups and landowners to improve health and wellbeing.

Case for local climate action

The following section provides detail on how emissions are created in Hackney as well as considering the physical impacts of the climate emergency, how these affect different groups and sectors, and how we can all take a collaborative, just and equitable approach to climate action in Hackney.

Greenhouse gas emissions and decarbonisation in Hackney

Hackney's borough-wide greenhouse gas emissions to date

In 2020, Hackney Council undertook an assessment of where Hackney's greenhouse gas emissions come from. Figure 3 presents borough-wide emissions and has been produced using data from 2018, the most recent available at the time.

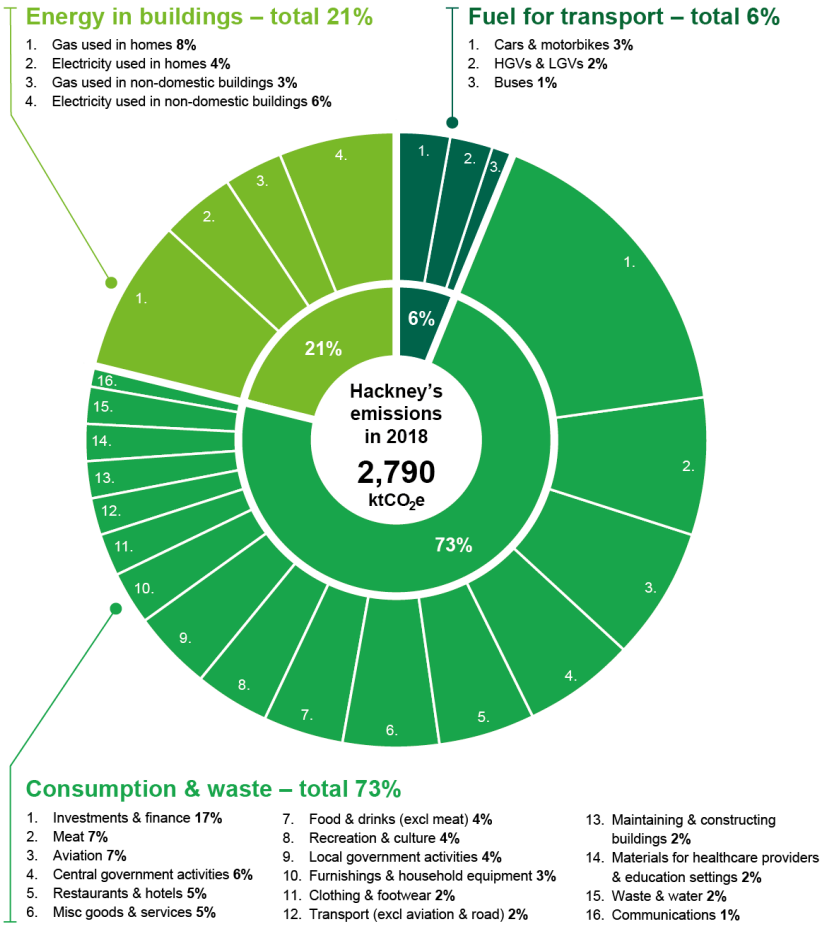


Figure 3: Hackney's (borough-wide) greenhouse gas emissions in 2018.

The green 'territorial emissions' data (Energy from buildings and Fuel for transport) is from BEIS sub-national CO_2 emissions datasets, with adjustments to account for other greenhouse gases. The 'consumption and waste emissions' data is from GLA and University of Leeds datasets.

The type and amount of fuel used in buildings and vehicles are the biggest part of Hackney's ‘territorial emissions’, ie. those emissions created within Hackney’s borders. In 2018, these emissions were around 734 $ktCO_2e$. Most of these were from the fuel used in buildings, like gas-powered heating and using electricity for lighting and appliances. Cars and motorbikes create about 44% of emissions and LGVs about 37%, whilst buses emit the remainder.

In 2018, the majority of emissions came from ‘consumption emissions’ (73%, 2,100 $ktCO_2e$), which come from a diverse range of goods and services. Although it is possible to change how much we all consume, and what we consume, these emissions are also dependent on changes by manufacturers and service providers. For example, there are emissions associated with investments and pensions – where some proportion of the money in these funds might be invested in activities that generate emissions, such as a building or an energy company. Meat consumption is also highly emitting - nearly 60% of emissions from food in Hackney are linked to meat production, including farming machinery and processes to rear and transport animals that occur outside of the borough.

Pathways to net zero

In 2020, Hackney Council modelled the ‘pathways’ of actions and changes that would reduce emissions from buildings and vehicles, which requires direct changes to the energy systems and roads within Hackney. The exercise showed that in all scenarios everyone: businesses and institutions, community groups and organisations, residents and the Council alike, need to make changes at a large scale and at pace.

Many aspects of the transition are inherently uncertain and hence progress may be faster in some sectors. Even in the near term, there is high uncertainty whether projected emissions savings will advance as anticipated. We therefore need to keep options open while assessing if sufficient groundwork has been put in place to achieve overall emissions targets.

The modelling showed the actions that need to occur in Hackney include:

- Supporting the retrofit of public and private buildings.
- Swapping gas boilers for low-carbon heat sources (like heat pumps or district heating networks).
- Tightening controls on the emissions produced by building and operating new buildings.
- Encouraging active travel and transitioning to electric vehicles.
- Supporting businesses, institutions and communities in reducing greenhouse gas emissions in the products and services they use.

These actions must be taken rapidly to reduce emissions to safe levels. For example, Figure 4 shows the territorial emissions savings that could be achieved if the 2030 goals of this plan are delivered, and then continue to remove fossil fuels beyond that date. In this case, there would be a 94% reduction in Hackney’s territorial greenhouse gas emissions in 2040, compared to 2010, and a 77% reduction by 2030.

This ambitious pace of change is closely aligned with the pace of decarbonisation that Hackney needs to achieve to contribute to limiting global warming by 1.5ºC, based on current greenhouse gas emissions and Tyndall Centre modelling.[6]

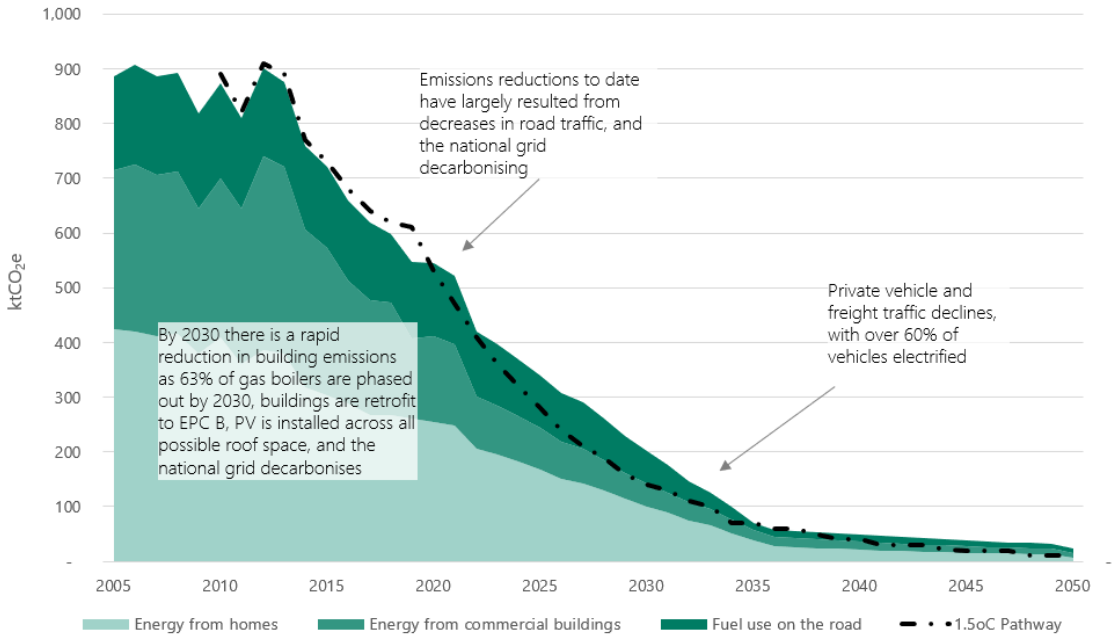


Figure 4: Achieving Hackney's 2030 goals would rapidly reduce territorial greenhouse gas emissions, contributing to global efforts to limit warming to 1.5ºC.

Source: Buro Happold modelling, with 1.5ºC Pathway based on rate of decarbonisation specified by Tyndall Centre carbon budget models (grandfathering model).

Role of behavioural change

73% of Hackney's emissions are associated with the goods and services we all use, and are significantly influenced by choices about how we all travel and use our homes or workplaces. Figure 5 illustrates the Committee on Climate Change (CCC) estimates which demonstrate practical solutions alone can only deliver 41% of required national greenhouse gas reductions. 59% of emission reductions however, will rely partially or wholly on behaviour changes.

[6] Local and Regional Implications of the United Nations Paris Agreement on Climate Change (manchester.ac.uk)

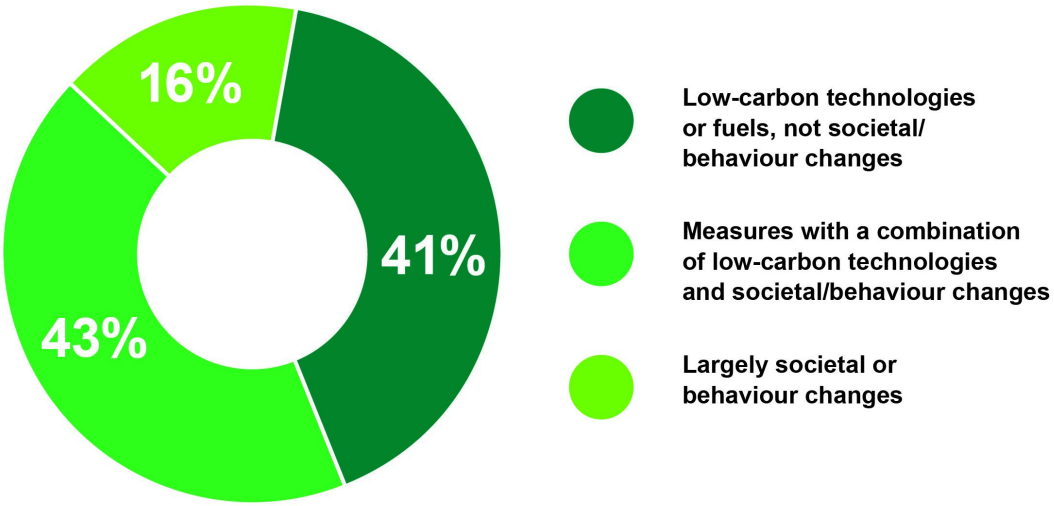


Figure 5: Role of societal and behavioural change in delivering the CCC's Balanced Net Zero Pathway.

Source: CCC Sixth Carbon Budget.

Preparing for climate risks

From extreme heat to flooding events, the impacts of the climate emergency are already being felt in Hackney. The CCC[7] have found the most immediate and critical risks to the UK include:

- Human health, wellbeing and productivity from increased exposure to heat in homes, other buildings and public spaces.
- The supply of food, goods and vital services due to climate-related collapse of supply chains and networks.
- People and the economy from climate-related failure of the power system.
- Viability and diversity of terrestrial and freshwater habitats and species from multiple hazards.
- Soil health from increased flooding and drought.
- Natural carbon stores and sequestration from multiple hazards, leading to increased greenhouse gas emissions.
- General disruption in the UK from climate emergency impacts overseas.

London Council's 2021 climate emergency poll[8] found that 55% of Londoners say their day-to-day life has been impacted by the changing climate. Londoners across the city and in all demographic groups are well aware of the climate emergency (with 94% of Londoners somewhat or very aware) and are motivated to tackle the climate emergency (with 89% of Londoners very or somewhat motivated to help prevent the climate emergency).

[7] Independent Assessment of UK Climate Risk - Climate Change Committee (theccc.org.uk)
[8] Londoners' views on climate change in 2021

People disproportionately affected by climate risks

Hackney is a young and culturally diverse borough, with roughly a quarter of its population under 20[9] and nearly 40% of residents born internationally.[10] Population growth is projected to continue to increase, with the majority of this increase coming from the working age population (16-65+).[11] Hackney will continue to flourish as a lively and multicultural borough that is committed to the climate transition. However, our collective efforts to tackle the climate emergency will need to ensure that people who might be disadvantaged and disproportionately affected by the impacts of the climate emergency are not left behind.

Disadvantaged groups are those that are "less able to anticipate, cope with, resist and recover from the impacts of disasters, such as the elderly and the very young, those suffering from poor health, those with limited mobility, the socially isolated, and the economically deprived".[12]

Table 1 shows some of the groups of Hackney residents who might have lower incomes or face challenges accessing housing, services, and the living environment, and why they might be more at risk to the impacts of climate change. Many individuals may be part of more than one group, and the groups will have diverse, competing and aligned needs. This means careful design of climate actions with the involvement of a diverse cross-section of stakeholders is essential.

Table 1: Groups in Hackney who are most at risk to the climate emergency. Note that categories can overlap for individuals

Groups most at risk	Why are they more at risk from the climate emergency?
Children living in poverty – Hackney has the fourth highest child poverty rate in the UK.[13]	Children are particularly vulnerable to air pollution,[14] overheating, and disease given that their immune and cognitive systems are not yet fully developed. Children are also more likely to be dependent on others for being able to adapt to climate risks.

[9] Hackney Census 2021 - Briefing 2
[10] Hackney Census 2021 - Briefing 5
[11] Hackney-Profile.pdf - Google Drive
[12] Final-equalities-evidence-base.pdf - Google Drive
[13] Child poverty rates by local authority | JRF
[14] Health impact assessment of current and past air pollution on asthma in London

Groups most at risk	Why are they more at risk from the climate emergency?
Social renters: Hackney has a higher proportion of social renters compared to the London average. Many social renters are structurally disadvantaged because social housing is allocated to those in greatest need.	Social renters are more likely to experience unemployment and lower average incomes than their neighbours. They may be susceptible to issues such as overcrowding in homes which makes the impact of overheating and flooding more dangerous. They will also have less agency to adapt their homes to the impacts of climate change.
Residents aged 60+ receiving benefits: Hackney has a higher proportion of residents aged 60+ receiving Pension Credit, out of work benefits, or have an income of less than 60% of the national median compared to the London average.	Elderly, low-income groups are more likely to have underlying health issues that may not be easily managed, putting them at risk from overheating, air pollution, and diseases such as Covid-19 being exacerbated by the impacts of the climate emergency, and more.
Socially isolated residents: those more likely to feel isolated in Hackney include people in semi-skilled, manual labour and low-income groups, social tenants, and Muslim and Asian residents.[15]	These groups may have a harder time accessing emergency and community services in times of need.
Homeless individuals or rough sleepers: One in 44 people in Hackney is classified as homeless. With 3,000 of the 13,000 households on the housing waiting list being homeless families in temporary accommodation.	Homeless individuals are more vulnerable to climate-related events due to their exposure to the elements, limited access to resources, health vulnerabilities, reduced mobility, and social isolation. Additionally, they may lack timely information about climate risks and face disproportionate impacts from policies that do not consider their unique needs.
Black and Global Majority residents: Black residents comprise 21.1% of Hackney's population, and Asian or Asian British residents are 10.4% of the population.[16] Across the UK Black and Global Majority people are structurally disadvantaged in relation to health, income and access to natural areas.[17]	Black and Global Majority people are disproportionately likely to have underlying health issues and/or lower incomes across London, which puts them more at risk from issues such as air pollution and overheating. They are also more likely to have the lowest incomes in the borough leaving them with fewer resources to adapt to the climate emergency.[18]

[15] Hackney Community Strategy 2018/2028
[16] Hackney Census 2021 - Briefing 5
[17] Confronting injustice: racism and the environmental emergency | Greenpeace UK
[18] Hackney Community Strategy 2018/2028

Groups most at risk	Why are they more at risk from the climate emergency?
Disabled people and people living with health conditions – while lower than the national average, about 9.6% of Hackney residents (age standardised) have some sort of disability or long-term health condition.[19]	Emergency responses (e.g. evacuations) may be more difficult for this group, while individuals with existing health conditions may be more vulnerable to further declines in environmental quality, new or more prevalent diseases associated with climate change.

Addressing inequality with a fair transition

Without drastic reductions in emissions, the impacts of climate change will continue to worsen – affecting our lives and those of future generations. It is important that we set out an optimistic and achievable roadmap, demonstrating that emissions can be reduced while communities – current and future – flourish and prosper. Critical to achieving this are considerations of social justice and the opportunities to create a vibrant green economy which are seen as cross-cutting across the whole of this CAP.

Social justice

Climate action in Hackney can reduce inequalities and create benefits such as improved air quality, better mental health, and biodiversity enhancement. By ensuring inclusive decision-making, prioritising accessible and affordable solutions, and tackling systemic issues, the Council aims to create a fair, equitable, and inclusive environment. Encouraging community engagement, including citizens' assemblies, raising awareness, promoting financial viability of sustainable options, and regularly monitoring progress will help ensure climate policies and initiatives remain effective and inclusive for all community members.

Inclusive climate action in Hackney can also foster an accessible and equitable economy that benefits everyone, especially vulnerable and underrepresented groups. By focusing on affordable housing, public transport, and access to green spaces, climate initiatives can address the diverse needs of residents. Offering impactful support for climate adaptation, resilience, and mental health will empower vulnerable groups to cope with climate-related challenges. Targeted engagement with the community using more deliberative engagement and promoting economically feasible sustainable options will help drive more lasting change to create a fair, resilient, and climate-conscious society.

Climate action can reduce inequalities and create other benefits. For example, Hackney faces significant overheating and flooding risks; using green infrastructure like trees and green walls, to mitigate this where possible, also reduces air pollution, improves mental health and contributes to local biodiversity enhancement. Reducing vehicle usage by enabling walking and other means of public transport can reduce emissions, while improving air quality and public health. In Hackney we must all make changes to our buildings, roads, public spaces and ensure our economy is accessible, equitable and inclusive. Table 2 sets out some of the potential social justice issues by theme.

[19] ONS 2021

Table 2: Potential social justice issues by theme

Themes	Potential Social justice issues
Adaptation	● Efforts to tackle the impacts of overheating and flooding, including the significant mental health impacts of these events, will prioritise residents who are likely to be worst affected. ● People who are most vulnerable to the impacts of the climate emergency are often already structurally disadvantaged. It will be essential to identify, listen to and involve the most vulnerable people, ensuring their voices are heard and insights incorporated into shaping plans. ● Efforts to adapt to the climate emergency with green infrastructure will improve quality of life across Hackney and should be prioritised in areas suffering the most disadvantage. For example, using green infrastructure like trees and green walls, to mitigate overheating and flooding also reduces air pollution, improves mental health and contributes to local biodiversity enhancement.
Buildings	● Insulating homes reduces fuel poverty and helps to keep people warm in winter and cool in summer. It also reduces the amount of energy leaking through the walls, roofs and floors, and therefore reduces the overall energy use and associated costs. Actions to accelerate retrofits and solar panel installations in Hackney will help capture these benefits, especially where they are designed to prioritise those who struggle to pay their energy bills. ● Retrofit measures like insulation and low carbon heat sources like heat pumps and solar panels save end users money in the long term, but some come with significant upfront costs. Grants, VAT changes and new financing structures will be needed across this theme to support residents and businesses to cover upfront costs and enable owners to take an holistic approach to improve their buildings thermal and energy efficiency. ● Many residents and business owners do not own the spaces they use, or only own part of a building, so they cannot install solar panels, swap boilers or start retrofits. Private landlords, freeholders, housing associations, the Council, building management groups and tenants can work together to overcome barriers to decarbonising buildings, and roll out retrofits across the whole public and private building stock.

Themes	Potential Social justice issues
Buildings continued	• Central government policies around building energy use do not always consider social justice impacts. For example, the OFGEM decision to introduce half-hourly energy charging will penalise residents who do not have the flexibility to choose when they use energy. Wider efforts to support vulnerable groups, such as retrofits to reduce energy demand in the first instance, can often help mitigate these changes, but keeping track of national policy changes and technology changes, and raising awareness of their impacts will be essential.
Transport	• Many people with disabilities, poor health or mobility issues will find it easier to walk, cycle and use wheelchairs if action is taken to make our streets calmer and more accessible. Wider transport networks should maximise accessibility for all. • People on low incomes, who live in areas that are less well connected to public transport and who experience disabilities or mobility issues may be most affected by changes in the transport system if transport networks do not consider their needs. New or modified networks and schemes must involve those affected at the early stages to better understand impacts. • Low carbon transport options like electric vehicles and e-bikes can be expensive and do not come without negative environmental impacts. For those who do need private vehicles, more widespread availability of well-planned EV charging infrastructure, coupled with addressing entry cost barriers could make uptake more equitable.
Consumption	• Sustainable, climate friendly and healthy diets can be compatible with religious and cultural dietary requirements, and can be more affordable than meat-based diets. However, changing eating habits can be more challenging for people who have less flexibility when it comes to food, particularly those living in food deserts with limited access to fresh and healthy options. New food programmes and initiatives in Hackney must address this issue by including affordable options and providing specific provisions and guidance for common diets, such as halal and kosher. • Green alternatives are not always easily accessible or affordable to all. Existing habits such as borrowing from neighbours, swapping with strangers, hiring rather than buying, reducing food waste and purchasing pre-loved items already make a contribution but could be more prevalent. The cost of common household appliances such as washing machines, fridges and cookers, which have higher energy efficiency and longer lifespans will need to be reduced to address the higher upfront investment which acts as a barrier to the future benefits of lower running costs.

Themes	Potential Social justice issues
Environmental Quality	• Children, elderly people and people with existing heart and lung conditions are all medically vulnerable to the ill health caused by pollutants. Identifying those most affected by pollution, and the people who could be most supported by interventions to reduce it are important guiding principles for action. • Expanding the area of green infrastructure (including green streets for example) as well as increasing the quality of existing green spaces, will improve people's ability to access cool outdoor spaces in the summer and places which are less likely to suffer from poorer air quality. • Community gardening groups and individual gardeners are central to the stewardship of many green spaces in Hackney. Working collaboratively is essential to protecting and enhancing Hackney's ecosystems, improving physical and mental health, and making sure that people living in Hackney can guide, shape and join plans to increase biodiversity.

Green economy

The transition to net zero in Hackney is creating economic opportunities (Table 3 sets out some of the green economy issues and opportunities by theme). A growing green economy means opportunities for businesses already delivering green products and services, and opportunities for new green businesses to emerge. This growth and transition will also create job opportunities mainly in skilled craft work and in managerial and professional jobs[20] but also in the evolving circular economy which is well represented in Hackney.

There is a clear need to specifically support individuals whose livelihoods may be affected by the transition because their economic activity is dependent on businesses and services that contribute to climate change by offering retraining programmes for people so they can find new forms of work. Retraining programmes and new opportunities for jobs, skills and business should be widely available to Hackney's residents - the green economy as a whole should be diverse and inclusive.

By working with partners in London's skills system we can better prepare our residents for the possibilities a growing green economy has to offer. Together, the Council, businesses and institutions need to address existing skills gaps in the construction industry and with STEM degrees.[21] Addressing the lack of diversity among potential entrants into green jobs and the green economy should be a fundamental part of future partnership work across London.

[20] Green Jobs and Skills in London: cross-London report - WPI Economics
[21] Green Jobs Taskforce

Table 3: Potential green economy issues and opportunities by theme

Themes	Potential Green economy issues and opportunities
Adaptation	● Across the UK and Hackney, building retrofits will provide significant opportunities for new jobs and businesses. Retrofit jobs and skills must encompass energy reductions and building maintenance, but also overheating and flood resilience too. ● Efforts to adapt to the climate emergency will help Hackney's businesses and community groups to prosper. Neighbourhood networks and local business forums can provide vital input into the design of plans to modify Hackney's streets and green infrastructure. ● Local businesses are greatly affected by shock events, as seen during the COVID-19 pandemic. Local partners, such as business forums, can help to shape resilience and emergency response plans so as to better prepare and be more resilient.
Buildings	● Co-operative financing mechanisms for community-scale and joint-owned services will help Hackney collectively achieve its goals. For example, community-owned solar panels and retrofit networks have proven powerful models to spread the upfront costs of decarbonising buildings. ● As well as Hackney's businesses decarbonising their buildings and activities, decarbonisation offers opportunities for new green businesses to develop in Hackney too. Green businesses offer services to meet climate action goals like delivering retrofits, solar panel installations and low carbon building designs. Incentives for these businesses and training opportunities to give local residents the skills to work for them in green roles will help them to prosper in Hackney, and contribute to the new green economy.
Transport	● Freight accounts for around one fifth of traffic in Hackney. Much of this traffic is through-traffic. Decreasing the through-traffic linked to freight in Hackney means working with partners and neighbouring boroughs to identify new solutions and traffic management options. ● Decarbonising deliveries will help accelerate alternative, clean delivery models, such as cargo bikes, van sharing and last mile delivery service models. The planning of new or improved economic areas must be designed with more sustainable freight and delivery options in mind. ● Hackney will need a workforce capable of managing electric vehicles and charger networks, as well as sustainable transport infrastructure such as cycle hangers and cycle hire schemes. Skills programmes and job opportunities should consider these opportunities as sustainable employment pathways.

Themes	Potential Green economy issues and opportunities
Consumption	● A better understanding of what a green economy can and could mean for Hackney is required, identifying opportunities for change and the potential for community wealth building. ● A green economy isn't just about removing fossil fuels from existing processes. Local services to maintain, repair and resell items enable reductions in consumption across Hackney. Existing businesses can provide these services, though this will require changes in skills, storage space and business models. Business networks and local economic areas must encourage, pilot and test new approaches. ● Decarbonising our businesses and creating new green business models will require new skills and employment pathways. The green economy must be integrated into existing training packages and employment processes, creating new skills pathways and opportunities to employ local people in decarbonisation activities.
Environmental Quality	● New development and regeneration can provide a catalyst for change to Hackney's streetscapes and public realm. New policies such as the urban greening factor and standards such as tighter water and energy efficiency requirements create new business opportunities for local trades and suppliers. ● Local businesses can contribute to reductions in air pollution by streamlining deliveries and shifting to shared and low carbon delivery models, by retrofitting their spaces to reduce energy demand, and swapping their gas boilers for heat pumps.

Over the next three years the Council will undertake the following actions to support the goals and objectives of this cross-cutting theme:

- Produce an Economic Development Plan in 2023 that includes growth of the green economy as a key theme.
- Deliver green skills courses through the Council's adult learning service, initially focused on construction and infrastructure.
- Promote new low carbon apprenticeships through the Hackney Apprenticeship Network.
- Establish a baseline of Hackney businesses engaged in green economic activity.
- Assess the options for increasing green economic activity in the borough and develop workstreams to achieve this growth.
- Ensure the Sustainable Procurement Strategy maximises the opportunity of the Council's own spending to create green jobs and training opportunities.
- Conduct review into the need for green skills and green roles in the Council's own workforce.

The journey so far to reduce borough-wide emissions

In 2019, the Council declared a climate emergency.[22] further supported by an ambitious vision to rebuild a greener Hackney in the wake of the coronavirus pandemic.

Council greenhouse gas emissions

For its own activities, which are 5% of the whole borough's territorial greenhouse gas emissions, the Council committed to a 45% reduction in emissions by 2030 and net zero emissions by 2040 relative to a 2010 baseline. Subsequently the Council is rejoining the UK100 network of councils, which requires an initial commitment to reaching net zero emissions by 2030 for the Council's non-tenanted buildings and vehicle fleet.

Earlier work to develop a Net Zero Energy Strategy set out plans to reduce the Council's emissions and identified the areas below for action, amongst others. The key aspects of this have now been integrated within this CAP.

- Arranging a Power Purchase Agreement to cover 100% of electricity purchased.
- Shifting to heat pumps and district heat networks for heating.
- Electrifying the vehicle fleet.
- Retrofitting buildings and swapping to electric heat pumps.
- Reducing the use of raw and carbon-intensive materials for new buildings.
- Generating energy from solar panel installations.

[22] Hackney Council pledges to reach net zero emissions by 2040

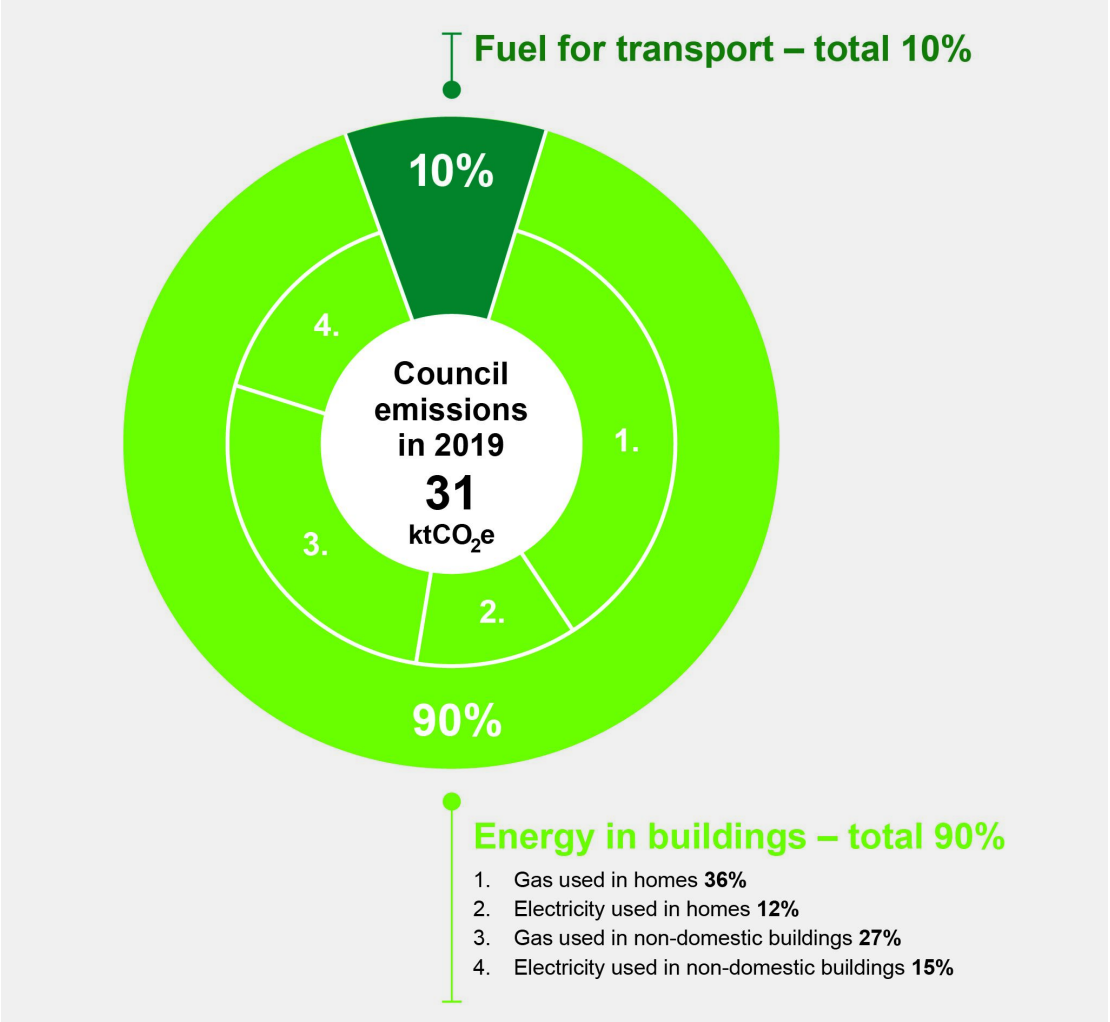


Figure 6: Council 'territorial' greenhouse gas emissions in 2019.

Source: Buro Happold based on the assessment made within the Net Zero Energy Strategy.

Borough-wide greenhouse gas emissions

Hackney as a borough has made progress in reducing territorial emissions over the last decade. Since 2010, emissions from buildings and road transport in Hackney have fallen by about 27%. Consumption emissions - from the things we all buy and use – have fallen by about 10–15% in the UK overall. Nevertheless, without faster action, driven by ambitious policies and targets, we won't be able to protect communities and ecosystems from the effects of climate change.

The Council has led some of the UK's most innovative interventions to improve air quality, reduce motor vehicle traffic and greenhouse gas emissions, whilst encouraging residents to change their behaviour to tackle the climate emergency. Table 4 outlines some of the key actions and outcomes from the last three financial years (2019/20 – 2021/22) split across each of the themes.

For borough-wide emissions, the Council has a number of regulatory levers that are influencing change on an estimated 25% of territorial emissions. It also hopes to create an

environment, through climate leadership, that makes low-carbon choices more widely available.

Table 4: Headlines of borough-wide schemes and outcomes run by the Council to take action on the climate emergency between 2019/20 and 2021/22

Themes	Key Council climate activities 2019/20 – 2021/22
Adaptation	• Launched the Adapt Your Business business support programme – supporting 48 businesses with a share of a £570k funding pot. • 22 SuDS and rain garden schemes have been implemented during a 3 year period between 2020 and 2022 with more than 1,800 m^2 of highway de-paved.
Buildings	• Continued promotion of the Solar Together scheme. 210 applications have been approved and circa 60 schemes have been completed. Total generation is estimated to be around 800kWh. • Dedicated £400k to make the homes of residents on low incomes more energy efficient and reduce their energy bills, through our Green Homes programme. • Adoption of Hackney's Local Plan in July 2020, bringing in strong climate adaptation and mitigation planning policies. • Adoption of the Planning Obligations SPD in July 2020, setting out the mechanism for carbon offset payments and an increased price for offsetting.
Transport	• Implemented one of the most ambitious active travel programmes in the country. Introduced 19 new Low Traffic Neighbourhoods (LTNs). 70% of the borough's residential side streets are in LTNs. • Retained 30 trial School Streets, now totalling 42 permanent School Streets. 84% of the borough's primary schools and 15% of secondary schools are covered, meaning Hackney has more School Streets and LTNs combined than any other council nationwide. • Installed 200 EV charge points, reaching 308 in total. Exceeded the target for 80% of residents within 500m of a charging installation. • Completed a number of cycle improvement schemes including: Queensbridge Road protected cycle track between Hackney Road, Lea Bridge Road and Albion Drive, Cycle Superhighway one interventions - Balls Pond Road; and 2 km of light segregated cycle lanes on Green Lanes. • Installed 200 new cycle hangers. • Installed the first tranche of permanent parking solutions for dockless bikes underway, with 74 locations having dockless corrals. • Continued to support the Zero Emissions Network (ZEN), which has gained close to 1,500 business members and over 1,000 residential members.

Themes	Key Council climate activities 2019/20 – 2021/22
Consumption	• Moved residual waste collections from weekly to fortnightly, whilst recycling and food collections remain weekly; street level recycling rates increased by 5% one year following introduction. • Opened a new Library of Things in Dalston Library in January 2022. • Introduced the first of our reuse and repair (zero waste) hubs, delivered with the Forest Recycling Project, Hackney Fixers, TRAID and Hackney Dr Bike team. • Supported 90 public reuse clothes banks across the borough, an average of 600 tonnes of clothes are collected via this network every year. • Progressed the Eco-Schools Programme; 42 schools signed up, with 16 schools achieving their green flag Eco-School status. 400 classroom recycling bins were installed and 25 waste audits delivered. One school supported a 'climate-friendly' and nutritional canteen study to adapt their school menu. • Published a 'Zero Waste' map to encourage residents to refill their household products without packaging.
Environmental Quality	• Over 5,000 new street trees have been planted increasing the overall street canopy from 20% to 30% • 13,037 trees have been planted in our parks and green spaces to date. • Completed more than 10 rain gardens diverting highway runoff from the public sewerage system. • Developed a new Air Quality Action Plan and adopted a commitment to meet the World Health Organisation guidelines for particulate matter by 2030. • Developed a Local Nature Recovery Plan and Green Infrastructure Strategy.

Goals and Objectives

Introduction

The plan covers five key themes for climate action across Hackney. The following sections describe the themes in more detail. For each theme, a set of 2030 strategic goals and associated objectives is identified.

Adaptation	Ensuring that we are prepared for and resilient to the impacts of the climate emergency, protecting our most vulnerable residents.
Buildings	Removing gas boilers, adding solar panels and decreasing energy use in our buildings, reducing fuel poverty.
Transport	Reducing emissions from the transport network, improving air quality and helping residents live active and healthy lifestyles.
Consumption	Changing what and how we buy, use and sell, creating a new green economy in Hackney.
Environmental Quality	Maximising the potential for biodiversity in all of our green spaces, reducing pollution and helping local ecosystems thrive.

Goals

Across the five themes in this document, there are 21 goals which set out the ambitious changes that we collectively need to make by 2030. This will require significant changes in all of our behaviour, infrastructure, business models, and co-operation. These goals are: ambitious; borough-wide; and aligned with the Paris Agreement. Reaching these goals at a local level doesn't rely on action by a single organisation, they are for everyone: residents, community groups and organisations, businesses and institutions.

Currently, not all the necessary infrastructure, finance and regulation is in place to enable these changes. The UK will only meet its emissions reduction targets if central government, regional bodies and local authorities, amongst others, work together to resolve some of these key barriers.

Objectives

Each goal has a number of key objectives for the next three years. Objectives are the activities that we will need to work on together to progress towards realising the 2030 goals. They are made up of objectives for all Hackney stakeholders, as well as some specific Hackney Council objectives where it would have the lead responsibility. Together, it is intended that the themes, goals and objectives provide a framework that shapes future action planning and decision making for all Hackney stakeholders.

How ambitious are the emissions reduction goals?

The goals set out the ambition needed in Hackney to contribute to limiting global warming to 1.5°C above pre-industrial levels, the Paris Agreement target. It reflects a pace of action that will require significant changes in all of our behaviour, infrastructure, business models, and co-operation. Currently, not all the necessary infrastructure, finance and regulation is in place to enable these changes. Reaching these goals at a local level doesn't rely on action by a single organisation, they are for everyone: residents, community groups and organisations, businesses and institutions.

Council Implementation Plan

Alongside this plan is a Hackney Council Implementation Plan, which provides a detailed set of key actions for the Council to undertake, initially over the next three years that contribute to delivering the goals and objectives. The Implementation Plan, whilst for an initial 3 year period, will be updated every year, extending to 2030.

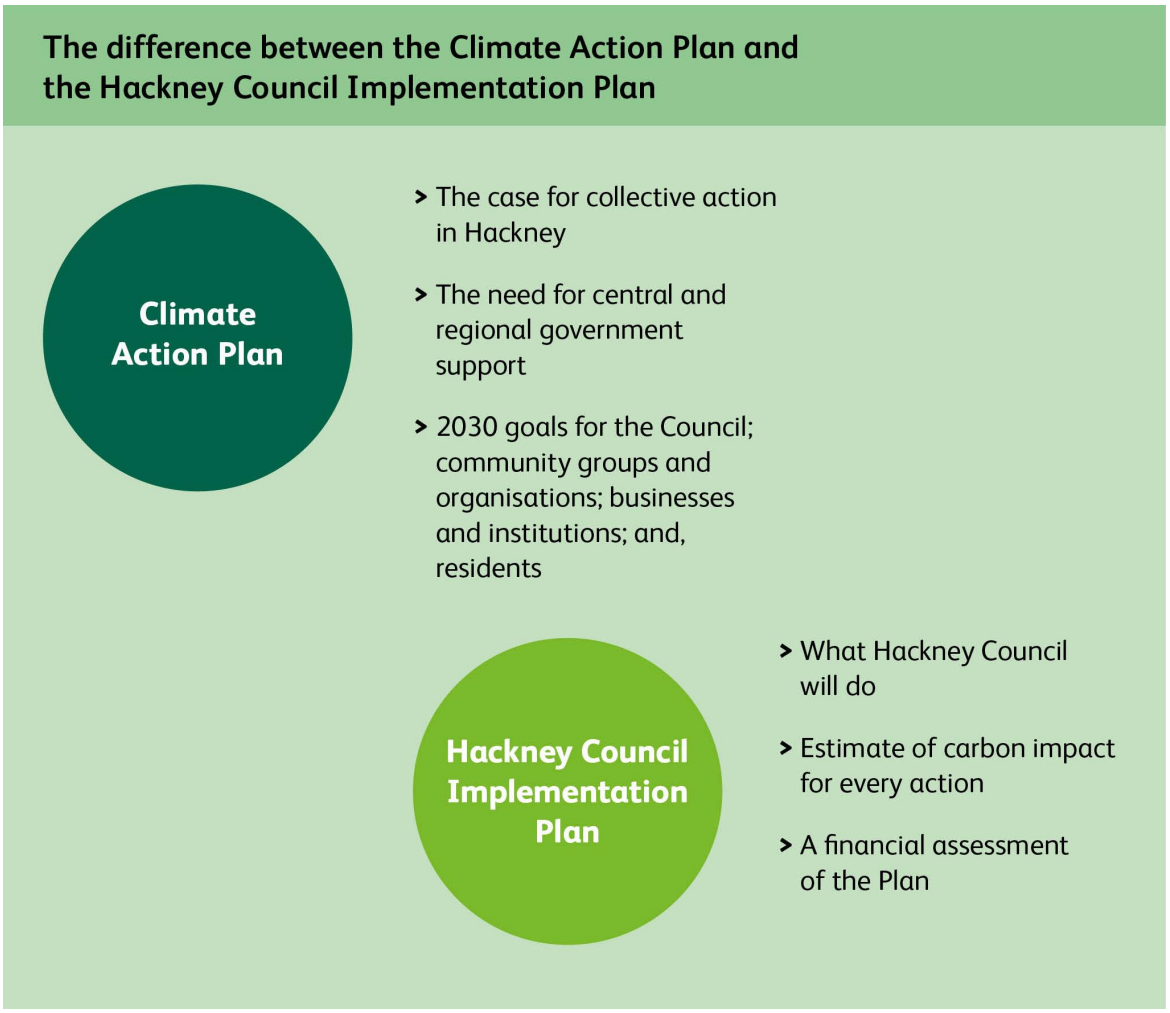


Figure 7: How the Climate Action Plan and Hackney Council Implementation Plan fit together.

Adaptation

Irrespective of our actions to reduce our carbon emissions, we also need to adapt to some of the impacts of climate change that we are already experiencing. Our infrastructure, services, ecosystems, and communities are at risk from higher temperatures, increased rainfall and more unpredictable weather. This theme looks at collectively designing new ways of managing our streets and buildings, supporting our most vulnerable neighbours, minimising health risks, and working to better understand the challenges that the climate emergency may bring to make us better prepared.

Goals and Objectives

Hackney is already experiencing higher summer temperatures and warmer, wetter winters than a few decades ago. Hotter summers combined with less rainfall dramatically increases the frequency and intensity of droughts; more frequent storms increase the likelihood of surface-water flooding. Some of the risks of heat and flooding can be reduced by optimising green infrastructure in the public realm. However, there will also be a need for a more significant response to adapt existing buildings to keep them cool in summer and warm in winter, and ensure new buildings can cope with weather extremes in the longer term; this is because the most vulnerable people, for example those with pre-existing respiratory, cerebrovascular or circulatory diseases, are less able to regulate body temperature during prolonged periods of heat or cold.

Developing a better understanding of how the climate emergency will impact Hackney will help inform how to prepare and respond at a community level. We must communicate the steps we can take collectively to adapt to the climate emergency, so we all know what behaviours might need to change. Community preparedness can also be increased through strengthening networks of community groups, resilience forums and partners across Hackney, improving early warning systems for extreme weather events. Climate change is also having more subtle, but potentially profound effects, in Hackney such as the increased risk of new pests and diseases that can affect both human and ecological health. [N.B. Issues relating to biodiversity and climate are addressed in the Environmental Quality theme].

Table 5: Goals and Objectives for Adaptation

2030 collective goals[23]	Is the goal 1.5ºC-aligned? [24]	3-year objectives
Community Preparedness		
Local capacity built to adapt and respond to the impacts of climate change.	N/A	Ensure better advance warning of potential flood and heatwave events and signpost the support available.
		Partner and collaborate with climate resilience groups.
		Ensure borough-wide systems and processes are prepared for extreme events.
Overheating		
Communities are protected from overheating, reducing the risk of extreme heat impacts on vulnerable groups and critical services.	N/A	Create a network of 'cool spaces' in existing buildings, streets and public spaces.
		Ensure new and existing buildings are both energy efficient and not prone to overheating during heatwaves.
		Build better understanding and raise awareness of the possible risks and impacts of overheating in Hackney.
Flooding		
Flood risk is reduced and the existing drainage system is better managed to respond to extreme weather events.	N/A	Expand the sustainable urban drainage network (SuDS), including increased urban greening.
		Ensure new buildings are flood resilient and don't contribute to increased surface water run-off.
		Ensure Hackney is fully integrated with cross-borough flood management schemes.
Conservation & Resilient Planting		

[23] These are the goals that we aim to achieve, collectively, in Hackney by 2030. This will require actions by all stakeholders: community groups and organisations; businesses and institutions; residents; the Council and central government.

[24] 1.5ºC alignment means that meeting this goal is consistent with Hackney contributing to only 1.5ºC of global warming, in line with the Paris Agreement.

2030 collective goals[23]	Is the goal 1.5ºC-aligned?[24]	3-year objectives
New planting in Hackney is resilient to a changing climate, and invasive species and new plant diseases are managed.	N/A	Plant climate-resilient species, particularly in streets and civic spaces to support transport related objectives for increased walking and cycling.
		Tackle invasive species and new plant diseases in line with national protocols and guidance.
Green Economy		
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs	N/A	Increase the number of Hackney businesses and jobs that contribute to the green economy, including through regeneration delivery programmes and procurement.
		Create green apprenticeships and training pathways, with a focus on disadvantaged groups.
		Ensure Hackney residents have the skills for and access to training and job opportunities linked to the green economy.
		Support Hackney businesses and partners to decarbonise.
		Attract new green businesses into the borough.
		Reskill, retrain and/or recruit staff to meet the needs of the climate emergency.

How will Hackney Council support the three year Objectives?

The Council's Implementation Plan provides a more detailed set of key proposed actions for the Council to undertake over the next three years that contribute to delivering the goals and are aligned with specific objectives. Whilst these actions are the headlines, they are not the sole lever to achieve progress.

There are a range of subsidiary plans which support the delivery of the Council's climate response. In respect of adaptation and resilience these include the Air Quality Action Plan, Transport Local Implementation Plan, Green Infrastructure Strategy, Local Nature Recovery Plan, Parking and Enforcement Plan, Hackney Transport Strategy and Local Plan amongst others.

Over the following three years Hackney Council will undertake the following actions to support the Adaptation Goals and Objectives:

- Develop an Adaptation and/or Climate Resilience Plan.
- Develop a Hackney Urban Forest Plan.
- Update the Multi-Agency Flood Response Plan.
- Implement two larger flood risk alleviation schemes within the borough.
- Establish a SuDS approval body and implement new national standards in relation to SuDS.
- Produce a practical guide to demonstrate how all future basement developments can be secure from groundwater and surface-water flooding.
- Implement a new flood reporting system in Hackney to improve data collection and sharing of information with other risk management authorities in the Greater London, Thames Flood Risk Area.
- Review 50% of parks and greenspace management plans to embed climate resilience principles.
- Deliver a communications programme on extreme weather risks, focusing on advice for vulnerable and at-risk groups alongside others.
- Develop further phases of tree planting to increase tree canopy and solar shading - prioritising hottest areas of Urban Heat Island mapping and vulnerable communities.
- Review planning documentation and guidance to ensure overheating is adequately embedded in new area action plans and supplementary planning guidance.

Case study: Tree planting in Hackney

Trees and woodland cover about 25% of Hackney.[25] As of 2022, there were around 14,724 trees on highways, 7,262 trees within communal areas of housing estate environments and street properties, and 10,405 individual trees within parks and open spaces in Hackney. There are also lots of trees in private gardens, and areas of woodland - including Wick Woodland and Abney Park Cemetery.

Over 5,000 new street trees have been planted increasing the overall street canopy from 20% to 30%; 13,037 trees have been planted in our parks and green spaces to date as a result of Council programmes.

An online map of Hackney showing more than 45,000 Council maintained trees was launched in April 2023.

The tree map helps residents find out more information about trees on their streets – listing species, common name and age.

[25] Green Infrastructure Strategy

Buildings

Energy use in Hackney's buildings is responsible for 21% of the borough's total emissions. This includes the electricity powering lights and appliances and the heat warming water and spaces. This theme looks at how to reduce these emissions, including improving the thermal performance of buildings to reduce the amount of energy required to heat and cool them, and using and generating renewable energy. The theme also looks at the additional emissions from materials used to create buildings, promoting building retention and retrofit over demolition where appropriate. Taking action on all emissions from buildings will greatly improve the quality of life in Hackney, help to reduce fuel poverty and keep our homes well-maintained and running at a comfortable temperature.

Goals and Objectives

For existing buildings, energy consumption can be reduced through retrofits, such as adding insulation to roofs and walls, installing double glazing on windows and replacing existing power sources with renewable sources. Where possible, this must be balanced with minimising disruption to residents, through prioritising external retrofit measures for example. Installing electrical heating sources such as heat pumps, connecting to low carbon district heat networks and installing solar panels with battery storage are options to provide new sources of renewable power. These changes can lower energy bills as well as emissions, but must be supported by central government to ensure they remain viable and beneficial for operators and end users.[26]

Reducing emissions from buildings also means considering the materials and processes they are made from. In addition to delivering buildings that are finished to a high quality we will promote better maintenance and support refurbishment, thereby increasing the lifespan of the existing building stock. This can reduce the need for demolition and new buildings, which emit significant emissions as a result of all the materials they require. Where new buildings are needed, optimising material use, reusing building materials and selecting low carbon and recycled products reduces their impact, as well as making them very efficient.

By taking such action Hackney can lead by example. Homerton University Hospital NHS Foundation Trust achieved the Planet Mark in recognition of its efforts to reduce greenhouse gas emissions and report its progress. It is the first hospital in the country to achieve this, and has maintained its certification since 2017. The hospital successfully cut its greenhouse gas emissions by 9.2%.[27]

[26] The people who wish they had an energy price cap - BBC News
[27] Planet Mark - Homerton Hospital

Using local businesses and suppliers where possible (including small businesses) to implement these changes supports a thriving economy for retrofit and low carbon construction professionals in Hackney and more widely. Currently, skill shortages and a lack of available contractors are slowing the rate of retrofit. Addressing this shortage will require training, recruitment and employment services that help people find jobs that reduce emissions in buildings, or jobs connected to the other climate action themes. Working alongside others, the Council will lobby central government to ensure that there are sufficient high quality retrofit providers to meet future demand. The Council has also trained technical staff in housing services as retrofit co-ordinators whilst embedding the additional building skills needed within roles in corporate property as part of recruitment.

Table 6: Goals and Objectives for Buildings

2030 collective goals[28]	**Is the goal 1.5ºC-aligned?** [29]	**3-year objectives**
Retrofit		
Existing buildings (public and private) have been retrofitted to average EPC B to minimise energy consumption and reduce levels of fuel poverty.	Yes	Increase retrofits and energy monitoring in private buildings[30].
		Increase retrofits in conservation areas and heritage buildings where appropriate.
		Increase retrofits in Council buildings (owned or managed) and other public buildings.
Gas Phase-out		
63%[31] of buildings (public and private) use low carbon heat sources such as district heat networks,	Yes	Deliver additional infrastructure that supports low carbon heating & hot water, including District Heat Networks.

[28] These are the goals that we aim to achieve, collectively, in Hackney by 2030. This will require actions by all stakeholders: community groups and organisations; businesses and institutions; residents; the Council and central government.

[29] 1.5ºC alignment means that meeting this goal is consistent with Hackney contributing to only 1.5ºC of global warming, in line with the Paris Agreement.

[30] Different housing types (i.e. pre-war vs post war buildings) face different challenges, but the recommendations in the CAP apply to all buildings where technically and economically viable

[31] Target derived from borough pathway modelling (See Section Greenhouse gas emissions and decarbonisation in Hackney)

2030 collective goals[28]	Is the goal 1.5ºC-aligned? [29]	3-year objectives
heat pumps and electric heating.		Replace gas boilers with heat pumps and other low carbon heat sources in public and private buildings and infrastructure.
Embodied & Operational Carbon of New Builds		
All buildings are maintained and refurbished to prolong their lifespans to at least 60 years, where appropriate. Where new buildings are needed, they are ultra-energy efficient and do not use fossil fuels, and they are made from low carbon and reused materials.	Yes	Prioritise maintenance, thermal upgrades and adaptive reuse instead of building demolition.
		Increase the reuse of construction materials and reductions in construction waste.
		Meet ambitious operational and embodied carbon planning requirements, as set out in the London Plan 2021.
		Embed higher operational and embodied carbon standards in future policy and design, considering alignment with UK Net Zero Building Standards, LETI and other relevant industry led best practice for developments.
Renewable Power		
80 MWp of solar panels and battery storage have been installed on the roofs of all possible buildings (public and private).	Yes	Increase the deployment of solar panels across public and private buildings.
		Increase the number of community and cooperative solar panel projects.
		Explore further opportunities for renewable energy.

2030 collective goals[28]	Is the goal 1.5ºC-aligned? [29]	3-year objectives
Green Economy		
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs.	N/A	Increase the number of Hackney businesses and jobs that contribute to the green economy, including through regeneration delivery programmes and procurement.
		Create green apprenticeships and training pathways, with a focus on disadvantaged groups.
		Ensure Hackney residents have the skills for and access to training and job opportunities linked to the green economy.
		Support Hackney businesses and partners to decarbonise.
		Attract new green businesses into the borough.
		Reskill, retrain and/or recruit staff to meet the needs of the climate emergency.

How will Hackney Council support the three year Objectives?

The Council's Implementation Plan provides a more detailed set of key proposed actions for the Council to undertake over the next three years that contribute to delivering the goals and are aligned with specific objectives. Whilst these actions are the headlines, they are not the sole lever to achieve progress.

There are a range of subsidiary plans which support the delivery of the Council's climate response. In respect of Buildings these include: the Air Quality Action Plan, Green Infrastructure Strategy, Local Nature Recovery Plan, Parking and Enforcement Plan, Hackney Transport Strategy and Local Plan amongst others.

Over the following three years Hackney Council will undertake the following to support the Buildings Goals and Objectives:

- Deliver approved Social Housing Decarbonisation Fund project to retrofit 600–700 Council housing street properties.
- Submit Social Housing Decarbonisation Fund applications for future bidding rounds once launched – subject to eligibility criteria.
- Develop net zero roadmap for Council's social housing.
- Deliver approved Public Sector Decarbonisation Fund projects at London Fields Lido, Clissold Leisure Centre and Queensbridge Leisure Centre, amongst others.
- Submit Public Sector Decarbonisation Fund applications for future bidding rounds once launched – subject to eligibility criteria.
- Assess options to further establish Hackney Light and Power as a municipal energy services company.
- Deliver further phases of Green Homes programme in privately owned or rented homes (based on eligibility criteria), with a target of 100 homes by 2026.
- Survey 50% of Council operated commercial buildings embedding identified energy efficiency improvements in funding bids.
- Develop new guidance on achieving retrofit & refurbishment in conservation areas.
- Undertake a pilot project to trial new methods & technologies to retrofit traditionally constructed [pre 1919] buildings.
- Develop an area-based Local Area Energy Plan.
- Develop a programme of works to improve the efficiency of existing communal heating networks in housing.
- Deliver two new heat networks on Colville Estate & Woodberry Down.
- Ensure that 50% of the Council's total electricity needs are covered by a renewable Power Purchase Agreement.
- Deliver pilots to a minimum of two schools through provision of decarbonised energy sources.
- Develop an action plan to support maintained schools to reach net zero or best achievable outcome by 2030.
- Prepare circular economy guidance applicable to major planning applications & large regeneration projects.
- Develop and approve embodied and operational carbon standards for future Council building development projects.
- Develop 5 MWpeak of bid-ready projects for PV installation on Council buildings.
- Install a minimum of 1 MWpeak of renewables on Council-owned buildings.
- Deliver annual rounds of Hackney's Community Energy Fund to multiple community interest groups.
- Develop guidance to reflect ambitious whole life carbon and carbon pricing standards.
- Agree a methodology to assess the relative merits of refurbishment vs new-build in planning assessments.

Case study: Hackney Light and Power

Hackney Light and Power is the delivery arm for the Council's plans to decarbonise energy across the borough; working to decarbonise the council's assets and buildings with a number of measures including installing 1MW of solar generation on our leisure centres and community halls.

Hackney Light & Power is also supporting private households with funding through the Green Homes programme which has enabled energy efficiency measures in over 60 households in Hackney and a community energy fund with initial funds of £300k that was launched in 2022 to support community organisations with their energy efficiency schemes such as solar panels, heat pumps and insulation. It will work with the community energy movement, schools, faith organisations, cooperatives, activists, nurseries and encourage other community groups to bid for projects that help reduce organisations' impact on the environment and support them with rising energy costs.

16 Chart Street, Hackney Design Awards Winner 2022 (new build elements in sustainable structural timber)

Case study: Low Carbon Development Cross-London Programme

Hackney is the lead London borough on the Low Carbon Development action plan, one of seven programmes established by London Councils to address climate change. Hackney has been the lead London borough for this programme since 2021 (CK) and will continue to do so until 2024.

London local authorities face similar opportunities and challenges in moving towards low carbon and zero carbon buildings. The Low Carbon Development action plan provides a valuable opportunity to bring London boroughs together to explore fully how sustainability aims and planning can align. The programme brings boroughs together to share knowledge, best practice, and clarify and action next steps and solutions to reaching low carbon and zero carbon. The programme is looking at both internal and external issues. Key themes that are being explored and addressed include design, heritage, monitoring and upskilling.

Case study: 80Z Eastway, Hackney Wick

Eastway is a multi-use sports facility for young people based behind the Old Baths on Eastway in Hackney Wick which opened in February 2022. It was designed by Atelierone, and operated by Young Hackney, our Early Help service for young people aged between 6 and 19 (or up to 25 for people with special education needs and/or disabilities). The facility demonstrates best practice across energy use (EPC A), construction and materials, public amenity and biodiversity.

Transport

Transport is responsible for 6% of the borough's emissions. Even though over half of all trips starting in Hackney are by walking or cycling, the vast majority (70%) of transport related emissions are from private cars and motorbikes. This theme explores Hackney's aim to be a model for sustainable urban living in London, with high levels of cycling and walking, accessible and resilient public transport networks and provision for low carbon vehicles.

Goals and Objectives

Transport-related emissions will be reduced by increasing rates of walking and cycling, reducing the use of carbon intensive vehicles and encouraging the use of lower carbon energy or fuel sources. A shift away from private vehicle usage will also help reduce the amount of traffic and congestion on the roads supporting the Mayor of London's target to reduce car vehicle km by 27% by 2030 (based on a 2018 baseline), improve local air quality and provide opportunities to free up public space for other greener uses.

Hackney's streets will continue to be enhanced through a combination of physical changes to the environment that prioritise walking, cycling and public transport. These will be supported by complementary measures such as cycle training, route mapping/assessments, road safety measures (also see the Hackney Local Implementation Plan 2022–2025), education in schools, behaviour change campaigns, inclusive design, security, as well as traffic restraint and transport demand management policies such as car-free development and road user charging.

LTNs and School Streets have been proven to reduce overall traffic and air pollution and increase rates of walking and cycling – all without affecting bus speeds and waiting times. Road and parking spaces can also be replaced with pocket parks and sustainable urban drainage networks opening up Hackney's roads for cleaner uses. These measures also help make routes safer for pedestrians, cyclists and wheelchair users, as well as helping to support the overheating and flood resilience goals under the 'Adaptation' theme.

In line with the movement hierarchy set out in the Hackney Transport Strategy 2015-2025, the needs and safety of pedestrians should be prioritised followed by that of cyclists and public transport users. Ensuring the safety of those who choose to walk or cycle will be crucial as will the affordability of public transport. For those people who still need to travel by car, they will be encouraged to adopt less polluting electric vehicles or use car sharing services. The Council aims to have over 3,000 EV charge points by 2026 to encourage this transition. Reducing emissions from all vehicle fleets will also play a role, as well as reducing levels of through traffic associated with freight transport.

Hackney businesses will be able to reduce emissions from their own transport by supporting innovative last mile delivery solutions, cargo bike sharing and freight consolidation.

The goals and objectives in the following table should be read in conjunction with the Hackney Local Implementation Plan 2022–2025.

Table 7: Goals and Objectives for Transport

2030 collective goals[32]	Is the goal 1.5ºC-aligned? [33]	3-year objectives
Walking and Cycling		
At least 59% of journeys that start in Hackney are on foot or by bike, compared to 53% in 2020.	Yes	Increase rates of walking and cycling.
		Expand cycling infrastructure and promote opportunities for green infrastructure on cycle corridors.
Clean Fuels		
Most petrol and diesel vehicles have been phased out: 64% of cars and 68% of vans on the road are battery-powered.	Yes	Expand the EV charging network, both on street and in commercial and domestic settings.
		Reduce transport greenhouse gas emissions from Council, business and institutional vehicle fleets.
Car and Motorbike Traffic		
Only 5% of trips that start in Hackney are by private car or motorbike, compared to 13% in 2020.	Yes	Increase the use of car sharing and other types of shared mobility.
		Improve the accessibility of public transport.
		Research the feasibility and viability of introducing Road User Charging in Hackney.
Freight & Delivery Traffic		
Freight traffic is 10% lower than in 2019, with more alternative delivery models on the road – such as cargo bikes.	Yes	Reduce freight traffic.
		Increase the uptake of alternative delivery systems.

[32] These are the goals that we aim to achieve, collectively, in Hackney by 2030. This will require actions by all stakeholders: community groups and organisations; businesses and institutions; residents; the Council and central government.

[33] 1.5ºC alignment means that meeting this goal is consistent with Hackney contributing to only 1.5ºC of global warming, in line with the Paris Agreement.

2030 collective goals[32]	Is the goal 1.5ºC-aligned? [33]	3-year objectives
Green & Resilient Streets		
Road space currently used for parking has been reduced to support the promotion of walking, cycling and climate resilience.	N/A	Convert roadside parking spaces to public realm, SuDS and other uses.
		Expand the network of school and play streets.
		Plan for future changes that can reduce motor traffic.
Green Economy		
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs	N/A	Increase the number of Hackney businesses and jobs that contribute to the green economy, including through regeneration delivery programmes and procurement.
		Create green apprenticeships and training pathways, with a focus on disadvantaged groups.
		Ensure Hackney residents have the skills for and access to training and job opportunities linked to the green economy.
		Support Hackney businesses and partners to decarbonise.
		Attract new green businesses into the borough.
		Reskill, retrain and/or recruit staff to meet the needs of the climate emergency.

How will Hackney Council support the three year Objectives?

The Council's Implementation Plan provides a more detailed set of key proposed actions for the Council to undertake over the next three years that contribute to delivering the goals and are aligned with specific objectives. Whilst these actions are the headlines, they are not the sole lever to achieve progress.

There are a range of subsidiary plans which support the delivery of the Council's climate response. In respect of Transport these include: the Air Quality Action Plan, Green Infrastructure Strategy, Parking and Enforcement Plan, Hackney Transport Strategy and Local Plan amongst others.

Over the following three years Hackney Council will undertake the following to support the Transport Goals and Objectives:

- Develop and consult on an updated Transport Strategy.
- Develop a Main Roads Strategy to plan new ways of reducing traffic and improving air quality on key routes through the borough.
- Offer cycle training to 6,000 children at the primary and secondary school level.
- Complete the delivery of a School Street or traffic calming measure at 100% of Hackney's state primary and secondary schools, and School Streets at six Independent Schools.
- Deliver a communications campaign to promote walking and cycling.
- Continue installing EV charging points to provide 3,000 accessible charging points by 2026.
- Replace 10% of the Council's diesel fleet with electric vehicles, bikes and e-bikes.
- Expand the Zero Emissions Network to cover the whole of Hackney.
- Deliver accessibility upgrades at bus stop networks and streetscapes at rail stations.
- Review at least five bus interchange stops per annum in meeting user needs.
- Introduce shared mobility infrastructure at 10 transport nodes within high demand areas and LTNs.
- Deliver 100 additional car club vehicles – 50% of car club cars to be electric.
- Increase proportion of low traffic streets in Hackney, subject to investigation and engagement – target of 75% of all eligible roads in Hackney to be within an LTN.
- Create 12 cargo bike hubs.
- Undertake a feasibility study, options appraisals and impact assessment for Road User Charging.
- Publish a Freight Reduction Action Plan.
- Continue to expand the cycle hanger network with 4,000 new cycle spaces by 2026.
- Convert 2,700 parking spaces into alternative forms of public spaces such as pocket parks, sustainable urban drainage solutions, green links, cycle lanes and cycle hangars.
- Implement a minimum of 15 smaller scale SuDS schemes across Hackney to address local surface water drainage issues.

Case study: Low Traffic Neighbourhoods and School Streets

Hackney Council has implemented one of the most ambitious active travel programmes in the country in an effort to create a greener borough and tackle transport emissions. Nineteen LTNs and 48 new School Streets, have already been introduced. Hackney now has more School Streets and LTNs combined than any other local authority in the UK.

The LTN and school streets programmes have resulted in traffic reductions and air quality improvements, as well as increases in our walking and cycling rates and improvements in road safety. Across the four biggest low traffic neighbourhoods, emission reductions of 15,000 tCO_2e per year have been achieved. Bus speeds and waiting times have not been affected by the introduction of LTNs,[34] and a quarter of people in Hackney report walking or cycling more following their introduction.[35]

[34] Overall bus performance in Hackney unaffected by low traffic neighbourhoods
[35] A quarter of Hackney residents say they're walking or cycling more following LTNs

Case study: Bike sharing

Hackney has been at the forefront of new cargo bike and e-bike sharing schemes in the UK.

Cargo Bike Share

The first publicly-available cargo bike sharing scheme in the country was launched in Hackney in 2021. Eight new electrically assisted cargo bikes were deployed at four docking stations across Hackney, with two in Shoreditch, close to the borders with Islington and Tower Hamlets, one in London Fields and one in Stoke Newington. Each of the e-cargo bikes are capable of carrying up to 80kg – and can be used for shopping, deliveries and moving small items of furniture.

Dockless cycle hire

A new Lime dockless cycle hire scheme was launched in Hackney in 2022. This aims to support people who don't own a bike to cycle more. To support the new service and keep pavements accessible for people with visual or mobility impairments, 70 new dockless bike bays have been installed in place of car parking spaces. Lime bikes in Hackney must be picked up or dropped off from these bays.

Case study: Rain gardens in Hackney

Since 2018, more than 43 Sustainable Drainage System (SuDS) schemes have been implemented across Hackney. These SuDS or rain gardens are areas of ground with trees and low level planting which capture surface water, mimic natural infiltration and prevent overloading of the drainage system. Rain gardens additionally enhance the appearance of the public realm and can support actions to improve air quality. Since 2018, more than 3,700 sqm of hard paving area in Hackney has been replaced by soft landscape, safely accommodating water run off from the surrounding surfaces and diverting it from the main drainage system.

Consumption

73% of Hackney's total greenhouse gas emissions are associated with the goods and services we buy and use. Most are created in places outside of Hackney, for example in factories, farms and the transport networks used to bring goods into the borough. Individuals and organisations can still influence the reduction of these emissions through changing behaviours. We can all reduce consumption: buying less; endeavouring to reuse and repair our goods to extend their lifetime. In addition, changes to how we eat and manage our money, prioritising plant-based food where possible and investing in green businesses also offer opportunities. Actions in this theme will help reduce the environmental impact of the things we buy and use and drive the new green economy in Hackney. This is not limited to emissions but also impacts on global biodiversity and pollution.

Goals and Objectives

Changing how we all supply, buy, use and dispose of the goods and services we need is essential to reduce emissions and move towards a more circular economy. Awareness raising campaigns about the emission impact of consumption habits is critical to tackling the behaviour change needed. Gaining a better understanding of what consumption emissions are, and where they are concentrated in Hackney, is an important first step. The Council, larger businesses and institutions can use their purchasing power to reduce consumption emissions by prioritising emissions reduction requirements within internal procurement and management processes. Services to maintain, repair and reuse goods, including projects like the Library of Things, and clothes, electrical and bike repair workshops, help reduce the need to buy new and replace items so often. Good recycling and composting services ensure that anything that can't be reused does not enter the waste stream.

Awareness campaigns about sustainable and healthy foods help to expose the environmental impact of food supply. Meat production, for example, is responsible for over 7% of emissions in Hackney. Food poverty must also be taken into account to ensure everyone has access to healthy, affordable and more sustainable options. The Council and others are incorporating sustainability into its food poverty programmes, working closely with the Greater London Assembly Food Roots Incubator programme and promoting existing schemes such as healthy start vouchers, which encourage purchasing vegetables and fruit for healthy, low-carbon food choices.

How we all spend and save money also affects emissions, investments by Hackney residents and businesses account for around 17% of borough-wide emissions, since many banks and pension funds still invest in carbon-intensive activities. These can be reduced by raising awareness of how to invest money in more sustainable funds, lowering exposure to fossil fuel reserves owned by energy companies and opening up more avenues for investments in local decarbonisation projects and community wealth funds. The Council will continue to reduce the carbon footprint of its own pension fund, as well as increase investment in assets that help avoid carbon emissions, whilst encouraging others to do the same.

Table 8: Goals and Objectives for Consumption

2030 collective goals[36]	Is the goal 1.5ºC-aligned? [37]	3-year objectives
Consumption Emissions		
Residents, businesses and partners make low carbon procurement choices contributing to a 2/3 reduction in average total national consumption emissions, with more products being repaired and reused to extend their useful life.	Yes	Increase repair and reuse of goods (electronics, clothing, furniture and more).
		Embed actions to reduce consumption related emissions into internal procurement and management processes for the Council, businesses and institutions.
		Raise the awareness of residents of the impact and diversity of consumption emissions and how moving towards a more circular economy benefits them.
Waste		
Residents and businesses have actively reduced annual residual waste generation and there is increased participation in recycling and composting programmes, with avoidable food waste 50% less than in 2020.	N/A	Reduce household waste arisings and improve recycling rates.
		Reduce business waste arisings and improve recycling rates.
		Maximise rates of food waste composting in households and businesses.
Food		
Healthy, plant-based diets are widespread, with reduced rates of food poverty.	N/A	Reduce food poverty and enable equitable access to healthy and more sustainable diets for all.

[36] These are the goals that we aim to achieve, collectively, in Hackney by 2030. This will require actions by all stakeholders: community groups and organisations; businesses and institutions; residents; the Council and central government.

[37] 1.5ºC alignment means that meeting this goal is consistent with Hackney contributing to only 1.5ºC of global warming, in line with the Paris Agreement.

2030 collective goals[36]	Is the goal 1.5°C-aligned? [37]	3-year objectives
Healthy, plant-based diets are widespread, with reduced rates of food poverty.	Yes	Procure sustainable and healthy foods in Council, school, healthcare, leisure and other institutional settings, and influence local businesses to do the same.
		Increase public awareness and understanding of healthy and more sustainable diets.
Investments & Finance		
Half of residents', partners' and businesses' pensions and investments in Hackney are fossil-free, and local wealth is distributed to local, sustainable and cooperatively-run projects.	Yes	Raise awareness of the environmental impact of finances.
		Increase opportunities for funding local emissions reduction projects.
		Reduce the carbon footprint of the Council's Pension Fund and encourage others to the same.
Green Economy		
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs.	N/A	Increase the number of Hackney businesses and jobs that contribute to the green economy, including through regeneration delivery programmes and procurement.
		Create green apprenticeships and training pathways, with a focus on disadvantaged groups.
		Ensure Hackney residents have the skills for and access to training and job opportunities linked to the green economy.
		Support Hackney businesses and partners to decarbonise.
		Attract new green businesses into the borough.
		Reskill, retrain and/or recruit staff to meet the needs of the climate emergency.

How will Hackney Council support the three year Objectives?

The Council's Implementation Plan provides a more detailed set of key proposed actions for the Council to undertake over the next three years, that contribute to delivering the goals and are aligned with specific objectives. Whilst these actions are the headlines, they are not the sole lever to achieve progress. In respect of consumption, which is a diverse range of sources, the Council has prioritised areas where it has strong levers to effect change such as waste, food, procurement and the circular economy.

There are a range of subsidiary plans which support the delivery of the Council's climate response. In respect of Consumption these include: Reduction and Recycling Plan, Sustainable Procurement Strategy and Local Plan amongst others.

Over the following three years Hackney Council will undertake the following to support the Consumption Goals and Objectives:

- Achieve household recycling rates of 28% and a commercial recycling rate of 24% through increased participation in recycling services and reductions in non-recyclable waste arisings.
- Increase schools participation in dry and organic recycling services to 75%.
- Provide access to food waste collection services for all households in Hackney.
- Introduce climate friendly menus in 25 schools.
- Create a minimum of 9 new community food growing areas on housing estates.
- Undertake a review of where consumption emissions are concentrated in Hackney and develop a set of recommendations to reduce these emissions with supporting guidance for households and businesses.
- Increase the user rates of Library of Things to 1,000 people per year.
- Produce a Circular Economy action plan.
- Develop and implement two circular economy zones for businesses.
- Develop green bond community wealth investment proposals.
- Adopt an updated Sustainable Procurement Strategy.

Case study: Library of Things

In 2021, an object-lending library – the Dalston Library of Things (DLot) – was established by Hackney Council in partnership with the Library of Things. Residents can hire items from this library that they would otherwise have to purchase. The scheme helps minimise unnecessary waste, reduces the ecological footprint of the borough, frees-up space in people's homes, and avoids the need to purchase items that are used infrequently.

DLoT provides 49 high-quality items for residents to hire and is the largest of the six LoTs across London. Residents can select items among different categories such as cleaning, cooking, DIY tools, gardening, electronics, furniture, medical equipment, music, sports, toys and games, and hobbying. Residents hire items at an average of 7.5% of the retail price. DLoT provides a 25% concession rate discount to students, pensioners, people not working, and households with no/low income. By March 2023, DLoT had recorded 200 borrows, the highest any Library of Things location has recorded in a single month.

Case study: Fashion Swaps

Hackney Clothes Swap Shops are free community exchange events, which offer residents the opportunity to swap unwanted, but good condition, clothes and accessories in exchange for something else they need. The swaps are an effective way of encouraging textile reuse within the local community, preserving valuable resources, and diverting clothes from direct disposal. Clothing repair sessions are also provided and sustainable fashion is promoted (e.g. using second hand clothes shops, upcycling, the importance of organic cotton, rental schemes, etc).

Since 2019, 12 swaps have taken place which collected and exchanged approximately 8,000 pieces of clothing. This has prevented over 11 tonnes of good quality clothing items from going to direct disposal and 101 tonnes of carbon emissions entering the atmosphere. Nearly £112,000 savings have been passed to the community with over 1,500 individuals participating in these swaps.

Environmental Quality

Climate change accelerates ecological decline and can exacerbate the pollution of our air and water. Changing weather patterns and shifting seasons disrupt ecological cycles, air pollution gets worse during heatwaves, and summer storms wash contaminants into our rivers and canals. Protecting, improving and increasing the borough's green infrastructure can tackle some of these problems, while also helping to reduce temperatures and flood risk. Spending time outdoors in green spaces or good quality public realm has proven benefits for both physical and mental health, and can help overcome isolation and increase opportunities to connect with others, but can be curbed by poor air quality, noise or lack of shade or shelter. This theme outlines actions to protect and improve Hackney's natural environment, air and waterways and to support community groups and landowners to improve health and wellbeing.

Goals and Objectives

The Hackney Air Quality Action Plan 2021-2025 states that 7% of all deaths of people over the age of 30 in Hackney can be attributed to air pollution, compared to 5.2% in England. Air pollution has been linked with lung cancer, respiratory conditions (such as asthma) and cardiovascular disease, as well as emerging evidence for associations with low birth weight, Type 2 diabetes and dementia. The estimated costs of air pollution to local healthcare services were over £50m in 2019.

Many of the actions in the Transport and Buildings themes will have the greatest impact on improving air quality through reducing fossil fuel use in buildings (which contribute 15% of Hackney NO_x emissions), and vehicles (which are 64% of Hackney NO_x emissions). But there are also other ways to tackle pollution from construction (which contributes 9% of NO_x emissions in Hackney, and 37% of PM_{10} emissions)[38], and the burning of solid fuel, like wood. These include tightening pollution controls during construction, raising awareness of the dangers of solid fuel burning and providing advice on alternative, low pollution activities.

Hackney as a whole is a relatively green borough with some 359 hectares of publicly accessible open space, but these are unevenly distributed. There are opportunities to increase their ecological value and design, and manage them to mitigate some of the impacts of climate change. Community groups are often at the forefront for change in greening local spaces and driving action. It's essential that we work with these groups, along with other stakeholders, to protect, expand and enhance Hackney's green infrastructure. Hackney's Green Infrastructure Strategy and the associated Hackney Local Nature Recovery Plan provides the framework for achieving this.

There are many water bodies in Hackney. Improving water quality requires stakeholders responsible to monitor and manage these assets effectively. Thames Water and the Environment Agency must invest more resources in both monitoring and rectifying the major sources of pollution. The Council can ensure the drainage infrastructure is regularly maintained to avoid any build up of potential pollutants, use its planning powers to protect water bodies from development, and make sure new development does not contribute further to the pollution of water-courses or groundwater.

[38] London Atmospheric Emissions Inventory (LAEI) 2016

Thames Water has warned that Londoners need to reduce water consumption from an average of 142 litres/person/day in 2020 to 124 l/p/d in 2045 to accommodate depleting water resources and a growing population.[39] By 2030, Hackney residents will need to reduce water consumption to 135 l/person/day to meet the 2045 target. This can be achieved through behaviour change and installing water efficient fittings, but still requires utility companies to fix leaks, which accounts for 27% of water demand in London.[40]

Table 9: Goals and Objectives for Environmental Quality

2030 collective goals[41]	**Is the goal 1.5ºC-aligned?** [42]	**3-year objectives**
Air Quality		
The association between inner-London living and poor air quality has been broken, with Hackney meeting World Health Organisation Air Quality targets.[43]	N/A	Reduce air pollution from development and construction.
		Reduce solid fuel burning and raise awareness of its contribution to air pollution.
		Improve awareness of the impact of air pollution on public health.
Biodiversity		
Significant ecological improvements have been achieved in all the areas identified in the Hackney Local Nature Recovery Plan.	N/A	Enhance habitats in managed green spaces to support biodiversity.
		Increase connectivity between green spaces by supporting others to create new habitats and green corridors.

[39] Water Resources Management Plan 2019

[40] Section 3 - Water Resources Management Plan 2019

[41] These are the goals that we aim to achieve, collectively, in Hackney by 2030. This will require actions by all stakeholders: community groups and organisations; businesses and institutions; residents; the Council and central government.

[42] 1.5ºC alignment means that meeting this goal is consistent with Hackney contributing to only 1.5ºC of global warming, in line with the Paris Agreement.

[43] Goals and objectives related to improving air quality cut across multiple themes, please also refer to actions in Transport and Buildings which will further support improvements in local air quality.

2030 collective goals[41]	Is the goal 1.5°C-aligned? [42]	3-year objectives
Significant ecological improvements have been achieved in all the areas identified in the Hackney Local Nature Recovery Plan.	N/A	Support community groups and individuals to volunteer to benefit nature, drawing on their knowledge and expertise.
		Review Council operations and decision-making processes to meet the requirements of the 'biodiversity duty' within the Environment Act.
Water		
Water bodies in Hackney achieve 'Good' ecological status. Average water demand is reduced to 135 l/person/day, including reducing water lost through leaks by 22% compared to 2020.	N/A	Ensure all new development immediately adjacent to rivers, canals or waterbodies contribute to achieving good ecological status.
		Support Thames Water campaigns to reduce water consumption, whilst also lobbying them to reduce leakage levels and avert pollution discharges into local water bodies.
		Improve water body health through maintenance of surface water drains and promotion of sustainable urban drainage.
Green Economy		
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs.	N/A	Increase the number of Hackney businesses and jobs that contribute to the green economy, including through regeneration delivery programmes and procurement.
		Create green apprenticeships and training pathways, with a focus on disadvantaged groups.
		Ensure Hackney residents have the skills for and access to training and job opportunities linked to the green economy.
		Support Hackney businesses and partners to decarbonise.

2030 collective goals[41]	Is the goal 1.5°C-aligned? [42]	3-year objectives
Double the size of the local green economy, with an ecosystem of net zero businesses and more residents working in good quality, green jobs.	N/A	Attract new green businesses into the borough.
		Reskill, retrain and/or recruit staff to meet the needs of the climate emergency.

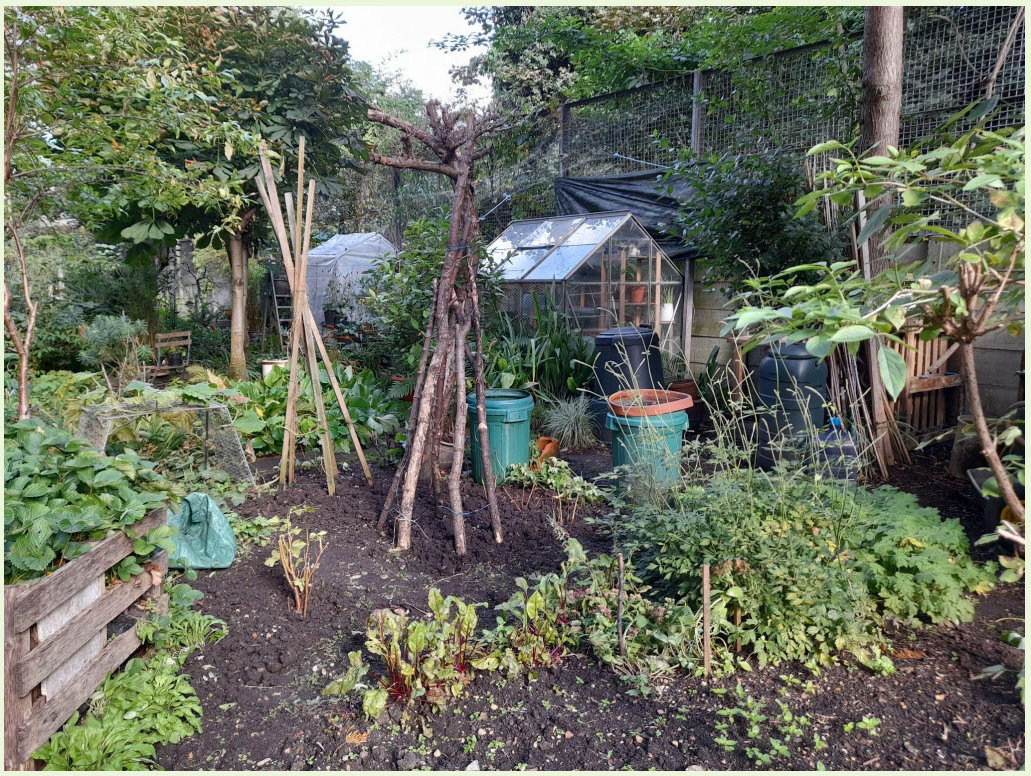
How will Hackney Council support the three year Objectives?

The Council's Implementation Plan provides a more detailed set of key proposed actions for the Council to undertake over the next three years that contribute to delivering the goals and are aligned with specific objectives. Whilst these actions are the headlines, they are not the sole lever to achieve progress.

There are a range of subsidiary plans which support the delivery of the Council's climate response. In respect of environmental quality these include: the Air Quality Action Plan, Transport Local Implementation Plan, Green Infrastructure Strategy, Local Nature Recovery Plan, Parking and Enforcement Plan, Hackney Transport Strategy, Contaminated Land Strategy and Local Plan amongst others.

Over the following three years Hackney Council will undertake the following to support the Environmental Quality Goals and Objectives:

- Adopt the Green Infrastructure Strategy and implement alongside others.
- Adopt the Local Nature Recovery Plan and implement alongside others.
- Implement new Biodiversity Net Gain planning requirements from November 2023 onwards.
- Install green screens at an additional 28 schools.
- Improve habitats and wildlife spaces via green corridor enhancements where the Council is the landowner or has influence.
- Deliver air quality awareness campaigns for vulnerable residents and visitors.
- Build on existing ‘weedkiller free zone’ trials to reduce the use of harmful weedkillers.
- Continue to participate in the Lea River Catchment Partnership and through improved joint working with relevant stakeholders increase its impact.
- Clean 11,000 gully pots annually to reduce diffuse pollution.
- Develop planning guidance for reducing emissions (particulates and NOx) during construction and demolition.
- Deliver a communications campaign on the health impacts of wood burning and raise awareness of the regulatory requirements for burning and supplying solid fuel.
- Integrate environmental quality theme considerations as part of reviewing parks management plans.
- Develop and consult on an updated Transport Strategy.



Case study: Community gardening and planting groups

Hackney has a long-tradition of conserving wildlife, much of it led and delivered by community groups and volunteers.[44] Over the last decades, wildlife conservation in Hackney has been bolstered by many community-led projects aiming to increase opportunities for wildlife in parks, on housing estates, along the canal, and in private gardens.

The Local Nature Recovery Plan highlights some of the examples of community-led projects that are delivering local nature recovery at the neighbourhood level through collaboration between residents, tenants management organisations and private land-owners under the guidance of local environmental groups.

Wenlock Barn Estate
Like many estates in Hackney, the Wenlock Barn Estate has many underused grass areas. The Growing Kitchen community garden is a growing space started by residents. The site has transformed into a space for organic food growing but also a haven for wildlife. The herbs, vegetables and fruits provide forage for pollinators and the once booming slug and snail population are now contained by common toads and smooth newts. Bats feed over the pond at night and it's used for drinking and bathing by house sparrows, blue, great and coal tits, dunnock, robin, wrens, blackbirds and more recently long tailed tits.

[44] Local Nature Recovery Plan - Section 5

The Role of Central and Regional Government

The Climate Change Committee (CCC) is a non-departmental public body that advises central government on the climate, and publishes progress and advisory reports. They stated in their Sixth Carbon Budget (published 9th December 2020), that decarbonisation can only be achieved if central government, regional agencies and local authorities work seamlessly together.[45]

They believe that more than half of the greenhouse gas emissions cuts needed rely on people and businesses taking up low carbon solutions – decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of greenhouse gas emissions in their local areas, but have significant barriers to deliver the climate response required.

The role of central government

In 2018, central government set the UK's first net zero target, to be reached by 2050, the first major economy to pass this into law.[46] This ambitious plan will impact how the UK produces goods and services, how people move around the country and how people heat homes. To guide this transition, central government published their Net Zero Strategy, which sets out UK policies and proposals to reduce greenhouse gas emissions for each sector. Most recently the government has released an extensive suite of documents entitled Powering up Britain which set out the UK's new energy plan including support for carbon capture projects, nuclear energy, offshore windfarms, electric vehicles, home heat pumps and hydrogen power amongst others. Its ambition is to make the UK more energy independent, reducing the impact of volatile international energy markets, while underpinning a clean energy transition, so the UK becomes a net zero economy by 2050.

The UK has reduced its greenhouse gas emissions by 47% below 1990 levels, 447 $MtCO_2e$ in 2021. These include the UK share of international aviation and shipping greenhouse gas emissions. Along with this good progress, there are further plans to decarbonise the national grid by 2035,[47] through the use of more wind, solar and nuclear power. This will decarbonise the existing electricity usage as well as clear the way for electrification of heat, moving away from fossil fuels to heat homes. This shows strong leadership as well as reducing the barriers to support the decarbonisation in local areas.

[45] Local Authorities and the Sixth Carbon Budget - Climate Change Committee
[46] UK becomes first major economy to pass net zero emissions law - GOV.UK
[47] Plans unveiled to decarbonise UK power system by 2035 - GOV.UK

Although greenhouse gas emissions from energy generation have fallen sharply in recent years, other key sectors such as transport and buildings continue to lag. This is further exacerbated by inadequate government subsidies to encourage heat pump take up, reduced subsidies for electric vehicles, cutting air passenger duty on domestic flights, failing to tax flying effectively to encourage train travel, or using carbon taxes as an instrument to drive change.

Borough-wide, collective action, with support from central government and the Council using its powers to unlock wider change will be needed. The climate emergency can and will be solved by collective action at all levels, with local authorities supporting and facilitating local stakeholders, helped, funded and guided by central UK policy.

Historic UK greenhouse gas emissions

According to the latest CCC reports,[48] the UK has cut its greenhouse gas emissions in the last decades. The UK greenhouse gas emissions were 447 $MtCO_2e$ in 2021, which were 47% below 1990 levels. There was a decrease of 10% on 2019 greenhouse gas emissions but an increase of 4% on 2020, as greenhouse gas emissions in 2020 had been significantly impacted by the response to the COVID-19 pandemic, see Figure 8. Action to address economic recovery and respond to the rising cost of living should be aligned with net zero. There remains an urgent need for equivalent action to reduce demand for fossil fuels to reduce greenhouse gas emissions and limit energy bills.

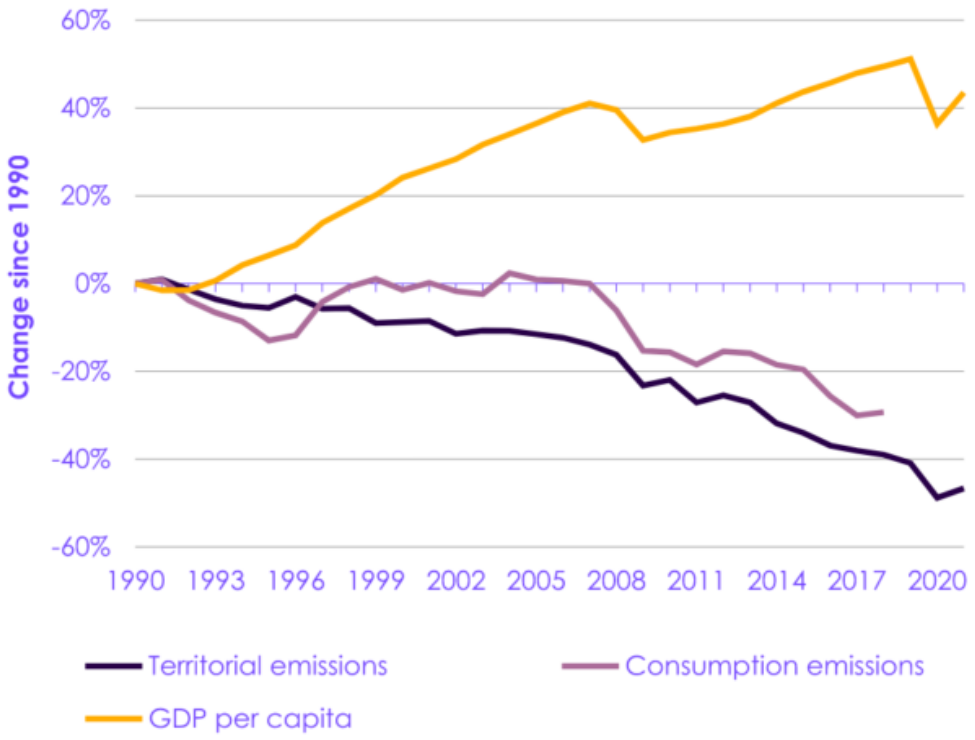


Figure 8: The UK's historical greenhouse gas emissions and GDP.

[48] 2022 Progress Report to Parliament - Climate Change Committee

UK Sixth Carbon Budget

The CCC also provides a national recommended Carbon Budget (i.e. the limit for UK net greenhouse gas emissions of greenhouse gases over the years 2033-37), which acts as stepped reduction targets to achieve the central government net zero target of 100% reduction by 2050. The latest is the Sixth Carbon Budget, outlining the required greenhouse gas emissions reductions, along with the current policy gap to help the country achieve them.

The Sixth Carbon Budget should be set at 965 $MtCO_2e$, implying a 78% reduction from 1990 to 2035 as shown in Figure 9. If this budget is met it would reduce the UK's annual per capita greenhouse gas emissions by 2035 to under 3 tCO_2e per person, in line with global pathways consistent with meeting the Paris 1.5°C goal. In 2017.

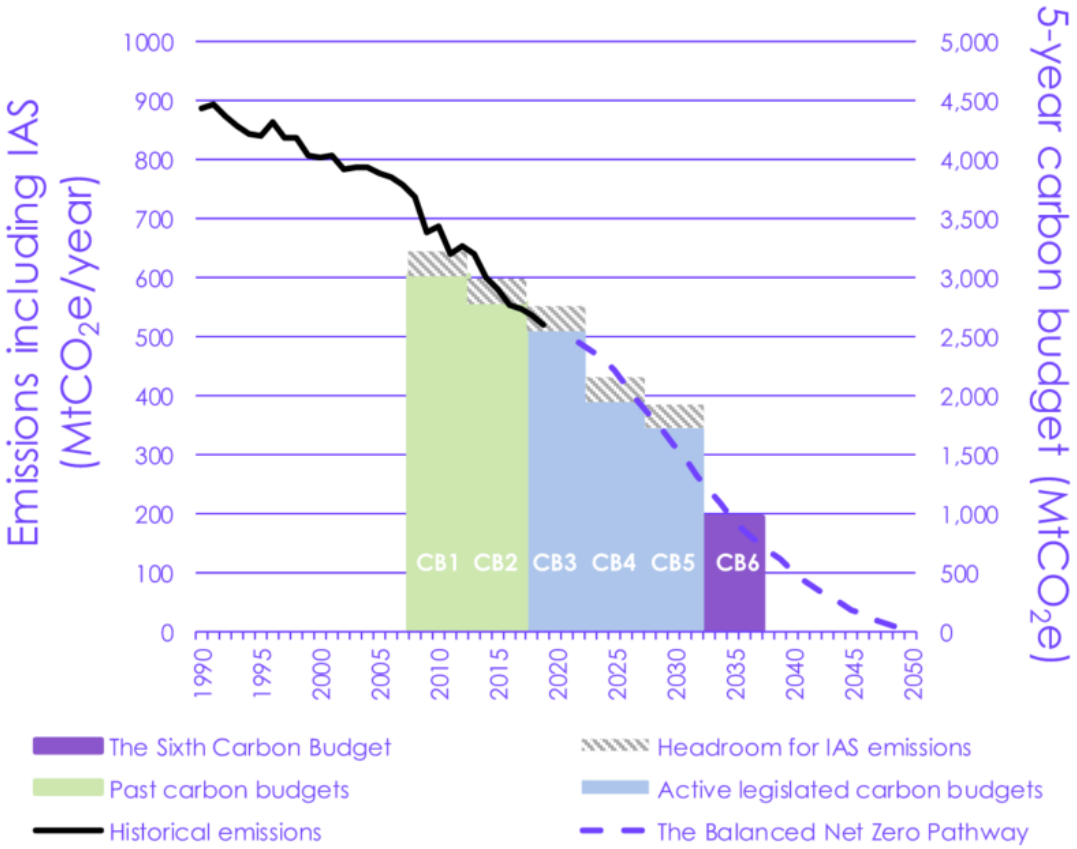


Figure 9: The recommended Sixth Carbon Budget.

UK wide progress on net zero 2050 targets

The CCC also provides annual progress reports; their latest Climate Change 2022 Progress report to Parliament states that, although central government now has a Net Zero Strategy in place, important policy gaps remain. Tangible progress is lagging the policy ambition. With a greenhouse gas emissions path set for the UK and the Net Zero Strategy published, greater emphasis and focus must be placed on delivery.

This outlines the importance and relationship between central government, creating top-down policies and the bottom-up implementation of local stakeholders. Everyone has a part to play, but critically climate action cannot be achieved by working within the borough's boundary only.

The following points are status updates from the CCC closely related to the CAP themes. It outlines the current positive progress made but also the gaps where further action is needed from central government in order to decarbonise the UK. These will need to continue to be included within lobbying efforts, in collaboration with other local authorities amongst others:

- **Surface transport –** the CCC suggests clear progress has been made in the sales of electric cars, although electric van sales are lagging behind. However, car travel rebounded much more quickly and completely following the lifting of lockdown restrictions than public transport did, and van and heavy goods vehicle (HGV) traffic rebounded to above pre-pandemic levels. Development of charging infrastructure for electric vehicles is not making fast enough progress.
- **Buildings –** Rates of improvement in energy efficiency continue to be well below the necessary level, as they have been over the last decade. Central government proposes to scale up the market for heat pumps over the 2020s to achieve at least 600,000 installations a year, up from around 54,000 in 2021. Indicators of supply chain build-up will be needed to track whether this is progressing as planned. Additional limitations are the cost of retrofitting, mainly weighted towards the homeowner and the potential difficulties of retrofitting in older properties, including those listed or in conservation areas.
- **Electricity supply –** Deployment of renewable electricity capacity, especially offshore wind, has been strong. Additional renewables and nuclear power are needed to meet the 2035 national grid decarbonisation goals.

Major risks

The CCC does however outline several major risks to the UK achieving its targets, the most relevant are as follows:

- **Policy gap –** There are policy gaps associated with 57% of future greenhouse gas emissions reductions.
- **Public engagement –** The central government Net Zero Strategy recognised the need for public engagement, but it is unclear how commitments will be implemented for public-facing advice, supporting businesses, increasing awareness and making green choices affordable and easy.
- **Governance –** Embedding and integrating net zero and climate adaptation properly across the policy landscape is vital to the delivery of central government's Net Zero Strategy. Responsibilities are needed between central government departments, the regulators, devolved administrations, the GLA, and industry for the actions and interactions on the path to net zero.
- **Skills –** Workers will need to develop new skills to fill the needs of new low carbon markets. However, evidence on skills requirements and current employment in key occupations (e.g. home retrofit coordinators) is limited. Availability of skilled workers therefore poses a risk for the net zero transition.

The role of regional government

The Greater London Authority Act 1999 sets out environmental improvement and sustainable development as core to the Mayor's role. They also have a duty to publish a 'London Environment Strategy' which covers an assessment of – and policies related to – biodiversity, waste management, climate change mitigation and energy, climate change adaptation, air quality, and ambient noise. Some of the most visible powers of the Mayor are in their control of London's transport network, which gives them enormous scope to tackle carbon emissions and the capital's dirty air, alongside substantial powers over planning, although the role does not have significant responsibility for land management in the capital.

The Mayor of London has set a target for London to be net zero carbon by 2030 and selected a preferred pathway to net zero – the Accelerated Green pathway. Amongst other things, achieving this will require:

- Nearly 40 per cent reduction in the total heat demand of London's buildings, requiring over 2 million homes and a quarter of a million non-domestic buildings to become properly insulated.
- 2.2 million heat pumps in operation in London by 2030.
- 460,000 buildings connected to district heating networks by 2030.
- A 27 per cent reduction in car vehicle km travelled by 2030.
- Fossil fuel car and van sales ended by 2030 and enforced in line with the government's existing commitments.

Regional and National asks

To support the delivery of the Goals and Objectives of the CAP, there are a series of key asks from regional and central government.

Table 10: Hackney's lobbying priorities to central and regional government

Theme	We need stakeholders to…	Who
Adaptation	• Include climate risks in emergency risk registers and frameworks. • Fully embed the significant co-benefits for communities from practical responses to adaptation needs into government decision making on adaptation and the assessment of responses to the risks. • Respond to the social justice impacts of what is already happening now in respect of the impacts of a changing climate needs to be more embedded in the overall approach to adaptation.	Central government (National Risk Register).
Buildings	• Create an easy-to-access national programme of incentives, affordable or zero interest loans, VAT rate reductions and grants to help people cover the upfront costs of retrofitting and installing new heat sources. • Establish requirements and incentives for private and landlord retrofitting, including green mortgages and a fiscally neutral, variable Stamp Duty Land Tax for more efficient homes. • Enable flexibility in the business rates system to incentivise decarbonisation measures on business premises. • Introduce bolder and more ambitious operational and embodied carbon greenhouse gas emissions reporting and reduction requirements in building regulations and the National Planning Policy Framework. • Provide strategic direction and planning powers linked to prioritising refurbishment over demolition where appropriate and feasible. • Establish circular economy requirements for major and minor applications, including in relation to reuse and refurbishment in preference to demolition where possible.	Central government (BEIS, HMRC, Treasury, DLUHC).

Theme	We need stakeholders to…	Who
Transport	• Rework national VAT structures and provide grants to prioritise clean fuel technologies, such as e-bikes and EV chargers. • Remove night-time freight routes in the borough and provide access to detailed public transport data. • Reduce public transport fares. • Invest in electric vehicle charging infrastructure, and digital connectivity to facilitate and encourage more permanent and flexible work practices. • Introduce comprehensive, effective and fair road user charging that reduces traffic volumes and congestion.	Central government (BEIS, HMRC) Transport for London.
Consumption	• Introduce requirements and standards for Consumption Emissions/Scope 3 assessments and reductions at organisational and local authority level. • Update food poverty and healthy diet policies and national programmes to include climate-friendly options. • Restrict the availability of non-essential single-use plastic items and all oxo-degradable products, and implement Extended Producer Responsibility legislation and new enforcement powers to promote recycling without further delay.	Central government, Defra, Environment Agency, Greater London Authority.
Environmental Quality	• Meet existing water body quality targets and introduce stricter management, monitoring and enforcement related to water body health. • Set more challenging targets for air pollution across London and England based on the WHO Air Quality Guidelines. • Update the National Planning Policy Framework to empower local authorities to adopt planning policies commensurate with the climate and ecological emergency.	Environment Agency, Defra, Greater London Authority.

Theme	We need stakeholders to…	Who
Cross-cutting	• Oversee rapid national grid decarbonisation and reinforcement programmes and fossil fuel phase-out legislation. • Provide funding and coherent cross-department support on local climate action, for example reforming vehicles like the UK Shared Prosperity fund to include opportunities at local government level and simplifying the application process for schools and other public sector organisations. • Support area-wide planning for regional delivery of energy, transport systems and building retrofit. • Join up the National Skills Fund, the National Retraining Scheme and the Apprenticeship Levy at local level and align this with place-based employment, decarbonisation and business support systems. • Social justice and the just transition is rarely considered in central government climate plans and strategies. Support for vulnerable groups and those most affected by climate action and the physical impacts of the emergency must be embedded into all plans and initiatives.	Central government (BEIS, HMRC, Treasury, DLUHC), National Grid and DNOs, Transport for London, Environment Agency, Department for Education and other trade bodies.

Financing the Transition

The economic and social costs of inaction continue to grow. Local areas have a huge role to play in reaching net zero and have the ability to start implementation quickly, but they do not have the funding they need. Central government must provide certainty on its long-term funding plans for key areas such as retrofit and energy efficiency. Without this, it is impossible for local areas to play their part in building the skills, capacity and engagement needed to meet the challenge. Analysis shows that retrofitting all buildings alone in Hackney would need an investment of approximately £3 billion in the building stock which will require significant public funding, particularly for public sector assets and social housing.

Homeowners, as well as other landlords, will need to be able to access affordable financial products such as loans and green mortgages, and for large organisations to work together to attract private investment. 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. Together we must encourage and support organisations across Hackney to prioritise planned investment in climate mitigation and adaptation.

Despite these challenges, funding for green initiatives around CO_2 reduction, energy efficiency, recycling and other sustainability programmes are already part of the Council's budget.

The Funding Strategy for the Council's own CAP commitments is summarised below:

1. **What's already planned for –** those allocations in the Capital Programme that can be adapted to reflect technologies/latest innovations to tackle climate change – e.g. Planned Maintenance budget, Combined Heat and Power in regeneration programmes, Fleet.
2. **Robust Business Cases –** those projects where there are savings to be made that can repay the investment over time or have alternative delivery models, e.g. Electric Vehicle charging network, cycle hangars – investment in energy technologies for the Council's non housing estate.
3. **The aspirational –** those investments that are currently unaffordable at scale – e.g retrofit of Council properties. The Council is exploring grant funding opportunities and working with other Local Authorities for solutions in this space and lobbying with others for more funding.

National context

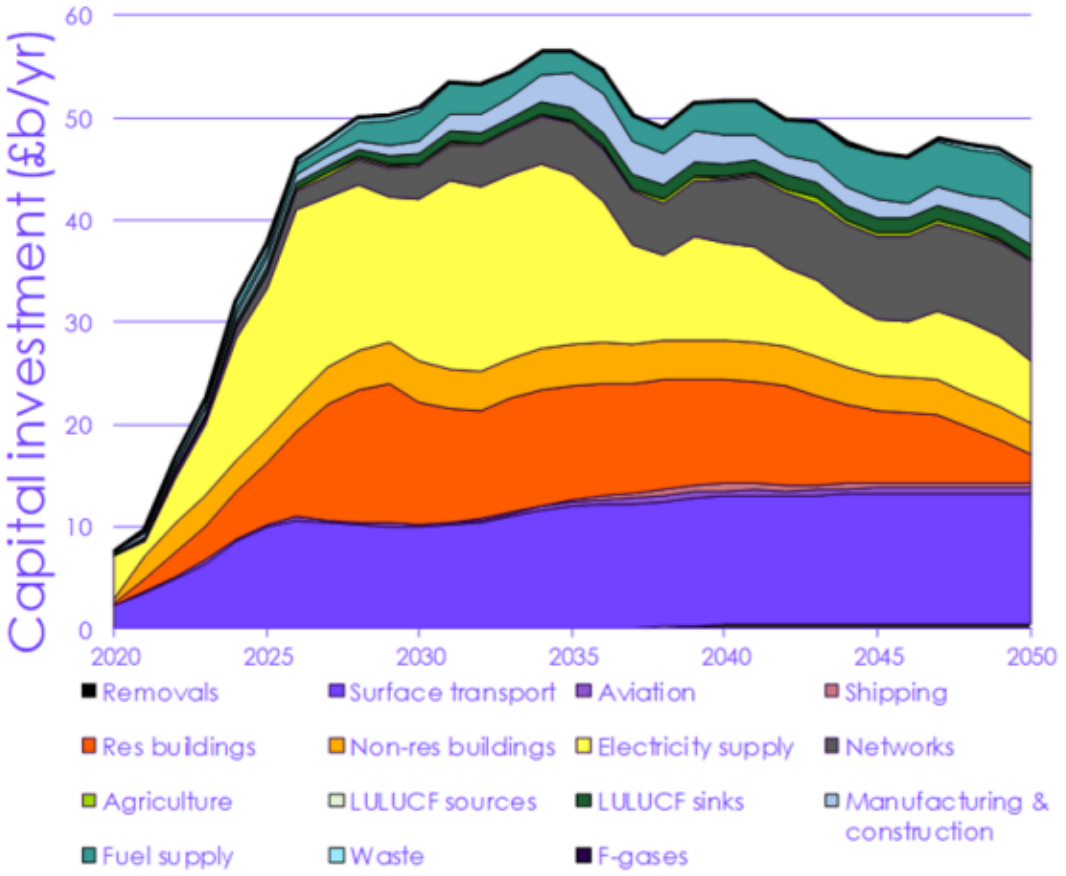
The cost of transitioning to net zero

The CCC, in their Sixth Carbon Budget, estimates that UK low-carbon investment each year will have to increase from around £10 billion in 2020 to around £50 billion by 2030. Such scale-ups are not unprecedented and have been seen in the power, transport and buildings sector in the past. Overall however, the CCC reports that the net costs of the transition will be less than 1% of GDP over the course of the next 30 years.

Clearly, the transition to net zero is capital intensive. In the near term, however, investment could support the UK's economic recovery following the COVID-19 crisis and seek to mitigate the impacts of the ongoing energy crisis. Over the medium and longer term this investment will also generate substantial fuel savings, as cleaner, more-efficient technologies replace their fossil fuelled predecessors, and costs will be recouped over time. The CCC also outlines that investment will unlock wider multiple benefits (e.g. for public health) and that the cost and risk associated with inaction is far greater than the cost of action.[49]

The CCC has forecast capital investment requirements by sector. This is shown in Figure 10. It outlines the immediate financial prioritises on a national scale. Prior to 2025, the majority of funding (approximately £3–4 billion per annum) will be needed to be invested in decarbonising surface transport and the electricity supply. As more vehicles become electric, the charging infrastructure and grid supply will need to keep up with demand to ensure this is a low carbon transition. By 2025 and onwards surface transport investment will level off at approximately £10 billion per year but overall investment grows significantly to nearly £50 billion per annum. Most of which is investing in renewables for the electricity supply, as well as in retrofitting residential and nonresidential buildings (approximately £12–15 billion). These four areas dominate the investment requirements in the next 15 years.

[49] Sixth Carbon Budget - Climate Change Committee



Source: CCC analysis.
Notes: This figure shows a partial picture of the required investments, without offsetting savings as operational costs. This figure is therefore not indicative of the net costs of decarbonisation. For a full picture of the costs of Net Zero, see Figure 5.4. Electricity supply 2020 data is an average of historical 2018/2019 data and modelled 2020 investment. LULUCF = Land use, land-use change and forestry.

Figure 10: The CCC's Balanced Net Zero Pathway UK Investment programme 2020–2050.

Sources of finance

Financing the net zero transition is a key challenge. Organisations across Hackney will share similar challenges to fund their journey to net zero and adapt to a changing climate. There are a number of options we can all explore together, including:

- Grant funding from Central Government, this is limited but will be particularly important for low income and social housing. For example, successful funding applications have already been made by the Council to the Social Housing Decarbonisation Fund and Public Sector Decarbonisation Fund.
- The Council working alongside others to continue to lobby the Government to increase funding programmes for both public and private properties.
- Income from funding and revenue streams which could be hypothecated for climate action in the borough.
- The use of policy mechanisms to deliver new income streams such as from planning obligations.
- Local climate bonds that can raise significant amounts of capital whilst allowing local people to invest in their area and directly benefit from the projects delivered.
- Organisations within the borough reviewing their planned expenditure and investment 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.
- Carbon offsets – Investment of carbon offsets in local decarbonisation and adaptation schemes.

Some examples of where such opportunities and other new approaches to financing climate emergency related activities are outlined below:

- Bristol City LEAP will establish a joint venture between the City Council and a strategic partner to deliver more than £1 billion of investment towards Bristol becoming a zero-carbon, smart energy city by 2030.
- Greater Manchester's Environment Fund will support the development, scale and verification for carbon and habitat banking, aiming for a £5m annual turnover to finance new habitats, tree planting and peat restoration.
- West Berkshire Council issued the first Community Municipal Investment through a Bond offer raising over £1m from 600 investors, a fifth from the local area, to finance solar, LED lighting, cycling routes and environmental investments.
- UK 100 and Siemens have identified £100 billion potential investment in local energy that could be realised with a public investment of £5 billion.
- The £8m investment in the BEIS Local Energy Hubs has delivered £61m investment to date and a pipeline of £1.2 billion.

Many other case studies are outlined in the UKCCIC's City Investment Analysis Report Oct 2021.

Pension and insurance funds could have a significant future investment role in financing the transition. The UKCCIC suggests there has been considerable change in the private sector financial services industry over the last few years, led by firms in the UK and Europe, to fully embrace the Environmental, Social and Governance (ESG) impact of their business models. They and their investment managers realise that sustainable investments may actually perform better in the longer term, providing better long term returns. This change in focus can be utilised by Hackney stakeholders to secure investment from these funds into long term decarbonisation projects but will need to be packaged at scale to attract interest. Due to the long term nature of these funds, investments in lower return, low risk investments, such as heat networks and energy infrastructure, can be highly attractive.

Carbon offsetting funds

The GLA London Plan requires all major developments to achieve net zero carbon. A minimum of a 35% on-site carbon improvement on national Building Regulations must be met and the shortfall to zero carbon is offset by making a cash-in-lieu contribution into the relevant Local Planning Authority's carbon offset fund, although planning applicants are expected to maximise savings on-site before offsetting. Carbon offset payments are set and collected through legal agreements between the Council and the developer when planning permission is granted. Examples of supported projects include the installation of solar panels on the West Reservoir Leisure Centre.

As the Borough grows with new development, this fund can help to support projects that are unable to gain funding from other private or public sector funds.

Recognising the co-benefits of climate action

In addition to cash returns, many of the outcomes associated with transitioning to net zero accrue as societal benefits, also known as 'co-benefits'. These co-benefits have wide ranging value through:

- Local economic stimulus.
- Improved health outcomes reducing the ongoing cost of healthcare services.
- Improved biodiversity outcomes.
- Alleviation of fuel poverty.
- Job creation and the opportunity to upskill redundant roles.
- Reduction of water run-off, avoidance of flood damage etc.

For example, reducing congestion can improve local air quality and in turn reduce respiratory and cardiovascular illnesses, absenteeism and health care spending. Tackling congestion might also free up space for greener spaces which can help improve surface water management and establish new habitats. By considering these systemic interactions, it is possible to better understand the overall social, economic and environmental value of proposals and the trade-offs that might be required. We can use this understanding to inform decision making and build the case for bolder and more ambitious action that will enable co-benefits to be better incorporated into investment decisions.

Monitoring and Reporting, Stakeholder Engagement and Governance

Monitoring and reporting

A key part of the role of future external governance of the CAP will be to monitor, review and report the progress of collective action against the goals and objectives of this plan.

Why monitor, review and report climate action?

Monitoring and reporting, including reviewing, is an important tool to assess progress towards net zero, informing decisions that may be needed to update the scale or pace of interventions accordingly. It is widely agreed to be key to credible, long term climate action by:

- **Maintaining transparency and accountability:** Monitoring climate action gives councils and other stakeholders the ability to demonstrate progress and quantify the benefits of climate action. This can aid future decision making by indicating where climate action has been most successful, and most challenging, and when carbon offsetting has been used for emissions that can't be reduced.
- **Providing key review points:** testing whether what we are doing collectively is having the desired impact on progress, whilst enabling opportunities to revise actions.
- **Communicating with stakeholders on progress with targets:** The Council alone cannot deliver the actions needed to reach net zero and therefore must work in partnership with other organisations and individuals and enable stakeholders to make change happen.
- **Building a case to improve delivery or secure further funding:** Monitoring can help identify where further resources, investment or investigation is needed, and build the evidence base for this – ultimately informing further action planning.

A schematic of key stages since the Council's climate emergency was declared is outlined below.

Figure 11: Key stages in the development and delivery of the Climate Action Plan.

The development of a monitoring framework will therefore support the need to measure the reduction in carbon emissions amongst other climate related actions, tracking progress towards the 2030 goals of Hackney's borough-wide CAP alongside an agreed reporting and review mechanism (Task 5 above).

Monitoring, in this context, refers to the ability to understand and track climate actions being taken in the area and their impact with a key focus on the net zero modelled pathway to the key 2030 and 2040 target points which estimate that there would be a 94% reduction in Hackney's territorial greenhouse gas emissions in 2040, compared to 2010, and a 77% reduction by 2030 based on the goals within the the CAP. Reporting is the ability to present and share these outcomes. This can be internally or externally, in line with existing reporting principles or commitments, or aligning with an external reporting mechanism.

Where are the key responsibilities for borough-wide emissions?

The 2018 baseline borough-wide emissions assessment within the CAP consists of:

1. Borough-wide territorial emissions where the Council has direct control circa 5%.
2. Borough-wide territorial emissions where the Council may have some influence (circa 25%), although others have direct control.
3. Other borough-wide emissions where direct control and/or influence mainly lies with others such as residents, businesses and institutions etc.

What are the internal governance arrangements for the Climate Action Plan?

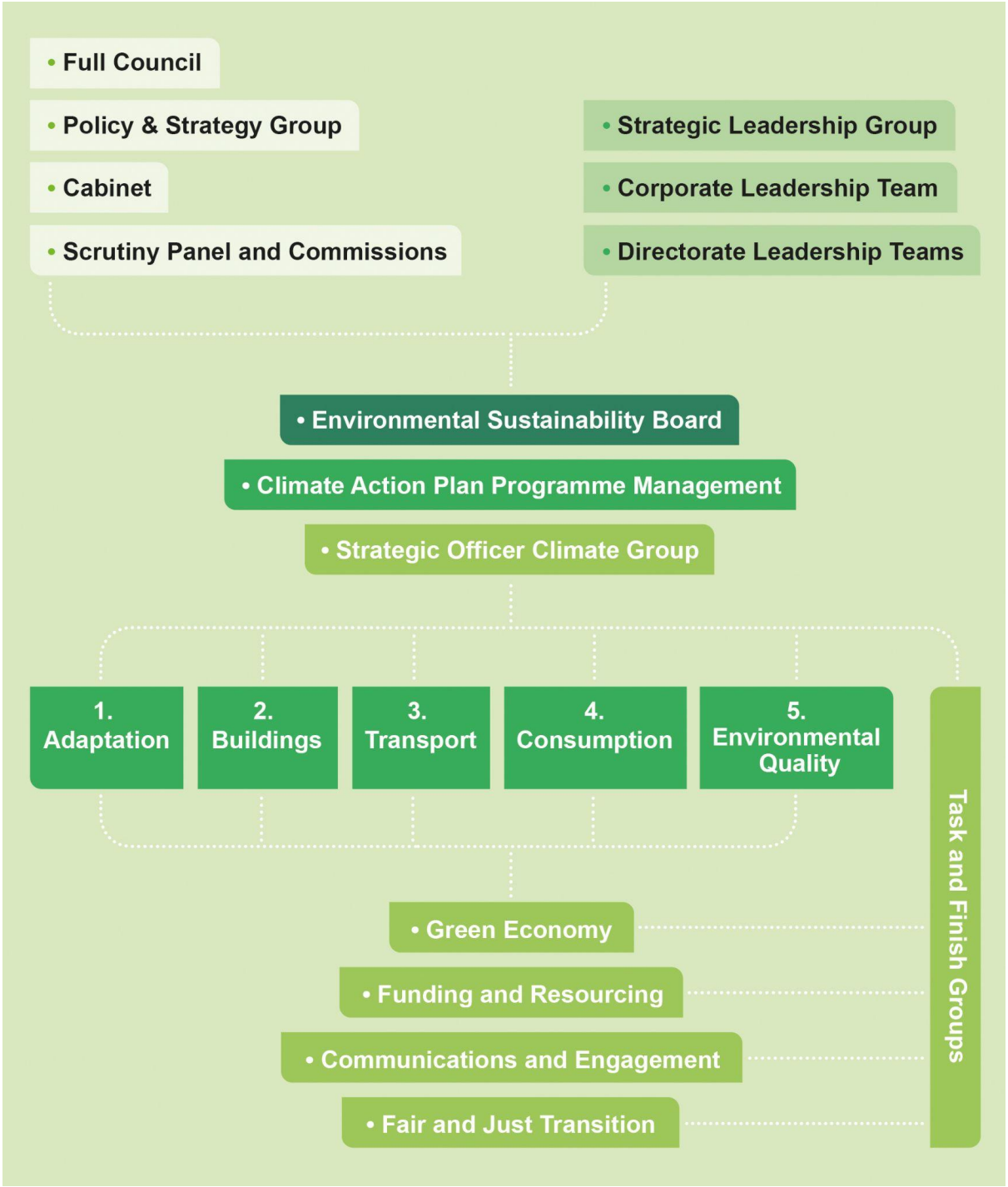


Figure 12: Schematic of Council internal governance structures for the CAP.

The monitoring and reporting framework for its own emissions (borough-wide emissions where the Council emissions has direct control) will be overseen by an established internal governance structure set out in Figure 12, whose function is to provide oversight and scrutiny links to the key Council political and corporate governance structures. Corporate oversight takes place through Climate, Homes & Economy Directorate Leadership Team, Corporate Leadership Team and the Strategic Leadership Group. Member oversight is provided by the Cabinet, various Scrutiny Commissions and Full Council.

Environmental Sustainability Board (ESB)

Purpose: To provide executive oversight, leading the strategic activity required to deliver our collective organisational response to the climate crisis. This includes ensuring that climate implications and actions to meet our targets and ambitions are firmly embedded in our policies, processes and procedures, and ensuring the delivery of the Implementation Plan (IP) that identifies the key actions that the Council will take to support the CAP goals and objectives.

The ESB is co-chaired by Group Director for Finance and Corporate Resources and Group Director for Climate, Homes & Economy, ensuring that the key aspects of delivering the CAP and associated work is taken forward within the remits of finance and climate. ESB meets bi-monthly.

Strategic Officer Climate Group (SOCG)

Purpose: This group is the key tool for delivery of the Council's Implementation Plan and is made up of the leads for each thematic area, as well as expertise in communications, engagement, finance, procurement, economic development and employment and skills. SOCG meets bi-monthly.

Additional task and finish groups may be established that sit alongside the SOCG to address specific engagement, funding and resourcing needs amongst others.

Theme leads

Five internal theme leads are responsible for the coordination and oversight of their relevant thematic area, plus an additional lead that covers the cross-cutting green economy aspect. There are also a number of cross-cutting aspects which impact on all the themes and include the green economy, funding and resourcing, communications and engagement and fair and just transition. To meet these needs task and finish groups may be established when required.

Monitoring

Monitoring will be completed through a variety of interrelated mechanisms:

- Council emissions initially aligning with the UK100 membership scope but expanding over time, using the Local Partnerships GHG accounting tool;
- Borough-wide emissions principally initially via The London Energy and Greenhouse Gas Inventory (LEGGI) and Consumption-Based Emissions Accounting Framework (CBEA);
- The Council's Implementation Plan for its own actions, to support delivery of goals and objectives which reflect its control and influence, supported by;
- More granular monitoring through other established Council plans and strategies;
- A set of key performance indicators to track Council and borough-wide progress.

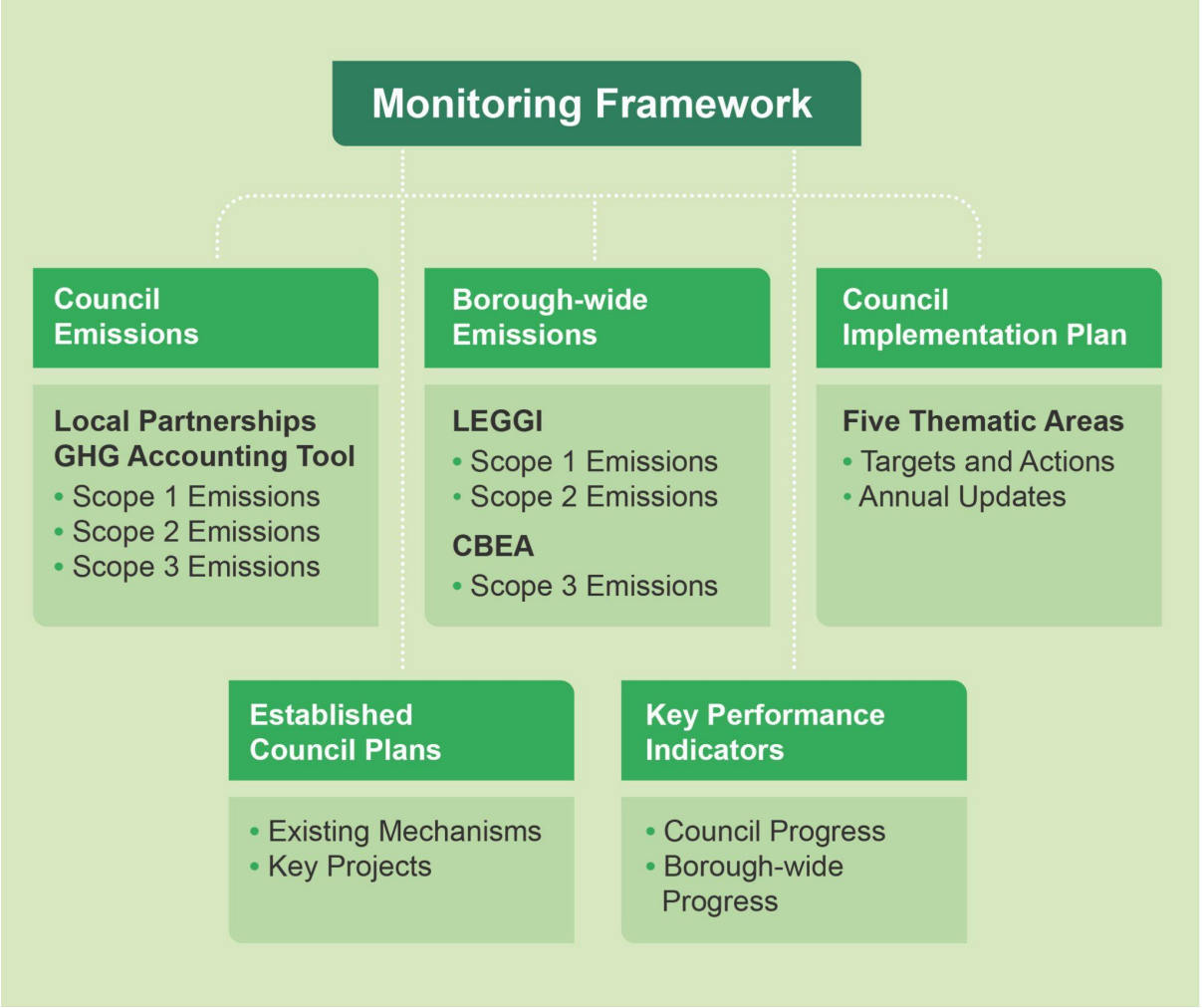


Figure 13: Summary of key elements of the Monitoring Framework.

Further detail on the monitoring approach is set out below relative to the key categories above.

Council emissions
Scopes 1, 2, and 3 refer to different categories of greenhouse gas emissions associated with an organisation's activities, including direct emissions from owned or controlled sources, indirect emissions from purchased electricity, and other indirect emissions from sources outside of the organisation's control:

- **Scope 1:** All Direct Emissions from the activities of an organisation or under their control. Including fuel combustion on site such as gas boilers and fleet vehicles.

- **Scope 2:** Indirect Emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy and eventually used by the organisation.

- **Scope 3:** All Other Indirect Emissions from activities of the organisation, occurring from sources that they do not own or control. Noting that these are the scopes 1 and 2 for other organisations who may have their own plans for carbon reduction.

Initially, the focus will be on measuring and monitoring Scope 1 emissions from gas and fleet operations, as well as Scope 2 emissions from electricity use. The territorial emissions that are under the direct control of the Council will be tracked using the Local Partnerships GHG accounting tool, as recommended by London Councils and based on the UK100 membership scope. The scope and complexity of monitoring will be gradually increased over time for both scopes 1 and 2 (particularly as additional properties within the corporate portfolio are included and potentially adding data from fugitive emissions such as air conditioning leaks). This will eventually extend to embed selective elements of scope 3 where there is significant carbon impact and the Council has some influence.

Borough-wide emissions
Data on emissions from domestic, industrial, and commercial energy use, as well as from transportation, will be gathered via LEGGI, while consumption emissions will be gathered via the CBEA created by the University of Leeds, as recommended by London Councils. Data from LEGGI and CBEA continues to develop over time, and hence any relevant new data will be reviewed as to whether it should be added to the framework.

Council Implementation Plan
The Council's Implementation Plan has a range of actions spread across the five thematic areas which reflect its areas of control and significant influence and will be updated annually. Initial targets have been identified to demonstrate progress and are included in each of the thematic sections of the CAP as well as the Green Economy cross-cutting theme. A number of these projects and programmes will have their own independent evaluation requirements and for key ones where a clear carbon impact has been estimated the intention would be to build the outcomes into shaping updates of our actions for the Council and others.

Established Council Plans
Using the principle of prioritising existing reporting systems, the monitoring framework can build upon and complement existing and future plans and strategies to support the overall goal of reducing emissions more effectively and efficiently.

More granular monitoring of the impacts of the CAP will therefore largely be through:

- Existing mechanisms including Air Quality Action Plan, Reduction and Recycling Plan, Local Nature Recovery Plan, Green Infrastructure Strategy, Transport Local Implementation Plan, Parking and Enforcement Plan and future Economic Development Plan, amongst others.
- Key projects such as, but not limited to, LTNs, School Streets, street tree planting and the Green Homes programme.

Key performance indicators
A smaller number of key performance indicators will be monitored. These will be developed post adoption of the CAP and will be broader than those which focus solely on emissions reduction.

Reviewing

The impact on achieving Hackney's emissions targets will be recorded by changes in the borough-wide emissions footprint. This will provide an indication of the overall direction of progress across the borough and by sector. Reviewing progress with meeting borough-wide and Council targets using a suite of key performance indicators will provide a more detailed assessment helping us to take more timely and evidence-based decisions to:

- Understand Hackney's progress towards its net zero target based on current and proposed actions.
- Understand progress towards its 21 goals and assess where greater action or alternative tactics are required.
- Track delivery of actions annually towards Hackney's borough-wide CAP with SMARTer measures.
- Measure (where possible), the differential impact on different groups in Hackney.
- Measure the success of climate action in delivering wider environmental, social, and economic co-benefits.
- Enable shared learning and information sharing across organisations.

Reporting

The Council has made annual reports on its progress with its decarbonisation commitments (for each 12 month period) since 2020 to Council in July each year. The next one is scheduled for July 2023. Whilst this has covered key progress at a project level and informed the development of the draft CAP, a new more public friendly annual report on the Council's progress towards its own emissions reduction targets, supported by key performance indicators will be put in place for July 2024.

The requirements for borough-wide reporting will be assessed with key partners for public reporting of progress on the borough-wide CAP.

Stakeholder engagement

The success of this plan depends on the involvement of all of Hackney's stakeholders, as well as central and regional government to enable the scale of change needed; the Council also plays a critical role. Furthermore, with only 5% of territorial emissions being in the Council's direct control, key stakeholders are responsible for significant levels of local carbon emissions and are essential to delivering the 2030 goals outlined in the CAP.

Work to develop the CAP recognises that organisations will have to come together collectively to address the climate crisis which no single body can do on its own. Stakeholders will need to exhibit their own leadership, as a start making pledges to the goals of the CAP. The proposed Hackney Net Zero Partnership is the key foundation to take this forward.

To strengthen and better coordinate its own future plans, the Council aims to build organisational skills and capability more broadly in respect of delivering external engagement in this topic area. All organisational stakeholders though have responsibility for establishing a diverse programme of engagement using varied techniques that include more deliberative engagement on specific topics, amongst others.

Engagement should be designed to ensure our diverse communities, including vulnerable and underrepresented groups who may be less engaged with the agenda are involved in the planning and implementation of climate policies and actions. A set of principles to guide all stakeholders to support this is set out below.

Engagement principles for all key stakeholders to deliver the CAP
1. Be clear about the process and aims of engagement
● Be clear about what the aims of the engagement are and the opportunities to engage. ● Be honest about what can and cannot be achieved or influenced from the beginning. ● Provide clarity for participants on what they are taking part in and how their views will be used.
2. Communicate the results of engagement activities
● Ensure that stakeholders are aware of the impact of their input, and they are told when this will be. ● Give participants the opportunity to feed back on the engagement process.
3. Take a more topic based approach to engagement
● Prioritise those topics that are likely to have the most impact on the climate emergency. ● Vary methods of engagement depending on the topic as well as being shaped by the needs. ● Use the existing structures of specific stakeholder groups where required.
4. Take account of the technical nature of many of the topic areas

Engagement principles for all key stakeholders to deliver the CAP
● Make an assessment of the technical expertise required to meaningfully participate in discussions about each topic. ● Make an assessment of the impact of plans on people's daily lives, and prioritise engagement for these topics. ● Build on existing work by scientists, charities, campaign groups and government agencies to make the topics of sustainability and the climate emergency as accessible as possible.
5. Focus engagement on topics that matter to people
● Learn from people's lived experiences. ● Work with people to design environmentally sustainable changes that are impactful but also normal, easy and in alignment with other day-to-day concerns.
6. Strive to be inclusive and to engage widely
● The greater the impact a proposal is likely to have on residents, businesses and partners, the more wide ranging the methods for engagement need to be. ● Ensure that individuals have the opportunity to express their views and know that these views will be listened to and respected. Take into account the particular needs of individuals or groups and aim to overcome any difficulties people may have in engaging. ● Consider ways of increasing involvement with communities who are not in touch with stakeholder organisations, or not already interested in sustainability and the climate emergency. ● Ensure that a diverse range of individuals from all walks of life are represented in engagement. ● Recognise that no one group or person is more important than any other group or person. ● Make accessible the often technical language used to describe environmental topics. ● Ensure meeting participants is at their convenience, not the other way around.
7. Work in partnership with other stakeholders to respond to the climate emergency
● Work together with other stakeholders and organisations to coordinate activity on the climate emergency and become environmentally sustainable. ● Encourage partners to develop their own responses to the climate emergency, recognising they are best placed to do so. ● Aim to learn from partners about their experiences in implementing sustainable policies.

Future external governance structures for the Climate Action Plan

Whilst the Council has established internal governance structures, broader external governance and oversight is needed to reflect this plan is not solely focussed on the Council's activities. This will include a range of borough-wide greenhouse gas emissions for which the Council is not responsible and/or may have lesser or negligible influence. The establishment of appropriate external governance is therefore required and should include, amongst others:

- Working collaboratively with others post adoption, to develop and agree a form of community oversight.
- Establishing a future Hackney Net Zero Partnership to convene key partners including major landowners, public institutions, large businesses, and large housing associations who are responsible for significant borough-wide emissions, amongst others, based on an agreed terms of reference.
- Better aligning existing networks and reviewing established key partnerships with the goals of the CAP.

The establishment of external governance will help steer the delivery of the CAP, ensure progress is tracked transparently, and the wider community is engaged in the efforts to achieve net-zero emissions in the borough.

What's next?

This plan sets out the need for ambitious climate action in Hackney, and some of the areas that we can collectively take action on to reduce greenhouse gas emissions. The next steps to achieving the goals set out in this CAP might include:

For residents

- Joining a local or community group to contribute to plans and changes in Hackney in the coming years. This could be a group who lobbies for changes on your estate, a local wildlife group, or a sustainability campaign initiative.
- Working out who is responsible for removing gas boilers and reducing energy consumption in your home, and discussing how and when you might start doing this. This might be the Council, a housing association or a private landlord. It might be a collection of people who run properties within one building. If you own your own property, grants and funding may support you.
- Ask your employer what their plans are for decarbonising. If your employer is based in Hackney, ask them if they have seen this document, and what their plans are for decarbonising. They should be aware of legal requirements to reduce energy consumption.
- Signing up to the Greener Hackney mailing list at hackney.gov.uk/newsletters.
- Reading through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!

For community groups and organisations

- Working out where you are using fossil fuels in your activities, and who you need to work with to swap them for clean alternatives.
- Talking to your members about whether they are aware of what they can do about the climate emergency, and work with them to take action.
- Creating local projects that contribute to the themes in this document, reducing greenhouse gas emissions, increasing biodiversity or spreading awareness, for example.
- Reading through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!

For businesses and institutions

- Working out where you are using fossil fuels in your operations, and how to swap them for greener alternatives and develop your own plans to get to net zero. You may need to coordinate with other business owners who share your building, your property owner or landlord.
- Better understanding your vulnerabilities to extreme weather to become more prepared.
- Talking to your employees about whether they are aware of what they can do about the climate emergency, and work with them to take action.
- Considering if your business can offer services to help Hackney reduce its greenhouse gas emissions. For example, could you start installing heat pumps, solar panels or energy demand reduction measures? Could you offer repairs and item hires that mean people don't buy and throw away so many new objects?
- Reading through the 2030 goals: are there any you can commit to? Let the Council know by sharing your pledge and encourage others to do the same!

For the Council

- Delivering alongside others the Council Implementation Plan, which sets out the proposed actions that the Council will take to contribute to achieving the goals set out in this document.
- Continuing partnership work with stakeholders, including awareness raising and further developing the Hackney Net Zero Partnership and a wider community governance structure.
- Providing the civic leadership for the collective effort needed to tackle the climate emergency in the borough helping to bring together different organisations and communities.
- Updating regulations and requirements to accelerate decarbonisation.
- Running projects and programmes to reduce greenhouse gas emissions across the borough, including decarbonising our own buildings, vehicles, procurement and other activities.
- Lobbying the UK government and regulatory bodies for systemic change and reducing barriers to change.

Glossary & Abbreviations

Glossary

Term	Definition
Adaptation	Adjustment to actual or expected climate and its effects in order to reduce harm or take advantage of any potential benefits.
Biodiversity	The variety of wild plants and animals in an environment.
Biodiversity crisis	An umbrella term to describe the deterioration of ecosystem health worldwide as a result of human activity and the climate emergency. Also known as: biodiversity collapse, ecological emergency.
Circular economy	An economic model in which resources are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste.
Climate emergency	An umbrella term to describe the situation where burning fossil fuels creates greenhouse gas emissions, which are changing the climate of the planet. Also known as: climate change, climate collapse, climate crisis, global warming.
Climate resilience	The capacity of interconnected social, economic and ecological systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation.
Community wealth building	Community wealth building is a new people-centred approach to local economic development, which redirects wealth back into the local economy. placing more control and benefits into the hands of local people.
Consumption emissions	The greenhouse gas emissions generated outside Hackney to create the goods and services used inside Hackney. For example, in manufacturing and delivery.
Decarbonisation/ Decarbonise	The process of reducing greenhouse gas emissions.
District heat network	A distribution system of insulated pipes that takes heat from a central source and delivers it to a number of buildings.
Embodied carbon	The greenhouse gas emissions created to produce, transport, install, maintain, replace and dispose of materials or items. This is a type of consumption emission.

Term	Definition
Fuel poverty	The situation where someone is unable to afford to keep their home adequately heated, without compromising basic necessities. Central government has defined fuel poverty as when a household needs to spend more than 10% of its income to achieve reasonable levels of warmth (22°C in living areas, 18°C in unoccupied rooms).
Global warming	The estimated increase in global mean surface temperature, typically expressed relative to pre-industrial levels.
Greenhouse gas emissions	Refers to the gases created when fossil fuels are burnt that contribute to the climate and biodiversity breakdown. Also known as: carbon emissions, carbon dioxide emissions, GHGs and emissions.
Green New Deal	A term used to describe sets of policies that aim to create a new political system that reduces greenhouse gas emissions while continuing to work towards prosperity and a flourishing society.
Grid carbon factor	The greenhouse gas emissions associated with each kWh of electricity generated on the national grid.
Gross domestic product	The standard measure of the value added created through the production of goods and services in a country during a certain period. It measures the income earned from that production, or the total amount spent on final goods and services, minus the cost of imported goods.
Heat pump	A device used to heat and cool buildings by transferring thermal energy from a cooler space to a warmer space.
Low carbon (e.g. item, product)	Something that does not release significant amounts of carbon when produced or operated. Typically they are electric and running on fossil-free renewable power, or capable of running on the national grid, which is rapidly decarbonising.
Mitigation	Mitigation is human interventions to reduce emissions or enhance the sinks of greenhouse gases.
National grid	The network of power stations, powerlines and electricity infrastructure that allows electricity to be generated, transported and used across the county. Within the network there are many different Distribution Network Operators who send electricity from the grid to end users.
Net zero	Net zero refers to a state in which the greenhouse gases going into the atmosphere are considerably reduced and the residual emissions removed out of the atmosphere elsewhere. In the context of the built environment, buildings should aim to reduce their overall greenhouse gas emissions for embodied carbon and operational energy to near zero or negative, with reliance on offsetting strictly limited to exceptional circumstances.

Term	Definition
Offsetting	The process of compensating for greenhouse gas emissions, by participating in schemes designed to make equivalent reductions of carbon dioxide in the atmosphere. Also known as: carbon offsetting.
Operational emissions	The greenhouse gas emissions related to the use of buildings during their lifespan, primarily from heating, cooling, water and electricity usage.
Paris Agreement	The UK is signatory to the international 'Paris Agreement' treaty, which aims to strengthen the global response to the threat of the climate emergency 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.
Renewable energy	Energy generated using fuels that are naturally restocked in a short time period and do not rely on fossil fuel extraction, such as solar or wind power.
Retrofit	The process of upgrading and altering existing buildings or systems to reduce greenhouse gas emissions. This might include upgrading their thermal performance to improve energy efficiency, adding renewable energy sources or removing fossil fuel power sources. This reduces the amount of energy used in a building, reducing fuel poverty and greenhouse gas emissions while improving comfort levels.
Social justice	The fair distribution of wealth, opportunities, and privileges within a society. In the context of the climate emergency and decarbonisation, this is also known as: just transition.
Solar panels	A renewable energy technology that uses sunlight as a source of energy to generate electricity.
tCO_2e, $ktCO_2e$, $MtCO_2e$	The unit for greenhouse gases emissions. It stands for tonnes of carbon dioxide equivalent, whereby the 'equivalent' means all types of greenhouse gases that contribute to the climate emergency. '$ktCO_2e$' means thousands of tonnes, and '$MtCO_2e$' means millions of tonnes.
Territorial emissions	The greenhouse gas emissions from energy consumption and activities inside Hackney. For example buildings and transport. See also: consumption emissions.

Groups referenced in this document

This CAP describes the actions that, collectively, we need to take to tackle the climate emergency. To outline how different groups can contribute to these changes, we refer to the following:

Group	Description
Community Groups & Organisations	The term used in this plan to describe networks, clubs, societies and initiatives run by or for Hackney residents. This includes faith organisations, local wildlife groups, campaign groups, neighbourhood representatives and the environmental community of interest, for example.
Businesses & Institutions	The term used in this plan to describe companies, organisations and other business groups in Hackney, that supply services to Hackney or work with Hackney in some way. This includes utility providers, public health organisations and other local authorities, for example.
Residents	The people who live in Hackney.
Central government	The UK national government.
The Council	Hackney Council.
Hackney stakeholders	The catch-all term for all the groups listed in this table.

Abbreviations

- **BEIS –** Department for Business, Energy and Industrial Strategy
- **CCC –** Climate Change Committee
- **Defra –** Department for Business, Energy and Industrial Strategy
- **EV –** Electric vehicle
- **GDP –** Gross Domestic Product
- **GLA –** Greater London Authority
- **IPCC –** Intergovernmental Panel on Climate Change
- **LETI –** London Energy Transformation Initiative
- **NLWA/NLWS –** North London Waste Authority/Strategy
- **OFGEM –** Office of Gas and Electricity Markets
- **STEM –** Science, Engineering, Technology and Maths
- **SuDS –** Sustainable Drainage systems
- **TfL –** Transport for London