Draft Climate Action Plan
2023–2030

Hackney

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Foreword

When it comes to tackling the climate crisis, we're 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 causes 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 draft Climate Action Plan aims to unlock these benefits for Hackney. Under five key themes - consumption, buildings, transport, adaptation and environmental quality - it sets out how residents, businesses and institutions, community groups and organisations and the Council could work together to tackle the climate and ecological crisis.

The plan is for everyone – and, through our consultation and the ongoing actions 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 there's a Council implementation plan as part of the Climate Action Plan – setting out specifically what we will do over the next three years, using our influence to best effect. This will be updated every year so we can track our progress alongside our climate emergency declaration.

We recognise that, even though we only contribute to 5% of the borough's emissions, we must continue to lead by example. That's why we're rejoining the UK100 network of Councils, committing us to reaching net zero emissions by 2030 across key functions.

From speaking to many Hackney residents – out in the borough and at our climate summit earlier this year – we know 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 comments, your scrutiny and, above all, your participation in tackling the climate and ecological crisis.

Join us in rebuilding a greener Hackney.

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

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Summary

Introduction

The climate and ecological crisis is having a significant negative impact in Hackney and across the world, through increased extreme weather events, such as flooding and extreme heat, that put communities, ecosystems, and natural resources at risk. Without drastic reductions in emissions, and adaptation to higher rainfall and warmer temperatures, the impacts of climate change will continue to worsen – affecting our lives and those of future generations. In response, the Council declared a climate emergency in 2019[1], supported by an ambitious vision to rebuild a greener Hackney in the wake of the coronavirus pandemic.

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 we declared a climate emergency, we have 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 our buildings. While the Council's emissions only account for about 5% of the borough's emissions, our climate emergency declaration commits us to a 45% reduction in Council emissions by 2030 and net zero – where we will no longer be a net contributor to climate change – by 2040.

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.

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.

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

Purpose and aims

The Climate Action Plan aims to:

- Outline what a greener Hackney could look like by 2030 based on a fair and just transition to net zero
- 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
- Outline initial proposals for monitoring and governance arrangements, as well as steps to support future stakeholder engagement requirements
- Use the final adopted plan to shape agreements on how to work together to achieve shared goals

Throughout this climate action plan, 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.

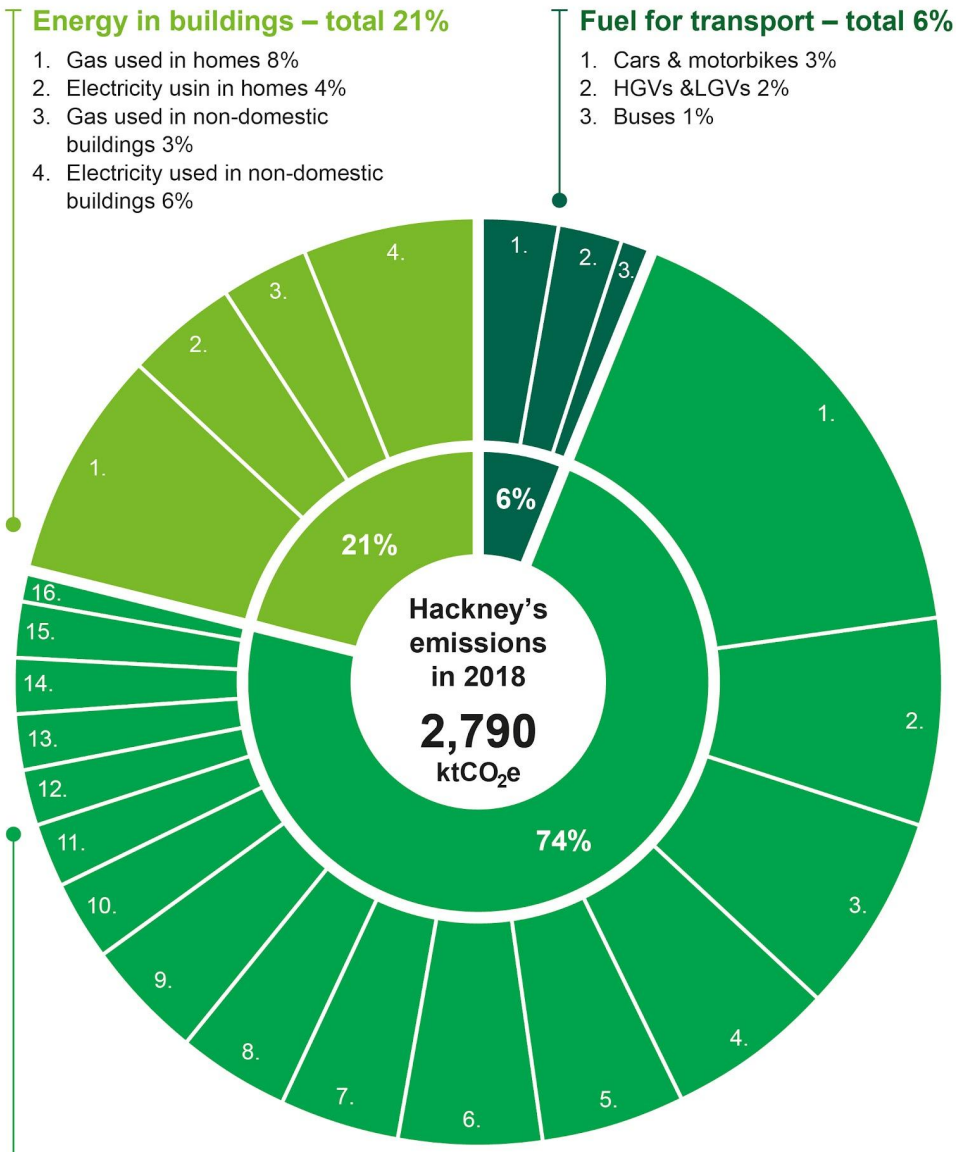
Collaboration is key: We can only address the climate emergency by working together to tackle emissions and adapt our borough to the changes already occurring. There are many opportunities to work collectively to reduce emissions and make our neighbourhoods more resilient.

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 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.



Themes, goals and objectives of the Climate Action Plan

The Climate Action Plan is broken down into themes, goals and objectives.

Themes

The Climate Action Plan sets out the ambitious, science-based changes that we can work towards achieving by 2030. All of these changes are organised into five themes: Adaptation, Buildings, Transport, Consumption and Environmental Quality. 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.

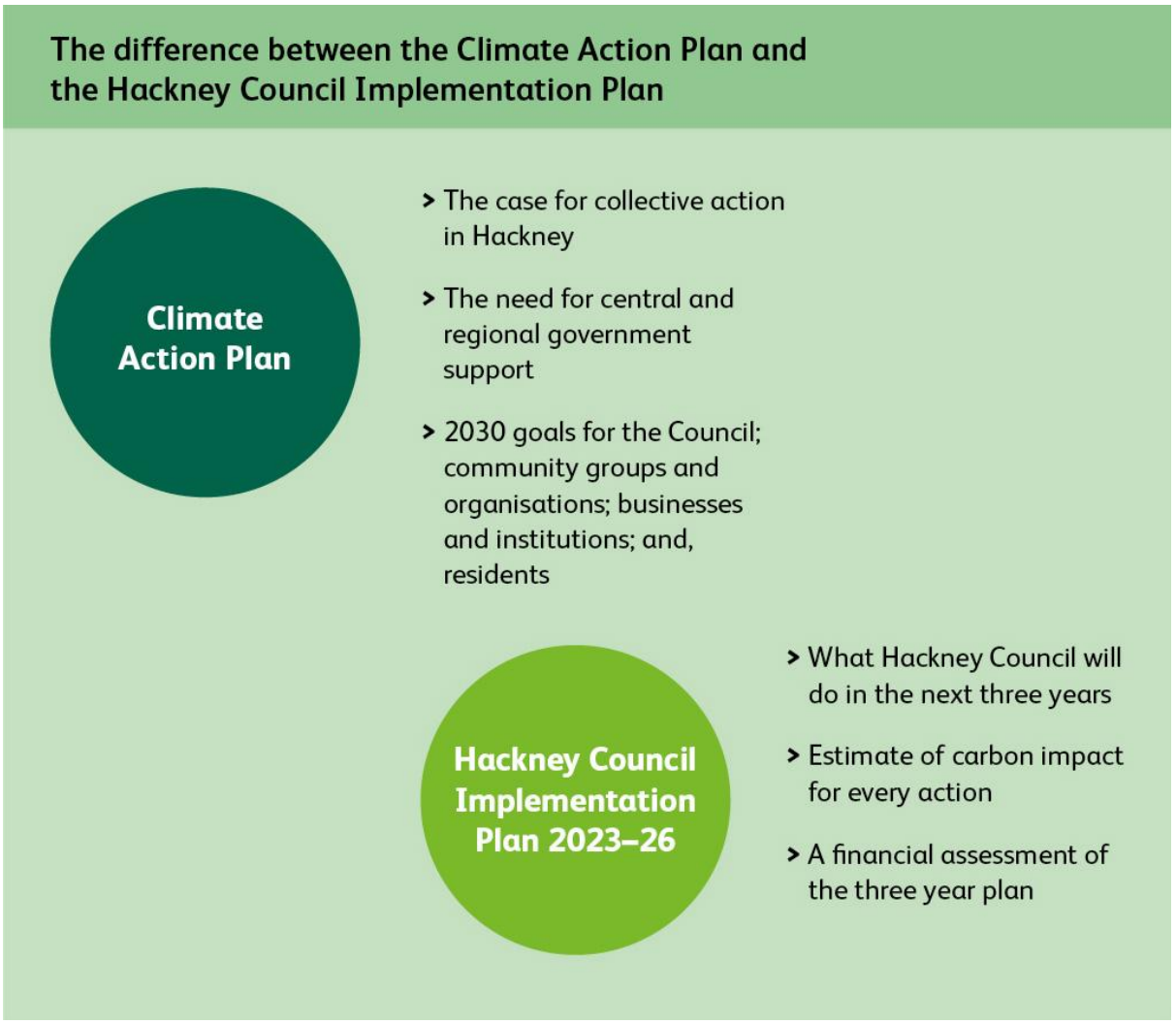
Currently, not all the necessary infrastructure, finance and regulation is in place to enable these changes. The UK will only meet its emissions reduction targets if central government, regional bodies and local authorities, amongst others, work together to resolve some of these key barriers.

Objectives

Each goal has a number of key objectives. 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. 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 Three Year Implementation Plan

Alongside this plan is a draft Hackney Council Three Year Implementation Plan, which 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 relationship between the two is shown in Figure 1 below.



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 change 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 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 • If your employer is based in Hackney, ask 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!
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,	• 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

Who	What can you learn in this document?	What might your next steps be?
	and activities you might need to explore to reduce emissions	• 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!
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!
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 3 Year 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

Who	What can you learn in this document?	What might your next steps be?
		● 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 out actions 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,[4] 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.

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[2] Global Warming of 1.5°C | IPCC

[3] https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

[4] Net Zero Strategy: Build Back Greener - GOV.UK

Change is possible

Achieving the ambitions of the Paris Agreement[5], 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.[6] Environmental health effects are experienced more strongly by poorer communities, this shows the importance of equitable action directly within the borough.

[5] The Paris Agreement | UNFCCC

[6] https://www.londoncouncils.gov.uk/members-area/member-briefings/local-government-finance/indices-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
- Outline initial proposals for monitoring and governance arrangements, as well as steps to support future stakeholder engagement requirements
- Use the final adopted plan to shape agreements on how to work together to achieve shared goals

The Climate Action Plan Themes

The plan sets out five themes.

Adaptation – We must also all be prepared for the impacts of the climate emergency. Infrastructure, services, ecosystems, and communities are at risk from higher temperatures, increased rainfall and more unpredictable weather. This theme looks at adaptation to the impacts of the climate emergency, collectively designing new ways of protecting streets and buildings, supporting our most vulnerable residents, minimising health risks, and working to better understand the challenges that the climate emergency may bring.

Buildings – Energy use in Hackney's buildings is associated with 21% of the borough's greenhouse gas 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. The theme further looks at the greenhouse gas emissions from materials used to create buildings and how this can be addressed by retaining and retrofitting buildings. It also explores the use and generation of renewable energy.

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 – 74% of Hackney's total greenhouse gas emissions are associated with the goods and services we 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 – The climate emergency is closely intertwined with ecological decline and increased pollution. In Hackney, biodiversity can be threatened by loss of green spaces or inappropriate management of wildlife habitat, and pollution created when fossil fuels are burnt, or chemicals and waste contaminate air, soil and water. 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.

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 greenhouse gas emissions to date

In 2020, Hackney Council undertook an assessment of where Hackney's greenhouse gas emissions come from, looking at data from 2018, the most recent available at the time (see Figure 2 below).

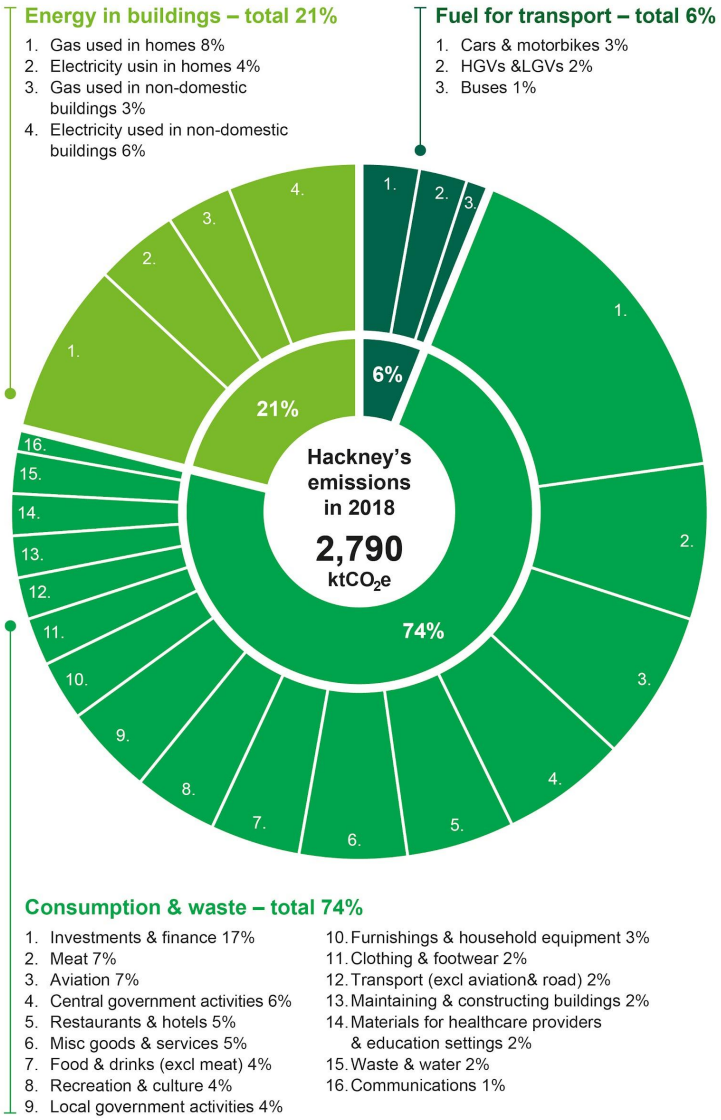

Figure 2: Hackney's greenhouse gas emissions in 2018. The green 'territorial emissions' data (Energy from buildings and Fuel for transport is from BEIS sub-national CO_2 emissions datasets, with adjustments to account for other greenhouse gases. The 'consumption and waste emissions' data is from GLA 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%, and buses emit the remainder.

In 2018, the majority of emissions came from 'consumption emissions' (74%, 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 – often money is invested into a company or an entity that generates emissions, like 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.

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.

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 emission produced by building and operating new buildings
- Encouraging active travel and transitioning to electric vehicles
- Supporting businesses 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 3 shows the 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.[7]

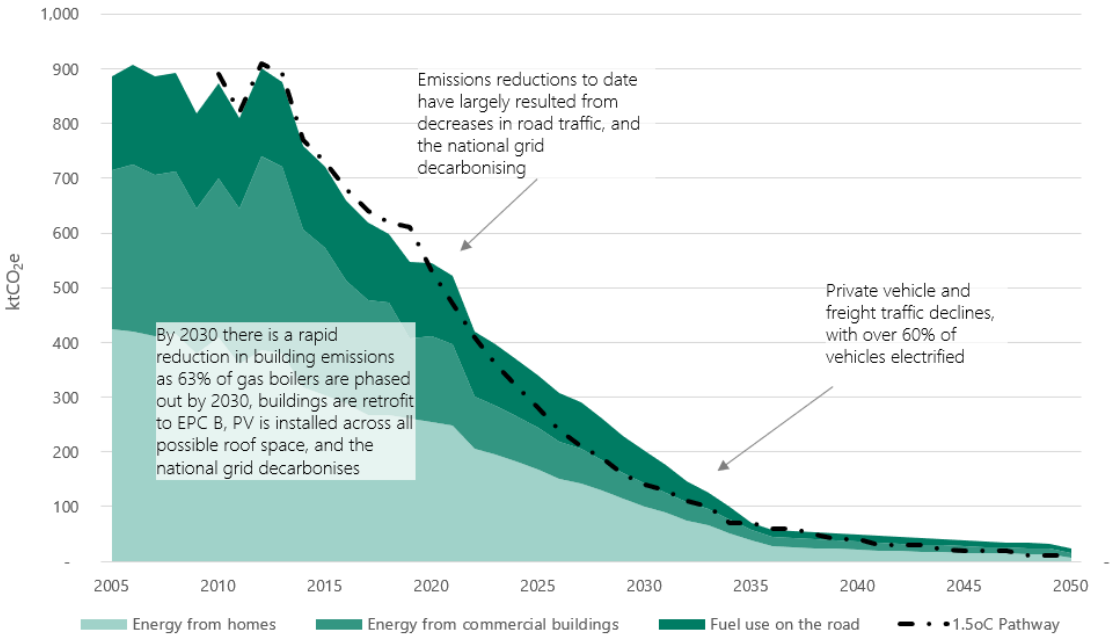

Figure 3: achieving Hackney's 2030 goals would rapidly reduce greenhouse gas emissions, contributing to global efforts to limit warming to 1.5oC. Source: Buro Happold modelling, with 1.5oC Pathway based on rate of decarbonisation specified by Tyndall Centre carbon budget models (grandfathering model).

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

Role of behavioural change

74% 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 4 illustrates the Committee on Climate Change (CCC) estimates that 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.

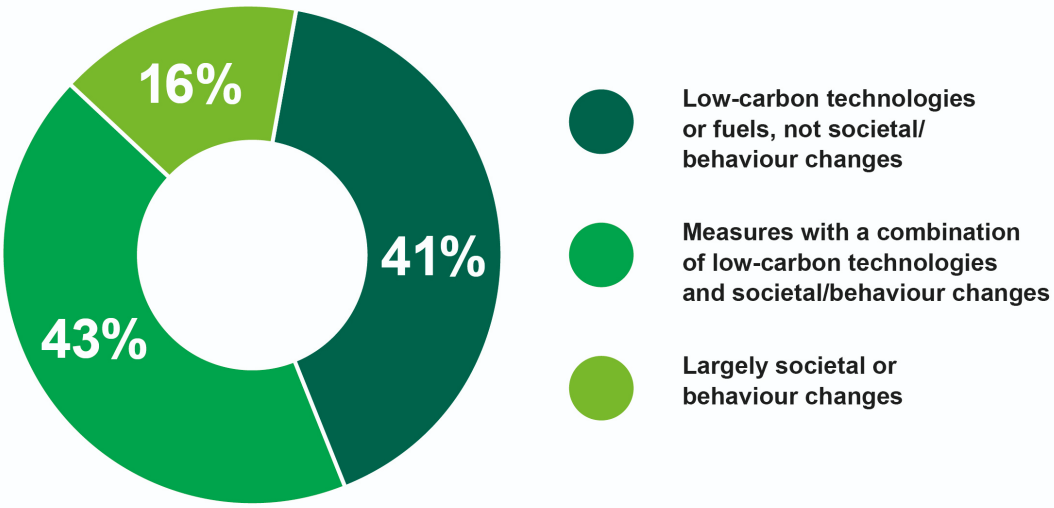

Figure 4: Role of societal and behavioural change in delivering the CCC's Balanced Net Zero Pathway. Source: CCC Sixth Carbon Budget.

Preparing for climate risks

From extreme heat to flooding events, the impacts of the climate emergency are already being felt in Hackney. The CCC[8] 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

[8] Independent Assessment of UK Climate Risk - Climate Change Committee (theccc.org.uk)

London Council's 2021 climate emergency poll[9] 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).

People disproportionately affected by climate risks

Hackney is a young and culturally diverse borough, with a quarter of its population under 20 and more than a third 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, but, 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.

[9] Londoners' views on climate change in 2021

[10] Hackney-Profile.pdf - Google Drive

[11] Hackney-Profile.pdf - Google Drive

[12] Final-equalities-evidence-base.pdf - Google Drive

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.
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 likelier 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.
Black and Global Majority residents: Black residents comprise 23.1% of Hackney's population, and Asian or Asian British residents are 10.5% of the population.[16] Across the UK Black and Global Majority people are structurally disadvantaged in	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

[13] Child poverty rates by local authority | JRF
[14] Health impact assessment of current and past air pollution on asthma in London
[15] hackney-community-strategy-2018-2028.pdf - Google Drive
[16] Ethnicity_Identity_Religion_Language_-_Census_Analysis_Paper1.pdf - Google Drive

Groups most at risk	Why are they more at risk from the climate emergency?
relation to health, income and access to natural areas.[17]	leaving them with fewer resources to adapt to the climate emergency.[18]
Disabled people and people living with health conditions - while lower than the national average, about 14.5% of Hackney residents 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 Climate Action Plan.

Social justice

Climate action can reduce inequalities and create other benefits. For example, Hackney faces significant overheating risks; actions such as planting more trees to provide shade can provide cooling effects. 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.

This includes ensuring that everyone in Hackney has a say on future changes, and that community groups and organisations are at the forefront of climate action. Hackney Council will make sure that efforts to decarbonise our buildings and systems help unlock wider changes, putting the most vulnerable or worst affected residents first and including local groups as much as possible. Table 2 sets out some of the potential social justice issues by theme.

[17] Confronting injustice: racism and the environmental emergency | Greenpeace UK
[18] hackney-community-strategy-2018-2028.pdf - Google Drive
[19] Final-equalities-evidence-base.pdf - Google Drive

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 ● 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

Themes	Potential Social justice issues
	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 and healthy diets can be compatible with religious and cultural dietary requirements, and can be more affordable than meat-based diets. But changing eating habits can be more challenging for people who have less flexibility when it comes to food. New food programmes and initiatives must include affordable options and include specific provisions and guidance for common diets in Hackney, 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
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

Themes	Potential Social justice issues
	• 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]

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

The journey so far

Supporting reductions in borough-wide greenhouse gas 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.

Tackling council greenhouse gas emissions

For its own activities, which are 5% of the whole borough's greenhouse gas emissions, the Council committed to a 45% reduction in emissions by 2030 and net zero emissions by 2040.

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

The Net Zero Energy Strategy sets out plans to reduce the Council's emissions by:

- 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 heat pumps and electric heat pumps
- Reducing the use of raw and carbon-intensive materials for new buildings
- Generating energy from solar panel installations

Borough-wide greenhouse gas emissions

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.

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 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 these 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 in the last three years

Themes	Key Council climate activities in the last three years	Key documents
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	Adapt Your Business Sustainable drainage systems (SuDS)
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 £2m 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	Net Zero Energy Strategy Green Homes Local Plan
Transport	• Implemented one of the most ambitious active travel programmes in the country. Introduced 19 new low traffic neighbourhoods (LTN)s. 70% of the borough's residential side streets are in LTNs • Retained 30 trial school streets, 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 in the last three years	Hackney Transport Strategy Hackney Parking and enforcement Plan Low Traffic Neighbourhoods Zero Emissions Network web page

Themes	Key Council climate activities in the last three years	Key documents
	• 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	
Consumption	• Moved residual waste collections from weekly to fortnightly, whilst recycling and food collections remain weekly; street level recycling rates have increased by 5% • 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 EcoSchools Programme; 42 schools signed up, with 8 schools achieving their green flag EcoSchool status. 400 classroom recycling bins have been installed and 25 waste audits have been delivered. A further 2 schools are supporting a UCL 'climate-friendly' canteen menu • Published a 'Zero Waste' map to encourage residents to refill their household products without packaging	Reduce, Reuse and Repair web page Dalston Library of Things web page Eco-Schools Programme Hackney Reduction and Recycling Plan
Environmental Quality	• Over 5,000 new street trees have been planted with 2,519 having been planted this season, increasing the overall street canopy from 20% to 30%; 13,037 trees (woodland belts, copses recorded as groups) have been planted in our parks and green spaces to date as a result of council programmes • 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 Local Nature Recovery Plan and Green Infrastructure Strategy	Air Quality Action Plan Local Nature Recovery Plan Green Infrastructure Strategy Health and Wellbeing in Hackney Health and Wellbeing Strategy Consultation

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 our green spaces, reducing pollution and helping local ecosystems thrive.

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. The UK will only meet its greenhouse gas emissions reduction targets if central government, regional bodies and local authorities work together.

How do the goals and objectives include the impacts of the climate emergency, social justice and the green economy?

Climate action is a complex and systems-wide challenge. To be effective, climate actions must be designed collaboratively, and with attention to who might be affected, and how. Proposals related to the green economy and social justice are part of all areas of climate action. Each theme identifies some of the key issues that need to be addressed to help ensure that climate action in Hackney is just and equitable.

Council Three Year Implementation Plan

Alongside this plan is a draft Hackney Council Three Year Implementation Plan, which provides a detailed set of key proposed actions for the Council to undertake over the next three years that contribute to delivering the goals.

Figure 5 shows the relationship between the Hackney Council Three Year Implementation plan and this boroughwide Climate Action Plan.

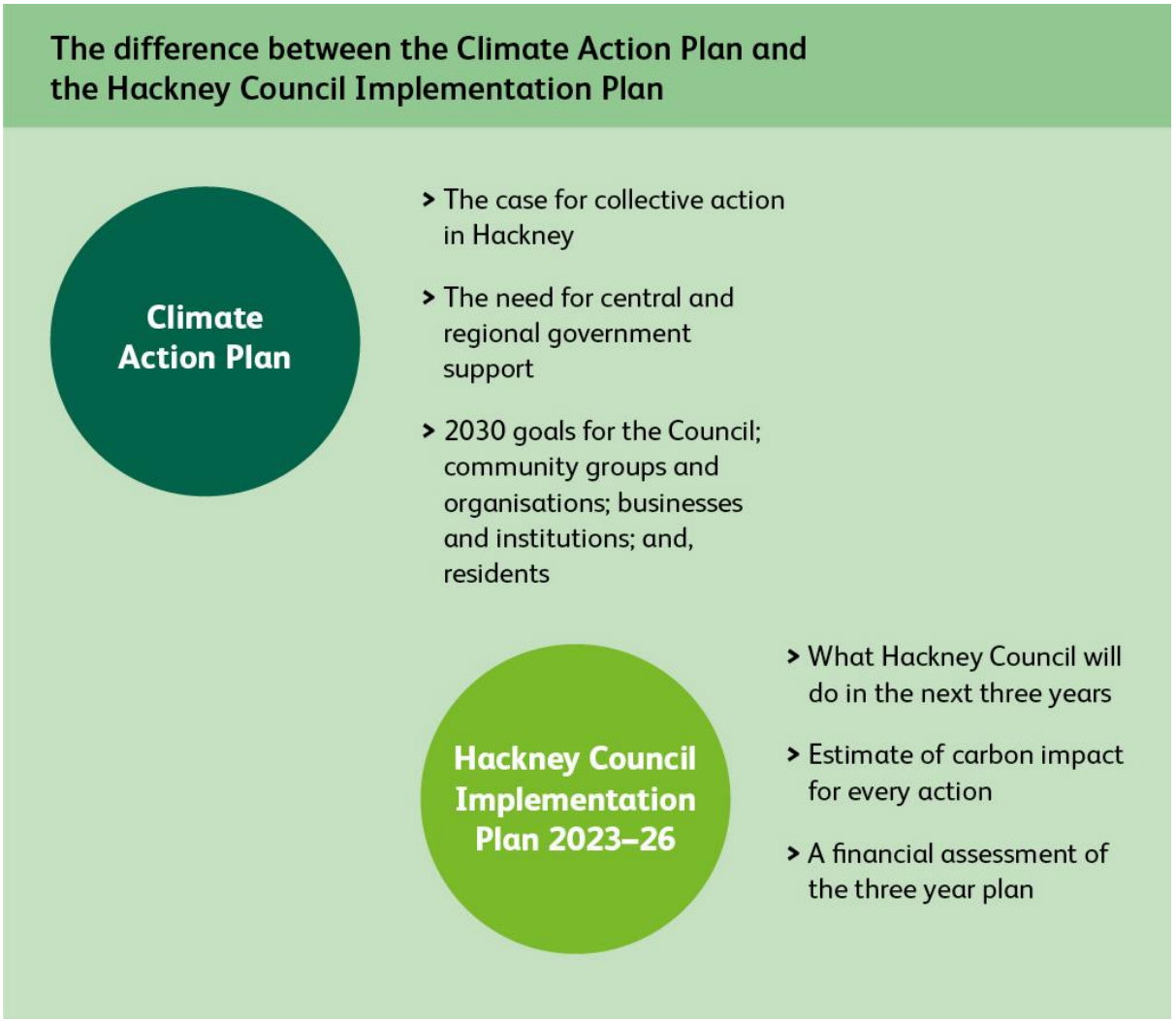

Figure 5: How the Climate Action Plan and Hackney Council Three Year Implementation Plan fit together

Adaptation

Our infrastructure, services, ecosystems, and communities are at risk from higher temperatures, increased rainfall and more unpredictable weather. This theme looks at adaptation to the impacts of the climate emergency, collectively designing new ways of protecting 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 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 overheating and flooding can be reduced by optimising green infrastructure; however there will need to be a more significant response to adapt existing buildings and ensure new buildings can cope with weather extremes in the longer term.

Developing a better understanding of how the climate emergency will impact Hackney will help inform how to prepare and respond at 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 and working with research groups and programmes to understand how to avoid the other impacts of the climate emergency, such as risks from pests, diseases, economic shocks, and threats to the food supply chain.

Table 5: Goals and Objectives for Adaptation

2030 collective goals[23]	Is the goal 1.5ºC-aligned? [24]	3 year objectives
Overheating		
Communities, businesses and public sector organisations are protected from overheating, reducing the risk of extreme heat impacts on vulnerable groups and critical infrastructure.	N/A	Start to reduce temperatures in existing buildings, streets and public spaces
		Ensure new buildings do not overheat
		Build understanding and raise awareness of the possible risks and impacts of overheating in Hackney
Flooding		
Flood risk is reduced in all critical drainage areas and existing sewage system capacity is better managed to respond to extreme weather events.	N/A	Reduce flood risk and expand the sustainable urban drainage network
		Ensure new buildings are flood resilient
		Connect Hackney to cross-borough flood defence schemes
Conservation & Resilient Planting		
Planting in Hackney is resilient to droughts and changing weather conditions, pests and invasive species are spotted and managed.	N/A	Plant climate-resilient species where appropriate
		Tackle ecosystem pests and invasive species
Community Preparedness		
Businesses, public sector organisations and communities have	N/A	Build local capacity to respond to environmental changes

[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
advance warning of climate shocks and know how to prepare and support each other.		Partner and collaborate with climate resilience groups
		Connect Hackney to early warning systems for climate shocks
Green Economy		
A Green New Deal has doubled the size of the local green economy and created a net zero, living wage-led economy of low carbon businesses.	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

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 with 2,519 having been planted this season, increasing the overall street canopy from 20% to 30%; 13,037 trees (woodland belts, cospes recorded as groups) have been planted in our parks and green spaces to date as a result of council programmes.

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https://consultation.hackney.gov.uk/++preview++/chief-executives-office/green-infrastructure-strategy/supporting_documents/Hackney Green Infrastructure Strategy.pdf

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.

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.

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, 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. 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. Caring for existing buildings better, by maintaining and refurbishing them, increases their lifespan. 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]

Using local businesses and suppliers to implement these changes supports a thriving economy for retrofit and low carbon construction professionals in Hackney and more widely. This requires training, recruitment and employment services that help people find jobs that reduce emissions in buildings, or jobs connected to the other climate action themes.

[26] The people who wish they had an energy price cap - BBC News

[27] Planet Mark - Homerton Hospital

Table 6: Goals and Objectives for Buildings

2030 collective goals[28]	Is the 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 fuel poverty.	Yes	Increase retrofits and energy monitoring in private buildings
		Encourage retrofits in conservation areas and heritage buildings where appropriate
		Continue to retrofit and install batteries in Council-owned and managed buildings
Gas Phase-out		
63% of buildings (public and private) use low carbon heat sources such as district heat networks, heat pumps and electric heating.	Yes	Deliver additional infrastructure that supports low carbon heating, including District Heat Networks
		Continue to swap gas boilers for heat pumps and other low carbon heat sources in Council-owned buildings and infrastructure
Embodied & Operational Carbon of New Builds		
Buildings are maintained and refurbished to prolong their lifespans 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
		Accelerate the reuse of construction materials and reductions in construction waste
		Meet ambitious operational and embodied carbon planning requirements

[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.

2030 collective goals[28]	Is the the goal 1.5°C-aligned? [29]	3 year objectives
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 private buildings
		Increase the number of community and cooperative solar panel projects
		Deploy solar panels across Council buildings and explore further opportunities for renewables
Green Economy		
A Green New Deal has doubled the size of the local green economy and created a net zero, living wage-led economy of low carbon businesses.	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

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. Hackney Light + Power is working to decarbonise its own assets and buildings supporting private households in Hackney with funding through the Green Homes Programme which has enabled energy efficiency measures in over 100 households in Hackney.

A community energy fund with initial funds of £300k was launched in 2022, aiming 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.

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, improve local air quality and 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 alongside complementary measures such as cycle training, route mapping/assessments, road safety education in schools, behaviour change campaigns, as well as traffic restraint and transport demand management policies such as car-free development and road user charging.

Low Traffic Neighbourhoods 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 (see: case study). Road and parking spaces can also be replaced with pocket parks, sustainable urban drainage networks to reduce traffic and open 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 deliver the overheating and flood resilience goals under the 'Adaptation' theme.

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 install over 3,000 EV charge points by 2030 to support this as well as reducing the emissions from its own fleet.

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.

Table 7: Goals and Objectives for Transport

2030 collective goals[30]	Is the goal 1.5ºC-aligned? [31]	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
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
		Reduce the Council's transport greenhouse gas emissions
Car and Motorbike Traffic		
Only 5% of trips that start in Hackney are by private car or motorbike, compared to 13% in 2020.	Yes	Accelerate car sharing and other types of shared mobility
		Improve the accessibility of public transport
		Explore the introduction of Road User Charging
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
		Accelerate the use of alternative delivery systems
Green & Resilient Streets		

[30] 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.

[31] 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[30]	Is the goal 1.5°C-aligned? [31]	3 year objectives
Roads and spaces currently used for parking have been reduced to support the promotion of walking, cycling and climate resilience.	N/A	Convert roadspace to public realm, SuDs and other uses
		Expand the network of school and play streets
		Plan for further future changes
Green Economy		
A Green New Deal has doubled the size of the local green economy and created a net zero, living wage-led economy of low carbon businesses.	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

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 low traffic neighbourhoods (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,[32] and a quarter of people in Hackney report walking or cycling more following their introduction.[33]

[32] Overall bus performance in Hackney unaffected by low traffic neighbourhoods
[33] 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[34]
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[35]
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.

[34] Cargo bike sharing to launch in Stoke Newington, London Fields and Shoreditch (hackney.gov.uk)
[35] Lime dockless bike hire scheme to launch in Hackney

Consumption

74% of Hackney's total emissions are associated with the goods and services we all 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. 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 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. Gaining a better understanding of what consumption emissions are, and where they are concentrated in Hackney, is an important first step. 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. Hackney Council is incorporating sustainability into its food poverty programmes, working closely with the Greater London Assembly Food Roots Incubator programme.

How we all spend and save money also affects emissions, investments by Hackney residents and businesses account for around 17% of boroughwide emissions, since many banks and pension funds still invest in carbon-intensive activities. These can be reduced by raising awareness of how to 'divest' money from these funds, and opening up more avenues for investments in local decarbonisation projects and community wealth funds. The Council will continue to move investments into low carbon, sustainable funds.

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	Research and raise awareness of procurement strategies to reduce borough-wide consumption emissions
		Increase repair and reuse of goods (electronics, clothing, furniture and more)
		Embed actions to reduce the Council's consumption emissions into internal procurement and management processes
Waste		
Residents and businesses have actively reduced annual residual waste generation and there is increased participation in recycling and composting programmes.	N/A	Reduce household waste arisings and improve recycling rates
		Reduce business waste arisings and improve recycling rates
		Maximise rates of food composting
Food		
Healthy, plant-based diets are widespread, with reduced rates of food poverty. Avoidable food waste	Yes	Reduce food poverty and enable access to healthy and sustainable diets for all
		Encourage healthy and sustainable food being supplied in Hackney businesses

[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
is 50% less than in 2020.		Procure sustainable and healthy foods for the Council's spaces
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 projects
		Continue to divest Council investment funds and pensions
Green Economy		
A Green New Deal has doubled the size of the local green economy and created a net zero, living wage-led economy of low carbon businesses.	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

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.

Case study: Bright Sparks

Furniture and household items in Hackney can be donated to Bright Sparks, a social enterprise that collects reusable furniture and household items for free. All the reusable items are cleaned, tested, sometimes repaired and distributed to local people via second hand shops. A 20% discount is available for residents on a low or no income.

Textiles including clothing, accessories and shoes can be donated via a network of 90 banks provided by TRAID, Islamic Relief and Oxfam across the borough or via free home collection service delivered by TRAID. Clothes and textiles in good condition will be sold for re-use in charity shops. Items that aren't suitable for donations can be recycled and made into new items, such as padding for chairs and car seats or industrial blankets.

Environmental Quality

The climate emergency is closely intertwined with ecological decline and continuing pollution of our air, water and soils. Biodiversity is threatened by loss of green spaces or inappropriate management of wildlife habitat, and pollution is created when fossil fuels are burnt, or chemicals and waste contaminate air, soil and water. 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 nature has proven benefits for both physical and mental health, and can help overcome isolation and increase opportunities to connect with others. 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)[38] 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 greatly reduce air pollution through reducing fossil fuel use in buildings (which contribute 15% of Hackney NO_x emissions), and non-electric vehicles (which are 64% of Hackney NO_x emissions).

There are also ways to tackle pollution from construction (which contributes 9% of NO_x emissions in Hackney, and 37% of PM_{10} emissions), 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 and there are opportunities to increase their value. 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 ecosystems.

There are many water bodies in Hackney, improving water quality requires stakeholders responsible to monitor and manage these assets spaces effectively. The Council can use its planning powers to protect water bodies from development, and make sure new development sites do not contribute to the pollution of water courses or groundwater. 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

[38] air-quality-action-plan-2021-2025.pdf
[39] executive-summary.pdf (thameswater.co.uk)

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		
Ecosystems are enhanced in all the areas identified in the Hackney Local Nature Recovery Plan.	N/A	Increase the biodiversity of green spaces
		Increase connectivity between green spaces and create new ecosystems and green corridors
		Support community groups to manage land in a way that benefits people and nature, and that draws on their knowledge and expertise

40 https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/technical-report/current-and-future-demand-for-water.pdf

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
		Improve awareness of biodiversity considerations in relevant decision making processes
Water		
Water bodies in Hackney are clean, healthy and protected from overdevelopment. Average water demand is reduced to 135 l/person/day, including reducing water lost through leaks by 22% compared to 2020.	N/A	Protect water bodies from overdevelopment
		Support Thames Water campaigns to reduce water consumption and lobby to reduce leakage
		Improve water body health
Green Economy		
A Green New Deal has doubled the size of the local green economy and created a net zero, living wage-led economy of low carbon businesses.	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
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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.pdf (hackney.gov.uk); 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.

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 to heat homes. To guide this transition, central government has published their Net Zero Strategy,[47] which sets out UK policies and proposals to reduce greenhouse gas emissions for each sector. 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,[48] 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.

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 decisions that are inconsistent with achieving net zero such as withdrawing the central government's Green Homes Grant this year, reducing subsidies for electric vehicles, cutting air passenger duty on domestic flights, proceeding with £27 billion of funding for road building, failing to tax flying effectively to encourage train travel or use 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

[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] Net Zero Strategy: Build Back Greener - GOV.UK
[48] Plans unveiled to decarbonise UK power system by 2035 - GOV.UK

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,[49] 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 5. 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.

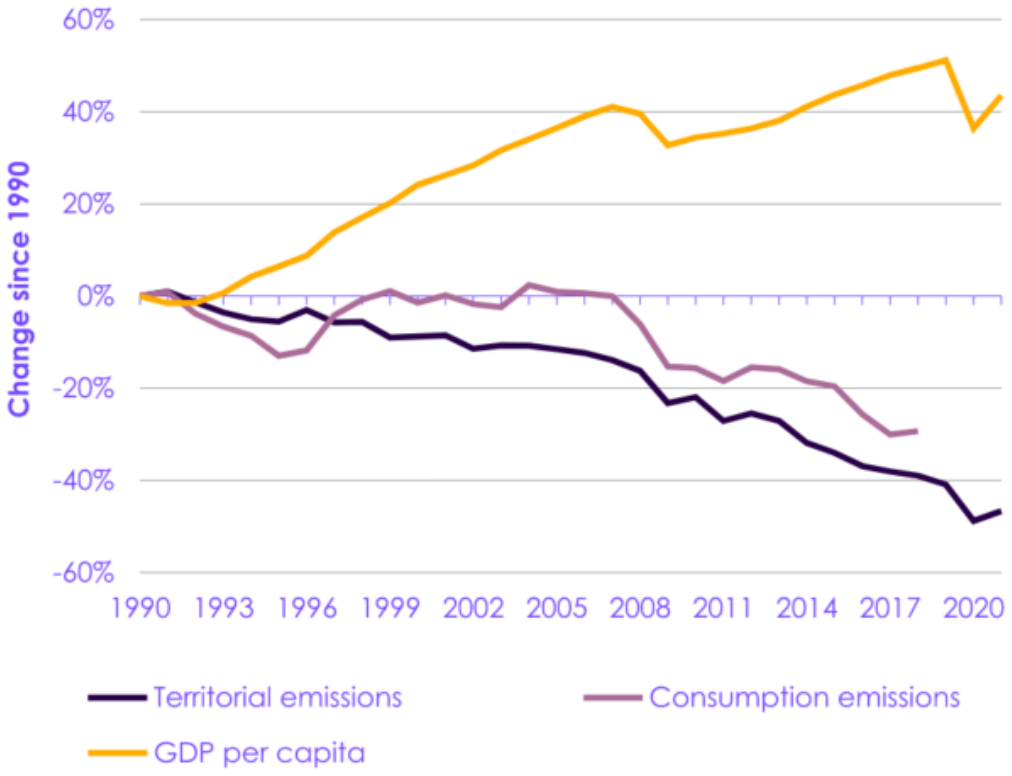


Figure 5: The UK's historical greenhouse gas emissions and GDP

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[50], outlining the required

[49] 2022 Progress Report to Parliament - Climate Change Committee
[50] Sixth Carbon Budget - Climate Change Committee

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 6. 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.

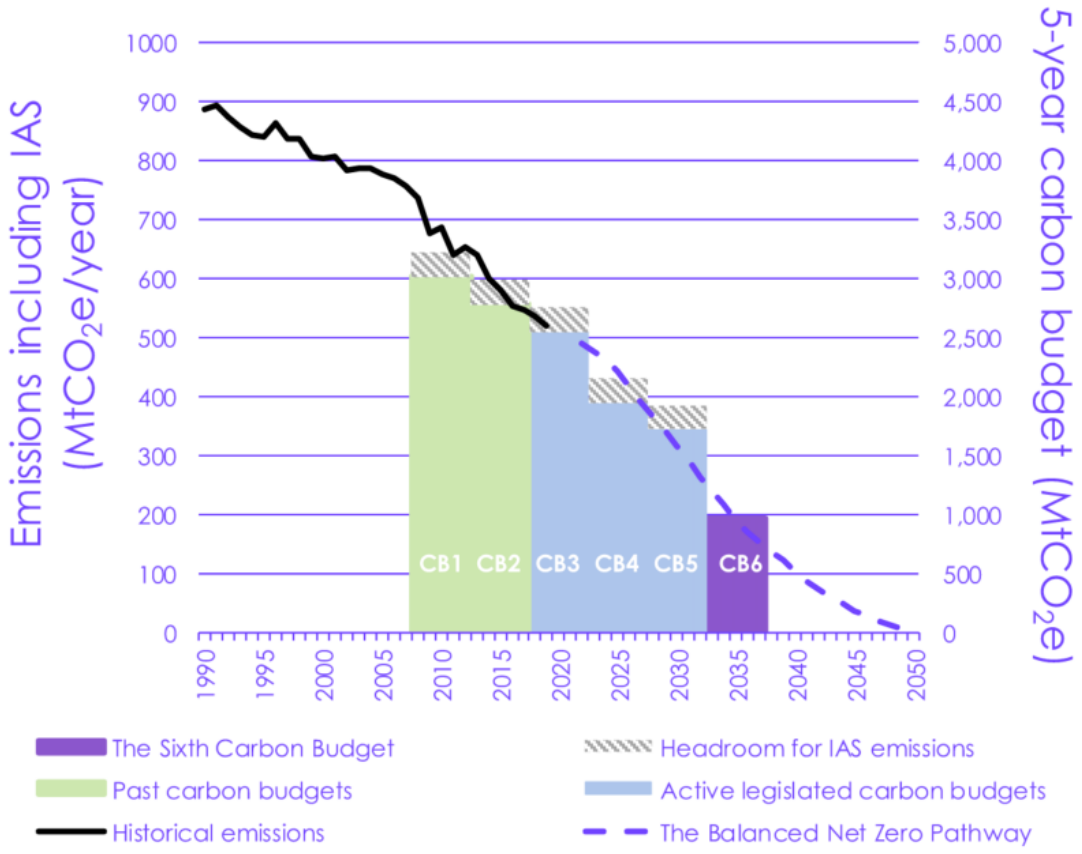


Figure 6: The recommended Sixth Carbon Budget

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 Climate Action Plan 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. Further work will follow from the CCC to define an Energy Security Strategy on how this can be achieved.

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 government's existing commitments

Regional and National asks

To support the delivery of the Goals and Objectives of the Climate Action Plan, 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	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	Central government (BEIS, HMRC, Treasury, DLUHC)

Theme	We need stakeholders to…	Who
	• 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	
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	Environment Agency, Defra, Greater London Authority

Theme	We need stakeholders to…	Who
	• Update the National Planning Policy Framework to empower local authorities to adopt planning policies commensurate with the climate and ecological emergency	
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

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 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.

National context

The cost of transitioning to net zero

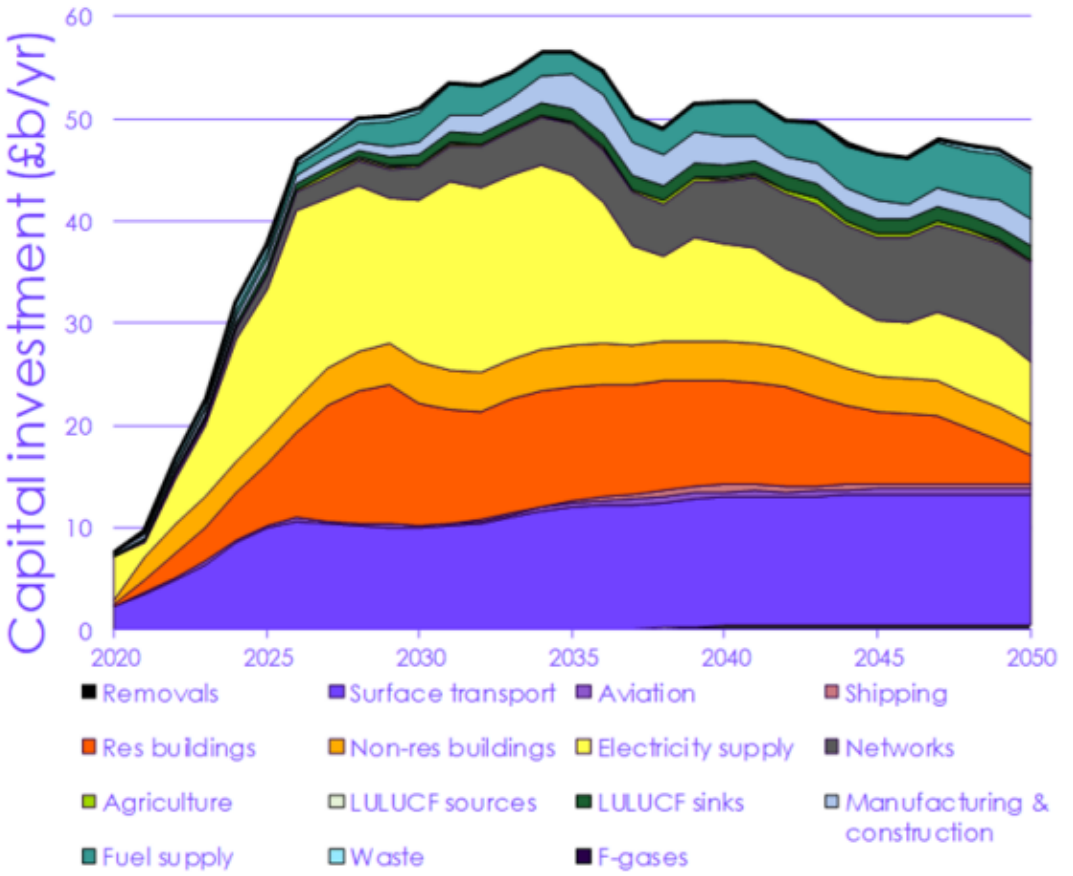
The CCC, in their Sixth Carbon Budget, estimates that UK low-carbon investment each year will have to increase from around £10 billion in 2020 to around £50 billion by 2030. Such scale-ups are not unprecedented and have been seen in the power, transport and buildings sector in the past. Overall however, the CCC report 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 current 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.[51]

The CCC has forecast capital investment requirements by sector. This is shown in Figure 7. 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

[51] Sixth Carbon Budget - Climate Change Committee

as in retrofitting residential and nonresidential buildings (approximately £12-15 billion). These four areas dominate the investment requirements in the next 15 years.



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 7: The CCC's Balanced Net Zero Pathway UK Investment programme 2020–2050

Sources of finance

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
- 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 in the UKCCIC's City Investment Analysis Report Oct 2021[52].

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.

[52] City Investment Analysis Report

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. Planning applicants are expected to maximise savings on-site before offsetting. Carbon offset payments are set and collected through legal agreements between Hackney 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
- Mitigation 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 parklets and green areas 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, Stakeholder Engagement and Governance

Monitoring and reporting

A key part of the role of future external governance of the Climate Action Plan will be to monitor, evaluate and report the progress of collective action against the goals and objectives of this plan. We will need to work together to establish a pragmatic but also transparent approach.

Council monitoring and reporting

It is the intention to adopt the monitoring approach proposed by London Councils using the London Energy and Greenhouse Gas (GHG) Inventory (LEGGI)[53] for borough-wide greenhouse gas emissions and the Local Partnerships GHG accounting tool for greenhouse gas emissions. This can be cross referenced with other data sources including the BEIS UK greenhouse gas emissions statistics[54] published annually, however, these only include territorial emissions.

A defined monitoring framework for Council emissions is scheduled to be in draft form by April 2023. There is also ongoing work with other local authorities via London Councils to look at ways of coordinating reporting and monitoring processes.

Progress will be reported through our internal Environmental Sustainability Board chaired by the Group Director for Finance and Resources overseeing Council actions that are undertaken in years one to three, as well as through our existing commitment to produce an annual report to Council. The Board is responsible for, amongst other things:

- Helping reduce barriers within the Council to help facilitate action
- Focusing efforts on the action areas identified
- Reporting back to the Council leadership and the public on efficacy of the programmes implemented

[53] London Energy and Greenhouse Gas Inventory (LEGGI)
[54] UK greenhouse gas emissions statistics - GOV.UK

Stakeholder engagement

The success of this plan depends on the involvement of all of Hackney's stakeholders, as well as central and city-wide government to enable the scale of change needed; the Council also plays a critical role. Work to date on the climate emergency has identified a continuing need for a more in depth and longer term response to engagement of residents and other key stakeholders. Current Council plans include, amongst others:

- Developing a future Hackney Net Zero Partnership to convene partners and businesses, including major landowners, public institutions, large businesses, and large housing associations
- Aligning existing networks and reviewing established key partnerships with the goals of the Climate Action Plan
- Using a more diverse range of engagement and participatory methods.

To strengthen and better coordinate plans, the Council aims to build organisational skills, plans and capability more broadly in respect of delivering external engagement in this topic area. In 2022, the Council applied to the Local Climate Engagement (LCE) programme which supports local authorities to engage communities in their climate decision-making, helping to build a deeper understanding of local preferences, aspirations and needs. A training programme is scheduled to be delivered with a key focus on how best to support the delivery of projects identified in the Climate Action Plan and implementation plan.

Participating in the LCE programme will help support the development of a new approach to public engagement on climate action, and bring together elected councillors, senior officers and communications and engagement officers on how to do this. It will help train a broader range of staff in the authority to take shared ownership of how good public engagement works, and build multi-disciplinary teams to deliver it, helping to increase more collaborative engagement with residents. By bringing together many suggested ways of engaging residents – ranging from citizens assemblies to statutory consultations – a more diverse programme can be established.

In the last 18 months, the Council has led a mix of project-based statutory consultations and broader digital and place-based resident engagement on LTNS, School Streets, the Parking Enforcement Plan and other walking and cycling proposals. This work has seen thousands of specific responses to consultations, broader feedback about its ambitions and genuine conversations between councillors, council officers, residents, businesses and activists. In particular, the Council has used an online platform (Commonplace) to seek broad resident feedback, and has heavily promoted this throughout all of its communications since 2020. In addition to these projects, the Council has worked with already-engaged residents, external stakeholders and experts and local groups on its Air Quality Action Plan and Local Nature Recovery Plan.

There have been two larger scale public engagement events, the first for voluntary and community organisations to start building a consensus about a greener recovery from the pandemic in 2021 (this was co-designed with community groups), and a second that reflects political commitments for a resident facing Citizens Assembly. The latter was held in March 2022 where a demographically representative group of residents were able to debate and

explore key elements of the Council's Net Zero ambitions and emerging Climate Action Plan. The findings from these events have provided background insight for the Climate Action Plan.

Future external governance structures for the Climate Action Plan

As part of adopting the Climate Action Plan broader external governance and oversight is needed to reflect this plan is not solely focussed on the Council's activities, but also a range of borough-wide greenhouse gas emissions for which the Council is not responsible and may have lesser influence. The establishment of appropriate external governance is therefore required.

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 Climate Action Plan 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
- 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: consider whether there are any you could commit to yourself and what it is possible for you to do to contribute to the behavioural changes required to realise greenhouse gas emission reduction ambitions set out in this plan

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!

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

For the Council

- Delivering alongside others the 3 Year Implementation Plan, that accompanies this Climate Action Plan which sets out the proposed actions that we will take in the years 2023–2026 to contribute to the goals set out in this document
- Continuing our partnership work with stakeholders, including awareness raising and further developing the Hackney Net Zero Partnership
- 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
- 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
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 state of preparing for the physical impacts and changes caused by the climate emergency.
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.
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.

Term	Definition
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.
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.
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

Term	Definition
	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. See also: consumption emissions.

Groups referenced in this document

This Climate Action Plan 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 and neighbourhood representatives, 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	The London Borough of 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 Urban Drainage systems
- **TfL –** Transport for London