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# Foreword

# Introduction from Cllr Ergin Erbil Deputy Leader and Chinelo Anyanwu, Climate Change and Net Zero Lead

Our planet is facing a real and imminent threat from climate change.

The Intergovernmental Panel on Climate Change's synthesis report in 2023 served as a "final warning" about the urgent need to act on climate change to prevent catastrophic consequences for communities around the world.

The emergency is real and action in response must be local, national and global. Enfield Council declared a climate emergency in 2019 and published our first Climate Action Plan in 2020.

This review and update of our 2020 plan builds on our successes so far, and responds to the rapidly changing context we're operating in. We have also further developed our approach based on what we have learnt since 2020 and we have listened to the feedback and ideas of local people and our partners.

Our overall aims remain unchanged - the Council will be carbon neutral by 2030 and the borough by 2040. Thorough internal engagement has taken place to ensure climate action is embedded into every team and department, while extensive external engagement has brought us closer to community, education and business organisations who are aligned to deliver these aims together. We cannot do this alone

In 2023, we agreed a new Council Plan which sets out our plans to invest in Enfield over the next four years and beyond. Responding to the climate emergency through adaptation and mitigation is a key part of all these priorities and we have a cross cutting principle to be climate conscious in all that we do. Our aim as an administration is to deliver positive outcomes for all our communities, now and in the future. Through our actions and those of our community, we will play our part in combating and adapting to climate risks.

This Plan has been subject to discussion and development with elected members at the Environment Forum and the Environment and Climate Action Scrutiny Panel. It has also been informed by engagement with national and regional climate change organisations and other local authorities.

This Plan has been guided by discussion and engagement with staff across the Council, with our partners and with our communities. It has been subject to discussion and development with elected members at the Environment Forum and the Environment and Climate Action Scrutiny Panel. It has also been informed by engagement with national and regional climate change organisations and other local authorities.



Cllr Ergin Erbil
Deputy Leader of
Enfield Council



Cllr Chinelo Anyanwu Climate Change and Net Zero Lead

Thank you to everyone who has contributed to the development of this revised Climate Action Plan for Enfield, and to all those who will be working with us to deliver on it in the months and years ahead.

Cllr Ergin Erbil Deputy Leader of Enfield Council

and

Cllr Chinelo Anyanwu Cabinet Member for Environment, Culture and Public Spaces



# Our Vision for Climate Action



# Our Vision for Climate Action

We will work with our staff, suppliers, residents, businesses, schools, community organisations, statutory partners and the government to become a carbon neutral organisation by 2030 and create a carbon neutral borough by 2040.



Enfield Council as an organisation

Carbon Neutral by:

2030

Potters Bar

Wallham Cross - Vytal Cympre

Whitevector Museum

Whi

London Borough of Enfield as geographical area

Carbon Neutral by:

**2040** 

In summer 2019, we signed a Climate Emergency Pledge, which commits us to:

- Make Enfield Council a carbon neutral organisation by 2030.
- Divest the Council from investment in fossil fuel companies.
- Only use environmentally friendly products where we are able to do so.
- Make our supply chain carbon neutral through ethical procurement.
- Work with local partners and communities and positively promote changing behaviours in Enfield to limit or stop activities scientifically linked to climate change.

This plan sets out how we are delivering on this pledge.

The Government has set a national target to be carbon neutral by 2050. We believe action needs to be taken faster than this to prevent climate breakdown and we are committed to using our statutory powers and our role as facilitator and influencer, to work together with residents, businesses, the community and voluntary sector and other public sector partners to achieve carbon neutrality in the borough by 2040.

Our success also depends on changes in national policy, further grid decarbonisation and significant additional investment from the Government. Along with other public sector organisations, private and voluntary and community sector groups, we are calling on Government to increase the investment and the powers available to local government so we can act at the scale and urgency required.

	Carbon Neutral Council			Carbon Neutral Borough		
Scopes	1	2	3	1	2	3
Type of calculation	Organisational emissions			Territorial emissions using Borough Boundary		
Status	Commitment t Neutral	o Carbon	Monitoring and Methodology in progress.	Neutral (Territorial emissions)		Currently monitoring waste and depending on LEGGI
Emissions reduction and date	2030 for 73% re	eduction.	Date to be set	2040 for 64% reduction.		Date to be set
Offsetting	Final 25% offse and beyond. Se or Offset metho confirmed.		Explore how we influence partners and value chain.	Explore and facilitate long term borough sequestration and offset projects.		



# **Executive Summary**



# **Executive Summary**

Our 2024 Climate Action Plan builds upon the priorities we established in 2020 in our first plan, responding to our progress so far, the changing policy, regulatory, economic and technological context, and the feedback and ideas from our partners.

We have strengthened our evidence base since 2020, including through commissioning our Local Area Energy Plan and by further refining our methodology for how we measure the greenhouse gas emissions produced by the Council. This has also enabled us to develop our plans with a greater understanding of current emissions.

### **Context**

Global, national and regional policy, the economic context, the technological context and climate risk have all changed since 2020. Each year, Conference of the Parties (COP) achieves new agreements, new technologies emerge, existing ones become cheaper and more efficient, professional bodies provide useful tools and the evidence base for climate action develop. At the same time climate risk is increasing and the links between poverty, health and climate risks become more pronounced.

Locally, we have seen these risks play out, with increases in extreme weather events, rising living costs and the increasing impact of increasing poverty impacting residents. We also have new opportunities to act because of the increasingly rich partnerships developing across the borough, as well as with other London boroughs, the successful initiatives we've delivered to date and as a result of our improved evidence base, including our Local Area Energy Plan and a comprehensive study on Delivering Net-zero co-commissioned with 18 other London councils.

We have developed our refreshed plan in the context of these new challenges and opportunities.

# Our principles

We will deliver climate action using the following principles:

- Robust governance and decision making
- Affordable climate action
- Fair and inclusive climate action
- Vigorous and transparent carbon accounting and offsetting

The climate action we take will not impose additional financial burden for the Council or penalise disadvantaged groups. We will make investments to adapt and mitigate the effects of climate change in a way that reduces future costs and therefore generates longer term savings, and in a way which tackles inequality and poverty. This includes green jobs and employment opportunities to strengthen our workforce and support our local economy, Our climate action aims to attract new and additional finance into the council and the borough that has co-benefits for Enfield residents and all stakeholders.

### A Carbon Neutral Council

To meet our target of being a carbon neutral Council by 2030, we will reduce carbon emissions the Council creates from the operation of our own buildings (including our libraries, civic centre, council housing, maintained schools, leisure centres and other council buildings); from our street lighting and from our council fleet of vehicles; and from how our staff commute to and from work and travel during the working day. We are also working to reduce emissions from the goods and services we purchase, and intend to reduce, re-use and recycle more from council buildings as well as develop initiatives to offset our remaining emissions. This involves supporting our staff in all teams to understand and take climate action.

### A carbon neutral organisation by 2030

#### **Carbon neutral council buildings**

Buildings owned and operated by the council will be carbon neutral by 2030



#### **Resource efficient Council**

The council will be water and resource efficient implementing best practice recycling



### **Decarbonised council travel and street lighting**

Council vehicle fleet will be carbon neutral by 2030



#### **Climate conscious organisation**

Decision making, spending, procurement and pension investment drives positive change





## A Carbon Neutral Borough

We will take coordinated actions with our partners across the borough to reduce carbon emissions from all sectors to achieve a carbon neutral borough by 2040. We will also adapt to the consequences of the climate change that we are already experiencing and which we will experience in the years ahead.

Our 'spheres of influence' range from direct initiatives such as local planning regulation through to engaging and working in partnership on community initiatives. Action includes enabling carbon neutral, sustainable and active travel; achieving carbon neutral and climate resilient buildings through planning policy and retrofit; reducing waste through enabling a circular economy; and decarbonising the energy sector. We also set out our plans for enhancing biodiversity and protecting natural landscapes across Enfield which will capture carbon emissions and help us to manage flood risk and mitigate against urban heating as part of our climate adaptation work.

### A carbon neutral Borough by 2040

#### **Carbon neutral and climate resilient buildings**

Carbon neutral buildings by 2040



#### Reduce, Reuse, Recycle

Waste in the brough reduced by 30% by 2040



#### Resilient urban and native natural environment

Increasing resilient urban and natural environment by 2040



#### Carbon neutral, sustainable and active travel

Carbon neutral travel by 2040



#### **Decarbonised energy systems**

Carbon neutral energy systems carbon neutral by 2040



### A climate conscious organisation

Residents, businesses and local partners engaged and committed to achieve a carbon neutral borough by 2040



# Successes 2020 to 2023



# Successes 2020 to 2023

### Council

### 30% decrease in the Council's direct emissions from the baseline

### **Carbon neutral council buildings**

- 10 heat pumps installed in our council buildings
- Piloted our first connection of the Energetik heat network to a school building
- Installed 247 kWp of solar panels at council and community buildings and three maintained schools



#### **Decarbonised travel**

- 18% of the council's fleet is electric
- Replaced all street lighting to LED



### A climate conscious organisation

- Launched our new Sustainable and Ethical Procurement Policy
- Reported to and received a score of A and A- for our Carbon Disclosure Project (CDP) submission in three consecutive years, demonstrating the Council's commitment to climate adaptation and mitigation.





# Borough

### 6% decrease in Borough greenhouse gas emissions from baseline

### Carbon neutral and climate resilient buildings

Deep retrofit of ten Council homes in Haselbury



### Carbon neutral, sustainable and active travel

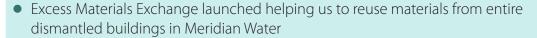
• 3.9 km of new cycle routes added to the network from 2021/22 baseline



• 20 school streets

#### Reduce, Reuse, Recycle

• Re-use shop at Barrowell Green Recycle centre





#### **Decarbonised energy systems**

• 709 homes connected to the heat network since March 2020

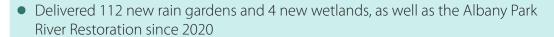




### Nature and green spaces

80 hectares of new woodland created

• 1,905 street trees planted from 2021/22 baseline





# The context



# The context

The trajectory of global, national and regional science-based requirements all limit global warming to below 1.5°C when compared to pre-industrial levels and reach global net zero by 2050. This is the backdrop for Enfield's Climate Action Plan.

# The increasing need for urgent action on climate, health and poverty

The last three years has seen the climate crisis accelerate in parallel with the Covid-19 pandemic and cost-of-living crisis, highlighting the need for urgent action to reduce carbon emissions and restore nature, while also addressing inequality, poverty and poor health.

Our revised Plan includes more emphasis on the co-benefits of climate action on improving the health, wellbeing and financial resilience of our residents.

Responding to climate change involves two major responses: mitigation (reducing greenhouse emissions) and adaptation (reducing the risks to people from changes to the climate), both of which have many major wider benefits for society. Mitigation strategies improve public health, reduce NHS expenditure, improve energy security and boost employment in emerging green business sectors. Improving green spaces to capture carbon and reduce impacts of flooding and heatwaves will improve physical and mental health – and help us in our response to the biodiversity crisis too.

These co-benefits make climate investment extremely cost-effective over the medium and long term.

### Climate risk in Enfield

The International Panel for Climate Change (IPCC) has reported that effects of climate change are already 'widespread, rapid and intensifying' and 'unequivocally' caused by human activity. London is having hotter, drier summers and warmer wetter winters.

The main climate risks for Enfield residents are extreme heat, drought and flooding. Enfield experiences flood risk due to the network of watercourses that flow through the borough as well as incapacity of our dated drainage systems. This is exacerbated by urban creep and the increasing intensity of rainfall events.

Climate risk compounds the issues of deprivation in the east of the borough. Most of the properties at risk of flooding are in the Lee Valley Area, which was historically an area of marshland. Land is lower lying in the Edmonton area compared to that in the west of the borough and it is where the Salmons Brook and Pymmes Brook meet to join the River Lee. Surface water flooding due to heavy rainfall is particularly high risk, causing the drainage systems to fail.

As with flood risk, wards to the east of the borough which experience higher level of deprivation, are also more at risk from extreme heat. As a dense urban environment London suffers from a significant urban heat island effect. In more deprived areas, poor housing, lack of green space, poverty and high numbers of elderly or very young people and those with long term conditions combine to concentrate risk in already marginalised communities. Enfield also experiences fluvial flood risk due to the flood plain of the river Lea.

<sup>1</sup> Remarks by Hoesung Lee, the IPCC Chair during Working Group III

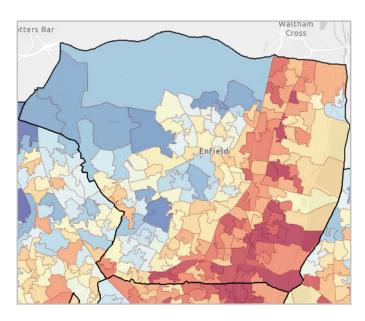


Figure 1 - Climate risk in Enfield, GLA climate risk mapping 2022

# Technological advances and the transition to a green economy

Some initiatives and technological options that were only emerging, or considered innovative three years ago, have now become more mainstream. For example, there have been significant developments in electric vehicle manufacturing and charging and solar panels are becoming increasingly affordable. We have developed our plans in response to these new opportunities and will continue to do so as technology advances further and funding becomes more available to deliver, anticipating that these technologies will also help reduce costs.

To respond to new technology and opportunities to deliver climate action, we need to skill, re-skill and develop our workforce across multiple teams. This includes training in retrofit and low carbon heat for council housing, facilities management and planning teams, low carbon procurement for commissioners and procurement teams, and low carbon finance opportunities for all teams needing to think differently about how to resource local climate action.

We also need to respond locally to the transition to a green economy so that local people do not miss out on accessing green jobs. Estimates by the LGA currently predict that in 2050 only 0.02% of direct jobs in low-carbon and the renewable energy sector in London will be in Enfield. We need to work to change this so that our local economy benefits from new green jobs and so that local people can access green jobs within the borough.

We need to ensure local people get the skills they need to access green jobs in the wider regional economy too. Nationally, the low-carbon and renewable energy economy is defined as consisting of low-carbon electricity; low-carbon heat; alternative fuels; energy efficient products; low-carbon services and low-emission vehicles. The Office of National Statistics have defined green jobs as 'employment in an activity that contributes to protecting or restoring the environment, including those that mitigate or adapt to climate change.'

# The financial challenge

Like local authorities across the country, we are facing unprecedented financial challenges with rising inflation, significant interest rate increases, a cost-of-living crisis and increasing numbers of households in need of support putting increased pressure on all our front-line services – with insufficient government funding to meet the increase in demand and costs.

Our Plan includes short and medium-term actions we are taking now with the resources available to us, in the context that we will need flexibility to deliver in rapidly changing circumstances. We are also committed to taking advantage of all available grant funding to mitigate and adapt to climate change, recognising the longer-term positive impact this can have on the council's financial position.

Our Plan also includes longer term action, necessary to reach our goals, which is not yet funded – because the funding will need to come from budgets in future years. With the current short-term funding mechanisms for local government, and the lack of sufficient sustainable funding, we cannot yet plan in any detail for how these longer-term actions will be funded – which is a huge challenge across the local government sector.

Along with other local authorities across the country, we are calling on the Government to put in place the necessary resources and powers so that we can deliver on all the actions set out in this plan, in time to meet our 2030 and 2040 targets. We are calling on Government to consolidate the different funding streams, reduce competitive bidding processes, give longer lead-in times where bidding remains and provide funding over the medium rather than the short-term with multi-year funding arrangements where possible. Non-competitive funding reduces administrative burdens and ensures that allocation of funding is based on need and opportunity rather than bidding capacity.

### Developing our evidence base

#### **Local Area Energy Plan for Enfield**

In 2022, Enfield Council was supported by the Mayor of London and the European Regional Development Fund (ERDF) to fund the first London borough-wide Local Area Energy Plan. A Local Area Energy Plan is an energy planning process which is considered the best practice approach for local governments to set decarbonisation pathways. A Local Area Energy Plan is a data-driven, whole energy system, evidence-based approach to set out the most effective route for a local area to contribute to meeting net-zero targets.

Our Local Area Energy Plan sets out the cost optimal pathway to the borough being carbon neutral by 2040, establishing a future vision of a 'Carbon neutral Enfield'. The process included non-technical analysis, stakeholder engagement and extensive detailed analysis of heat, transport and power demands of our energy system against a decarbonisation pathway to net-zero. The technical output is detailed analysis, recommendations and outputs alongside detailed mapping.

The Local Area Energy Plan sets out detailed recommendations on the steps we need to take to reach our carbon neutral target, which have been embedded into this updated Climate Action Plan and supporting implementation plans. Our Plan also reflects the targets set in interim years, showing the trajectory we need to take to meet our carbon neutral objectives.

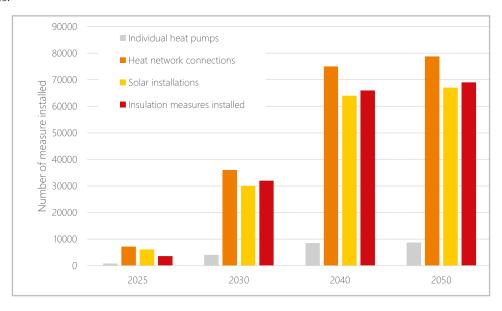


Figure 2 - Number of installation of measures

Meeting these targets is no easy undertaking, with a substantial cost to deliver the required measures. The Council cannot deliver this alone, with a whole systems solution requiring all stakeholders ranging from all levels of government, utilities, businesses and residents to come along on the journey.

#### **Consumption based emissions**

In July 2019, London Councils Transport and Environment Committee (TEC) Executive agreed that London Councils should develop support for borough action on climate change and one of the seven work streams is 'One World Living – Reducing London's Consumption Emissions'. In 2021, University of Leeds was commissioned to provide consumption-based emissions for the 32 London Boroughs and the City of London. This enables Enfield to have a deeper understanding of the climate implications of the actions taken by our residents, helping us identify where there are opportunities for change.

The output of this study forms a baseline for consumption-based emissions in Enfield. The study showed that Enfield is 12<sup>th</sup> out of the 33 boroughs for per capita emissions, an improvement from 18<sup>th</sup> in 2001, with 1 being the lowest and 33 being the highest figure, showing a trend in the right direction. The study also shows that 60% of emissions produced are from spend within the UK with 75% from within Europe.

Enfield has one of the largest industrial areas in London, with manufacturing forming 11% of our emissions, showing the opportunity to work with partners to move towards more sustainable manufacturing processes.

Our largest emissions sources are from direct household, forming 26% of all consumption-based emissions. This shows the importance of working together to enable and encourage our residents to make positive changes.

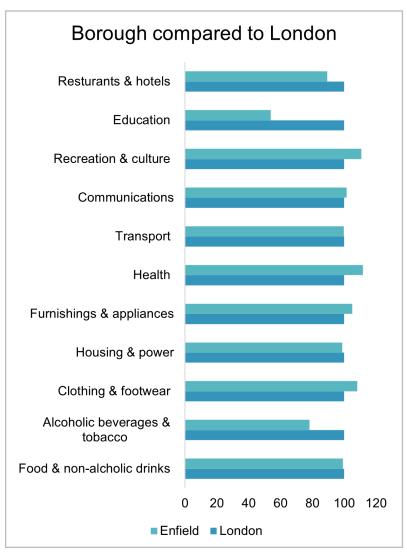


Figure 3 - Product based emissions (tCO2) 2018 (Baseline)

#### **Engagement with residents and partners**

In December 2022 and January 2023, we asked Enfield residents and stakeholders to give us their views on our 2020 Climate Action Plan and their ideas for future action. We ran events across the borough and also asked for feedback via an online questionnaire. Through this engagement, we heard from 136 local people with their views on our 2020 Plan and future approach.





We identified the following themes from this engagement:

- **Working in partnership** There so are many opportunities to work together with our informed and motivated community. We can only achieve our goal of a carbon neutral borough by 2040 if the Council, public sector and voluntary and community sector partners, local businesses and residents work together.
- **Climate as a co-benefit** Action to reduce climate change is widely understood as an imperative, but people are comfortable with it being a secondary outcome, or 'co-benefit', of another initiative for example one that could save money.
- **Homes and heating** Energy costs, heating efficiency and retrofit of buildings is foremost in everyone's minds, and people told us that they are prepared to put up with some disruption and some short-term costs to improve their buildings.

### Assumptions, constraints and gaps

This is a strategic document which focuses on delivery against the Council's Climate Emergency Declaration. Its intention is to cover all areas related to climate mitigation and adaption, but it cannot singlehandedly cover all environmental or sustainability issues as it relies on other documentation and strategies to cover these.

Our long-term Climate Action Plan assumes a 'best guess' of the evolving context around us. However, there are still many uncertainties as national policy is still emerging and central government has, at the time of publication of this Plan, downgraded its policies. We have to assume that there could also be unexpected forthcoming crises similar to previous ones, which could impact on this plan.

There are constraints on delivering this Climate Action Plan, the most obvious being finance and external policy decisions. Whilst these should not excuse holding back, they do have to be considered if the plan is to be realistic.

# Principles of climate action



# Principles of climate action

The way in which we take climate action is critical. In delivering on all our priority areas, we will always do so using the following principles:

- Robust governance and decision making
- Affordable climate action
- Fair and inclusive climate action
- Vigorous and transparent carbon accounting and offsetting

The climate action we take will not impose additional financial burden that the Council cannot fund, and it will not penalise disadvantaged groups.

As a local government, we will proactively work with Government to make investments to adapt and mitigate the effects of climate change in a way that reduces future costs and therefore generates longer term savings, and in a way which tackles inequality and poverty. Although climate change and climate breakdown affect all of us, the impacts disproportionately impact disadvantaged communities. This is the case globally and within regional areas too, including Enfield.

Considered and planned climate action can help us protect and improve outcomes for the most disadvantaged communities in the borough. It can attract new and additional finance into the council and the borough that has co-benefits for Enfield residents and all stakeholders, and we will take all opportunities available to us to draw this investment into Enfield.

Principle	This means
	Climate action has robust and integrated governance and holistic climate conscious decision making is used throughout the council.
Robust governance and decision making	There is a robust approach to coordinating and monitoring the delivery of the actions in this plan and we will measure success using the indicators we have identified for each priority and action.
	We will publish an annual progress report against our performance indicators and an annual emissions report tracking our journey to carbon neutrality.
	All funding options and incentives are maximised and lobbying increases available budgets. Realistic and affordable business cases will be created for delivering all the actions in the Plan, using funding opportunities that become available, and making investments that facilitate future financial savings for the Council and our residents.
	Action will not be taken where there is not a realistic and costed plan for delivery. This will mean our Plan may need to evolve and change over time through to 2040, to take account of the changing context we are operating in.
Affordable climate action	We will lobby national Government to consolidate the different funding streams, reduce competitive bidding processes, give longer lead-in times where bidding remains and provide funding over the medium rather than the short-term with multi-year funding arrangements where possible. Non-competitive funding reduces administrative burdens and ensures that allocation of funding is based on need and opportunity rather than bidding capacity – and allows all available capacity within local government to be focused on delivering climate action at the pace and scale required.
	We will also lobby Government to make significant investment in reducing carbon from our buildings and transport and energy systems.

	Climate action protects the most vulnerable people in the borough from the climate changes that are already happening or are now inevitable.
Fair and inclusive climate action	Climate action helps us tackle longstanding inequalities, by tackling health inequality through better air quality, improving the conditions of our homes and neighbourhoods, increasing access to nature and by supporting livelihoods through creating new good quality jobs and reducing fuel poverty.
	In all climate action we take, we undertake a robust equality impact assessment to ensure that action does not discriminate against anyone because of their protected characteristic, and that we are using every opportunity to advance equality of opportunity for people facing disadvantage.
	Our carbon accounting, compensation and offsetting programme will bring wider community value and we will be transparent about our approach at all times.
	We use the international Greenhouse Gas Protocol, a globally accepted standard for measuring emissions that is used as the system behind reporting frameworks such as CDP.
Robust and transparent carbon accounting and offsetting	Our key focus is carbon reduction, but for our council target we will also need to offset our residual emissions to become carbon neutral. This will be built into long term budgets and we will use offset schemes that are local, verifiable, have high impact, and bring community benefits for the borough.
	For our borough target we will explore ways that we can facilitate offsetting the residual borough emissions.
	We will also work with London Councils to establish a methodology to monitor and reduce the boroughs consumption-based emissions.

# Our action plan

O.P1	Robust governance and decision making			
O.P1.A1	Climate conscious decision-making	Implement processes to assess climate change implications in all decisions we take, review options for increased robustness including integrating carbon calculations and standardised monitoring and decision weighting		
O.P1.A2	Monitoring and reporting	Annually and publicly report on Council and Borough GHG emissions and progress against the Climate Action Plan. Monitor progress internally through tracking of corporate indicators assigned to services		
O.P1.A3	Continuous review	Continually assess effectiveness of the Climate Action Plan actions and targets in delivering the required outcome		

O.P2	Affordable climate action		
O.P2.A1	External funding opportunities	Track, bid for and spend grant and low-cost loan funding for projects to deliver carbon neutral trajectory and its co-benefits	
O.P2.A2	Resourcing and financing of new capital projects	Build in necessary internal resourcing and costing of carbon neutrality into the early stages of capital projects, with provisional funding targets so once funding is secured further development work is not needed	
O.P2.A3	Use of financial incentives	Explore financial incentives and review options for lower carbon choices with finance and commercial teams.	

О.Р3	Fair and inclusive climate action		
O.P3.A1	Equality Impact assessments	Undertake Equality Impact Assessments to inform all key decisions relating to climate adaptation and mitigation	

O.P4	Vigorous carbon accounting and offsetting			
O.P4.A1	Carbon price	Pilot the use of HM Treasury carbon price in business cases, options appraisals, and as internal accounting for project incentives and levies		
O.P4.A2	Council carbon compensation fund	Continue to maximise the incoming council carbon offset funds and the projects that are funded		
O.P4.A3	Borough carbon fund	Explore and support local/community carbon offset funds for investment in carbon mitigation projects in Enfield		
O.P4.A4	Carbon offsetting	Establish mechanisms to monitor local council enabled carbon offsetting in borough, and identify projects and budget to offset all council residual scope 1 and 2 emissions from 2030, and borough residual emissions from 2040		

# Measuring success

O.P	Principles for climate action			
O.P1	Robust governance and decision making			
O.P1.M1	To be developed by 2025			
O.P2	Affordable Climate Action			
O.P2.M1	Climate action resourcing (£) Council funds annually allocated to climate action resourcing and delivery			
O.P2.M2	Funding raised for climate action (£) Grants secured per year related to climate action			
O.P3	Fair and inclusive climate action			
O.P3.M1	To be developed by 2025			
O.P4	Vigorous Carbon accounting and offsetting			
O.P4.M1	Carbon offset per year in borough (tCO2/yr) Nature based carbon offset per year in borough			
O.P4.M2	Organisational natural offsets (kgCO2e) Natural environment offsets invested in to offset council carbon emissions			

# Carbon neutral council



# Carbon neutral council

### Our vision

By 2030 the Council will be a carbon neutral organisation. Enfield Council's operations will reduce scope 1 and 2 emissions by 73% from our baseline in 2018/19 and offset the remaining emissions to zero. Council buildings and schools will have reduced energy demand and decarbonised heating systems and all energy will be supplied by renewable energy. The Council's fleet will be decarbonised and in all the decisions we make, we will ensure that the lowest amount of carbon possible is emitted.

Carbon neutral council buildings

By 2030 all buildings owned and operated by the Council will be decarbonised and support the green economy through a combination of building rationalisation, energy efficiency investment, heat decarbonisation and utilisation of renewable energy. This will be demonstrated by a 73% reduction from our 2018/19 baseline by 2030, with year-on-year reductions in energy and carbon emissions and an increase in installed solar capacity.

Decarbonised council travel and street lighting

By 2030, the Council will have decarbonised council travel through reducing the overall size of our fleet and investing in decarbonised vehicles, reducing energy consumption from street lighting infrastructure and supporting staff to use low and zero carbon forms of transport.

Resource efficient Council

By 2030, the Council will be resource efficient, minimising water consumption and waste produced, implementing best practice in recycling and circular economy principles.

Climate conscious organisation

By 2030, Council staff and partners will be climate conscious in all decisions we make and actions we take. This includes ensuring pension funds are sustainably invested, using all procurement activity to make positive changes towards climate action and using every opportunity to mitigate and adapt to climate change.

# Council carbon footprint and our trajectory to carbon neutrality

A carbon footprint is the total amount of emissions an organisation will emit in the delivery of its objectives. This may be in the form of energy use or an organisational fleet. We measure our carbon footprint over three areas:

Scope 1	Carbon that is emitted directly from the council's gas usage and vehicle fleet.
Scope 2	Carbon that is emitted from electricity usage in council buildings and street lighting.
Scope 3	Carbon emissions from sources that the council does not own or control but are within our value chain and can therefore influence. This includes emissions associated with business travel, procurement, waste and water. It also includes estimated emissions from energy used by residents in council homes and capital goods for the construction of new homes.

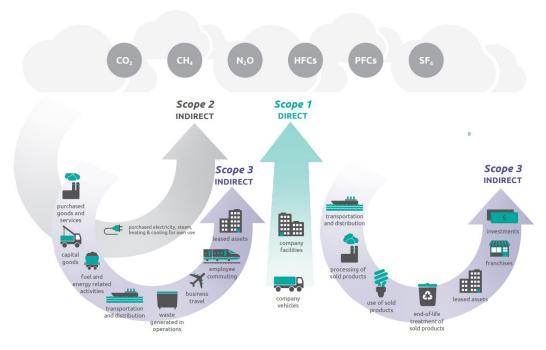


Figure 4 Overview of GHG Protocol scopes and emissions across the value chain

Historically, carbon emissions reporting has concentrated on only scope 1 and 2 emissions. Recognising the severity of the climate crisis and the need to work with our partners, as set out in our Climate Action Plan 2020, we are committed to reporting on our scope 3 emissions, establishing new methodologies for more accurate reporting. Whilst we are focusing on reducing scope 1 and 2 to zero by 2030, we recognise we also have an important role to play in being transparent and identifying the actions we can take to reduce our scope 3 emissions as well.

Enfield Council reduced its emissions by around 50% between 2009 and 2019, halving our carbon footprint in 10 years. This was achieved by investing in our buildings to make them more energy efficient, investing in low carbon energy sources and consolidating our operations into fewer buildings.

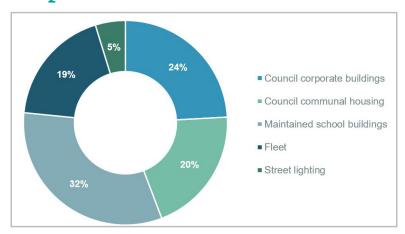
### **Baseline**

In the development of the Climate Action Plan 2020, Enfield Council calculated a new baseline utilising 2018-19 data year, to measure the footprint of our own operations. Since then, we annually reported, following the GHG companies reporting methodology, against this baseline to measure improvement and progress toward our target.

# The Council's scope 1,2 and 3 emissions

Council direct, indirect and influencing emis			
Council scope 1, 2 and 3 (tCO2e)	2018/19	2021/22	2022/23
	Baseline	Previous	Current
Scope 1  Direct emissions from fleet and buildings	11,199	11,527	9,908
Scope 2 Indirect emissions from purchased electricity	10,709	6,134	5,347
Scope 3  Indirect emissions from council influence	81,256	43,732	39,920
Total scope 1, 2, 3 emissions	103,165	61,157	55,175

# The Council's scope 1 and 2 emissions

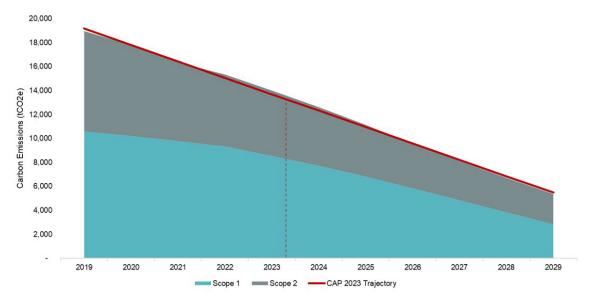


# The Council's scope 3 emissions

Council influencing emissions			
Council Scope 3 (tCO2e)	2018/19	2021/22	2022/23
Capital Goods	45,440	588	7,721
Fuel and energy related activities	913	543	488
Water	48	62	68
Business Travel	139	96	104
Employee commuting	No date	2,230	2,040
Upstream leased assets	No data	237	243
Downstream leased assets	32,237	38,-057	27,402
Franchises	2,479	1,919	1,855
Total Scope 3 Emissions (tCO2e)	81,256	43,732	39,920

# Carbon neutral trajectory

Below is our projected trajectory towards carbon neutrality for our Council scope 1 and 2 emissions. This trajectory has been established using science-based targets methodology, setting a reduction target which is in alignment with the Paris agreement. At the time of the publication of this plan in 2024, we are on trajectory.



### Carbon offsetting

Reducing emissions through direct action will be our main approach to becoming a carbon neutral organisation. But there will be c.20% of emissions which are currently not practically or financially possible to reduce, these are called "residual emissions". This will likely include:

- Emissions from the UK power grid, based on carbon content of the national grid, which is projected to massively decarbonise by 2030
- Emissions from the heating and hot water systems of hard-to-treat buildings or buildings where at the point of heating system replacement there was no viable low-carbon alternative. This may be in areas of the borough which are awaiting strategic growth of the heat network to decarbonise as part of the 2040 plan
- Emissions from fleet vehicles for which no low-carbon fuel or electric vehicle product alternative is available at time of replacement

From 2030, the Council will offset all residual scope 1 and 2 emissions to zero. Carbon offsetting will be undertaken

through the allocation of funds and delivery of in-borough offsetting projects such as renewable energy generation and investment in natural offsetting through green infrastructure (carbon sequestration). All projects will provide additionality, avoid double counting, ensuring best practice is followed seeking 3rd party accreditation where necessary. This will be budgeted utilising the HM Treasury cost of carbon guidance. The Council will develop a role offsetting framework as set out in the action plan.

# Milestones and targets

Carbon neutral organisation	by 2030	2018 Baseline	2027	2030
Council scope 1 and 2 carbon emissions	(tCO2e/yr) Council total scope 1and2 corporate emissions	21,908 <sup>2</sup>	15,062	5477
Council scope 1 and 2 carbon emissions reduction	(%) Reduction of council scope 1and2 corporate emissions over 2019 baseline	0%	42%	75%
Carbon neutral council build	lings			
Operational buildings emissions	(tCO2e/yr) Council corporate scope 1 and 2 emissions	4978	2640	1274
Maintained school buildings emissions	(tCO2e/yr) Council maintained school scope 1 and 2 emissions	4889	4271	1773
Community housing asset emissions	(tCO2e/yr) Council communal housing scope 1 and 2 emissions	26072	2737	1246
Decarbonised council travel				
Annual carbon of street lighting (market)	(tCO2e/yr) Annual scope 2 emissions from street lighting contract (market based)	2478	753	405
Council fleet emissions	(tCO2e/yr) Annual carbon emissions from the council's directly managed fleet vehicles	2470	2238	684
Council resource efficiency				
Council waste diversion rate  (%) of council waste from corporate sites which is recycled, reused or composted		We are working to establish a measure for this metric		
Working together to be clim				
Fossil fuel divestment % Invested of total pension fund invested in fossil fuels		We are working to establish a measure for this metric		
Employees empowered to take climate action	(%) Percentage of employees who answer positively to annual staff survey question "Do you feel empowered to take climate action in your work?	We are working t metric	o establish a meas	ure for this

This figure does not align with the original 2020 baseline as we have since improved the granularity of our reporting.

# Council: Buildings

### Our vision

By 2030 all buildings owned and operated by the Council will be decarbonised and support the green economy through a combination of building rationalisation, energy efficiency investment, heat decarbonisation and utilisation of renewable energy. This will be demonstrated through a 73% reduction from our 2017/18 baseline by 2030, with year-on-year reductions in energy and carbon emissions and an increase in installed solar capacity.

Council buildings include all council owned and operated buildings, recognising our role as a building owner, occupier and operator. This includes our offices, depots, libraries, youth centres, family hubs, council housing community halls, council housing stock and buildings we rent commercially to other operators.

C.BU.1	Decarbonised operational buildings	By 2030, Council operational buildings will be rationalised and the carbon emissions from our remaining estate will be reduced through an energy efficiency and heat decarbonisation programme, delivered as increased funding becomes available.
C.BU.2	Decarbonised maintained schools	By 2030, Enfield Council's maintained schools will be decarbonised by 64% from our baseline. Schools will be supported and empowered to decarbonise and benefit from improved estates.
C.BU.3	Decarbonised council housing assets	By 2030, landlord energy supply to council housing will be decarbonised by 79% from our baseline through decarbonisation of communal heating systems and renewable energy investment. We will achieve year on year reductions in energy and carbon emissions and increases in solar capacity installed with savings passed on to residents.
C.BU.4	Retrofit of Council homes	By 2030, all existing directly managed council housing will be carbon neutral and housing energy inefficiency will no longer contribute to fuel poverty. All council homes will have an average rating of EPC C (>70) at least and moving towards B (>80) where affordable.
C.BU.5	Carbon neutral council-led development	By 2030, all buildings developed by the Council will be carbon neutral and resilient. Leading by example, the Council will minimise whole-life carbon impact of all developments and require the highest standards from development partners.
C.BU.6	Carbon neutral commercial landlord	By 2030, EPC B average will be achieved for all investment properties through the council utilising powers as a landlord to support, encourage, and enable retrofit of commercial properties.
C.BU.7	Climate resilient buildings	By 2030, council owned and maintained buildings will be resilient to a changing climate, with reduced risk of overheating and flooding and with opportunities for further adaptation in the future if required.

# Why is this important

Decarbonising buildings is a challenge at every scale. The UK's built environment is responsible for 25% of the UK's greenhouse gas emissions. The Mayor of London has committed to going beyond the national target with an aim to be carbon neutral by 2030. Our homes and workplaces in Enfield make up over 3% of London-wide building emissions.

We recognise our role in decarbonising the large number of buildings we own in the borough, ranging from council operational properties, council commercial assets and council homes. We have estimated that buildings used for day-to-day council's operations and occupied by our maintained schools, make up almost 5% of non-residential borough wide emissions, and our council housing makes up almost 10% of the domestic emissions in the borough. This does not include the numerous commercial properties the council leases, such as many of our leisure and shopping centres in the borough.

In addition, the Council is continuing to address challenges including ever increasing financial pressures and continued need to deliver affordable high-quality housing and school spaces for our residents and their families.

We recognise the co-benefits that come with decarbonisation including improved working, learning and community spaces for our staff, residents and children and young people, positively impacting the physical and mental health of our community. Through the decarbonisation of our buildings, we can lead by example, supporting the creation of green jobs in the borough.

### Our asks of others

- Long-term, consistent funding from Government which not only supports but enables the decarbonisation of heat and acknowledges the significant investment needed in buildings to bring them up to modern standards to utilise the best in new technology.
- Viable financing options from Government and the private sector for delivering a fabric-first approach to address the fuel-poverty challenge, aligning funding with an increased aspiration in reducing fuel-bills, home decency and increasing quality of life for our residents.

## Our action plan

C.BU1	Decarbonised operational buildings	
C.BU1.A1	Planning, funding and delivery	Develop a two-phase strategic plan and business cases to rationalise 30% of the Council's operational estate, and secure funding to decarbonise the remaining portfolio including investing in energy saving opportunities and low-carbon heating systems.
C.BU1.A2	Skills, monitoring and operational improvements	Develop robust data gathering and storage processes ensuring active metering and monitoring to enable operational insight and improve reporting. Invest in training, skills and operational improvements to support decarbonisation of public buildings
C.BU1.A3	Low-carbon energy installation and procurement	Invest in renewable energy prioritising on-site opportunities that provide additionality. Identify opportunities for increased carbon reduction through energy procurement



# Local story: Decarbonising our public buildings

Enfield Council have been investing in energy saving measures in our public buildings for many years, demonstrated by our previous achievements reducing our emissions by around 50% between 2009 and 2019, halving our carbon footprint in 10 years. This was achieved by investing in our buildings to make them more energy efficient, investing in low carbon energy sources and consolidating our operations into fewer buildings

In 2020 we made steps to further decrease our emissions, securing funding through Phase 1 of the Public Sector Decarbonisation Scheme, with £3.1m invested over 15 sites. The council installed 10 heat pumps, to reduce our reliance on natural gas and piloted our first connection of the heat network to an existing school building. We invested in insulation and energy saving technologies and installed 247 kWp of solar panels at council office and community buildings and three maintained schools.



C.BU2	Decarbonised maintained schools	
C.BU2.A1	Schools retrofit planning, funding and delivery	Align maintained schools' capital programme with decarbonisation opportunities, and support schools with decarbonising whilst upgrading assets
C.BU2.A2	Schools low-carbon energy installation and procurement	Support schools to access funding for building upgrades and decarbonisation. Submit for capital funding from the Public Sector Decarbonisation Scheme for minimum 1 school per round of funding
C.BU2.A3	Renewable energy for maintained schools	Support schools with access to renewable energy to decarbonise energy supply and reduce bills

C.BU3	Decarbonised council housing assets	
C.BU3.A1	Council housing energy investment programme	Develop strategic plans and business cases to decarbonise council housing communal areas, secure funding and invest in energy saving opportunities and decarbonisation of communal heating systems.
C.BU3.A2	Communal energy systems	Undertake a strategic review of council housing communal energy systems to identify opportunities for connection to heat network and, create shovel ready schemes for future rounds.
C.BU3.A3	Council housing renewable energy	Invest in renewable energy where a business case can be made, prioritising on-site opportunities that provide additionality and explore affordable opportunities to procure renewable electricity through corporate contracts.

C.BU4	Retrofit of Council homes		
C.BU4.A1	Strategic planning	Develop a planned and consistent approach to retrofitting properties and proposed goals to be set out in a carbon neutral aligned Housing Asset Management Strategy which is reviewed at regular intervals.	
C.BU4.A2	Delivery and funding	Establish business cases and deliver a programme of works, securing funding required to support the delivery.	
C.BU4.A3	Skills gap	Identify skills gaps and upskill inhouse staff and contractors working on behalf of the Council.	
C.BU4.A4	Resident engagement	Establish a programme to engage with council housing residents to raise awareness about energy saving and decarbonisation.	

C.BU5	Carbon neutral council-led development		
C.BU5.A1	Standardisation and knowledge sharing	Develop, implement, and enforce net-zero standards for all council-led developments, standardised across departments, in line with best practice guidance available, embedding throughout the design process from inception though to occupation, including prioritising data collection in contracts. Share knowledge between departments on new approaches	
C.BU5.A2	Best practice pilot	Invest resources to learn from best practice approaches and delivery mechanism, such as Passivhaus and MMC, to identify opportunities and establish template business cases to ensure net zero is achievable	
C.BU5.A3	Monitoring and reporting	Establish and implement processes for monitoring on environmental performance across all council-led new build developments, including a toolkit to embed expectations into contracts, to provide oversight and drive-up standards of all new developments	

C.BU6	Carbon neutral commercial landlord	
C.BU6.A1	Council non- residential assets	Decarbonise council owned commercial assets utilising our role as landlord to encourage, support and enable low carbon technologies and operational improvements. Identify and implement process and policy levers, including reviewing leases as they come up for renewal and embedding as part of asset disposal decision making
C.BU6.A2	Monitoring and reporting	Develop an in-depth understanding of energy performance and emissions associated with council investment properties. Utilise centralised data information systems to track status including compliance against national policy

C.BU.7	By 2030, council owned and maintained buildings will be resilient to a changing climate, with reduced risk of overheating and flooding, and with opportunities for further adaptation in the future if required.	
C.BU7.A1	Resilience to extreme heat	Implement building design tools to reduce overheating risk in new and existing buildings and use urban design tools to reduce the urban heat island effect on council-maintained sites.
C.BU7.A2	Resilience to flooding	Implement best practices to reduce flood risk on council-maintained sites and council-led developments.

# Measuring success

C.BU	Carbon neutral council buildings		
C.BU1	Decarbonised operational buildings		
C.BU1.M1	Operational buildings emissions	(tCO2e/yr) Council corporate scope 1 and 2 emissions	
C.BU1.M2	Operational buildings gas consumption	(MWh) Annual gas consumed by operational building portfolio	
C.BU1.M3	Operational buildings electricity consumption	(MWh) Annual electricity consumed by operational building portfolio	
C.BU.1M4	Operational buildings heat consumption	(MWh) Annual heat (from heat network) consumed by council housing communal building portfolio	
C.BU.1M5	Solar capacity on operational buildings	(kWp) Total installed solar capacity on council operational buildings	
C.BU2	Decarbonised maintained schools		
C.BU2.M1	School buildings emissions	(tCO2e/yr) Maintained on-contract schools' scope 1 and 2 emissions	
C.BU2.M2	School gas consumption	(MWh) Annual gas consumed by council maintained schools portfolio (on contract)	
C.BU2.M3	School electrical consumption	(MWh) Annual electricity consumed by council maintained schools portfolio (on contract)	
C.BU2.M4	Schools heat network connection	(kWp) Total connected heat (from energy network) to council maintained schools	
C.BU2.M5	Schools solar capacity	(kWp) Total Installed solar capacity on council maintained schools (all)	

C.BU3	Decarbonised council housing assets		
C.BU3.M1	Community housing emissions	(tCO2e/yr) Council communal housing scope 1 and 2 emissions	
C.BU3.M2	Community housing gas consumption	(MWh) Annual gas consumed by council housing communal building portfolio	
C.BU3.M3	Community housing electrical consumption	(MWh) Annual electricity consumed by council housing communal building portfolio	
C.BU3.M4	Community housing heat consumption	(MWh) Annual heat (from heat network) consumed by council housing communal building portfolio	
C.BU3.M5	Community housing asset solar capacity	(kWp) Total installed landlord solar capacity on council communal buildings	
C.BU4	Retrofit of Council homes		
C.BU4.M1	Social rented energy efficiency	(#) Median energy efficiency score of social rented properties. Score of 0 to 100, with a score of 100 indicating the most energy efficient property	
C.BU4.M2	Council housing EPC rating A–C	(%) Percentage of Council Housing homes with EPC rating A–C	
B.BU5	Carbon neutral council-led development		
B.BU5.M1	Whole life carbon of new development	(tCO2e) Whole life carbon of units completed in the reporting financial year	
C.BU6.M1	Upfront carbon of new build	(tCO2e) Annual upfront carbon of units completed in the reporting financial year	
C.BU6	Carbon neutral landlord		
C.BU6.M1	Council commercial average EPC	Council commercial average EPC	



#### Council: Travel

#### Our vision

By 2030, the council will have decarbonised travel by investing in a decarbonised vehicle fleet, reducing energy consumption from street lighting and highway infrastructure, and supporting staff to use low and zero carbon forms of transport.

C.TR1	Decarbonised street lighting	Council operated streetlight lighting is decarbonised by identifying energy efficiencies and through utilisation of low carbon renewable energy, demonstrated through year-on-year carbon reductions
C.TR2	Decarbonised council fleet	Council's emissions from fleet vehicles decrease by 74% from the baseline by 2030 through a fleet decarbonisation programme. The council's non-HGV fleet will be fully electric by 2030, with residual emissions reduced through vehicle, route and fuel efficiency improvements.
C.TR3	Staff travel sustainably	Staff commuting and delivering services on behalf of the council will be in low carbon forms of transport.

#### Why is this important

Improving air quality is a high priority for the Mayor of London and Enfield Council. We appreciate the co-benefits that low-carbon technology brings, including reducing air pollutants and improving public health. With a fleet of more than 400 vehicles, of which many are operating in neighbourhoods across the borough, this is a priority area for the council.

The council is also one of the largest employers in the borough, with over 3,000 staff who travel in and around the borough for work. Many of our staff travel to work from across London and from neighbouring areas. We recognise our role as a responsible employer and we are encouraging our staff to make the best choices for their health and wellbeing, whilst also helping to reduce car traffic in Enfield, London and surrounding areas.

#### Our asks of others

- National investment in public transport and active travel, so our staff can travel to work in an affordable and low-carbon way, with private vehicles being the least attractive options
- National investment in upgrading of the power systems, to be aligned for large-scale electrification of vehicles, and reduce the burden on individuals
- Review of incentive schemes (such as plug-in-grant) for commercial vehicle electrification to ensure VAT registered clients are incentivised and supported to switch to electric vehicles.



#### Local story: Electrifying our fleet

Enfield have been leading the way in electrifying our fleet investing £1.4m in electric vehicles to date. In 2022 Enfield Council received delivery of the first of four fully electric refuse trucks, Renault's first ever 100% zero-emission electric refuse collection vehicle to reduce the Council's carbon footprint.



# Our action plan

C.TR1	Decarbonised street lighting	
C.TR1.A1	Energy reduction in street lighting	Continue to identify opportunities to further reduce energy from street lighting through operational efficiencies.
C.TR1.A2	Low carbon energy for street lighting	Explore opportunities for electricity contracts with increased additionality of renewable energy, alongside local renewably generated assets.

C.TR2	Decarbonised council fleet	
C.TR2.A1	Council EV fleet procurement	Convert the fleet to electric by 2030 as products become available and affordable.
C.TR2.A2	Fleet EV charging infrastructure	Identify options to provide EV charging infrastructure for council fleet as part of planning for fleet accommodation.
C.TR2.A3	Fleet efficiency and route optimisation	Reduce fuel usage by ensuring vehicles are efficient and continuing to utilise ongoing route optimisation analysis to reduce mileage and fuel consumption.
C.TR2.A4	Lower carbon fuel	To reduce emissions of remaining diesel fleet, continue to utilise lower carbon and emissions GTL fuel with ongoing assessment of options for lower carbon fuel alternatives such as HVO, as they become affordable.
C.TR2.A5	EV transition for council contractors	Work with council 3rd party contractors to support electrification of fleet vehicles.

C.TR3	Staff travel sustai	Staff travel sustainably	
C.TR3.A1	Low carbon staff commuting	Review opportunities to incentivise low carbon commuting by staff. Undertake an annual staff travel survey on commuting methods to better understand usage of private vehicles and develop a staff travel plan. Identify incentives such as EV salary sacrifice scheme and cycle to work scheme to encourage uptake of sustainable travel	
C.TR3.A2	Staff facilities	Ensure staff have access to appropriate facilities and are incentivised to take sustainable, active and low carbon travel including provision of secure bike parking and EV charging along with reviewing car parking provision.	
C.TR3.A3	Flexible working emissions reductions	Support flexible working arrangements and identify opportunities to encourage, support and educate about at home energy savings.	
C.TR3.A4	Low carbon 'Grey Fleet'	Reduce emissions from the Council's 'Grey Fleet' (employees using their private vehicles for work) by enabling and encouraging staff and partners delivering services on behalf of the Council to use low-carbon and sustainable forms of transport. Identify options for improved accounting for business travel with expenses systems, review mileage policies and identify options to encourage uptake of low-carbon travel	

C.TR	Decarbonised council travel	
C.TR1	Decarbonised street lighting	
C.TR1.M1	Annual carbon of street lighting (market)	(tCO2e/yr) Annual scope 2 emissions from street lighting contract (market based)
C.TR1.M2	Annual carbon of street lighting (location)	(tCO2e/yr) Annual scope 2 emissions from street lighting contract (location based)
C.TR1.M3	Annual energy consumption of street lighting	(MWh) Annual electricity usage from street lighting contract
C.TR2	Decarbonised council fleet	
C.TR2.M1	Council fleet emissions	(tCO2e/yr) Annual carbon emissions from the council's directly managed fleet vehicles
C.TR2.M1		, , , ,
	emissions Council electric fleet	vehicles
C.TR2.M2	emissions  Council electric fleet <3.5t  Council electric fleet	vehicles  (%) of Council's directly managed fleet <3.5 tonnes that is fully electric  (%) of Council's directly managed fleet >3.5 tonnes that is fully electric
C.TR2.M2 C.TR2.M3	emissions Council electric fleet <3.5t Council electric fleet >3.5t	vehicles  (%) of Council's directly managed fleet <3.5 tonnes that is fully electric  (%) of Council's directly managed fleet >3.5 tonnes that is fully electric

### Council: Resource efficient organisation

#### Our vision

By 2030, the Council will be resource efficient, minimising water consumption and waste produced, implementing best practice in recycling and circular economy principles.

This includes the water we consume at our parks, allotments and in our buildings, and how staff manage and minimise the waste they produce, ensuring we encourage re-use, enable recycling and composting at our sites.

C.WA1	Zero waste and circular economy council	The council has a comprehensive understanding of waste management at corporate offices and has made active improvements to reduce waste, improve recycling and embed circular economy principles.
C.WA2	Water efficient council	Council water consumption is reduced, demonstrated through year-on-year water savings.

#### Why is this important

In 2017, the Mayor of London committed to be a zero-waste city by 2026<sup>3</sup>. Enfield Council recognise our responsibility to lead by example, ensuring we are demonstrating best practice within our own operations for how we reduce, re-use, recycle and manage our waste. As an organisation we can embed circular economy principles, supporting the market shift.

We are conscious about how we use all our resources including water. London is in a water crisis, with bleak projections on water shortages over the next 25 years and we are looking at what we can do to reduce the water we use in operations.

#### Our asks of others

- National standardisation for commercial waste, including greater oversight and monitoring.
- Water efficiency to become a national priority, with review and introduction of new standards and policies to ensure accurate monitoring and reporting.

#### Our action plan

C.WA1	Zero waste council	
C.WA1.A1	Council waste and recycling	Overhaul and improve the Council's own recycling and waste sorting and collection from council buildings, and intensify the campaign to educate all staff on recycling, to increase our corporate recycling rates.
C.WA1.A3	Circular economy principles	Implement circular economy principles when replacing physical items and equipment to ensure product life is maximised.

C.WA2	Water efficient council	
C.WA2.A1	Active water management	Deliver active water management, including leak detection, roll-out of Automatic Meter Reading and ongoing delivery of water saving opportunities in our corporate buildings demonstrated through year-on-year savings.

<sup>3</sup> https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/waste-and-recycling

C.WA	Council resource efficiency	
C.WA1	Zero waste and circular economy council	
C.WA1.M1	Council waste diversion rate	(%) of council waste from corporate sites which is recycled, reused or composted
C.WA2	Water efficient council	
C.WA2.M1	Council water consumption	(CBM) Cubic meters of water consumption for council corporate sites on the water contract



### Council: Climate conscious organisation

#### Our vision

By 2030, council staff and partners are supported and empowered to be climate conscious in all aspects of our work, in the Council's role as facilitator, provider and commissioner for goods and services. The Council will have continued to reduce the carbon footprint of its own pension fund and will have increased investment in assets that help avoid carbon emissions, whilst encouraging others to do the same.

C.WT1	Climate ready workforce	Enfield Council's workforce are informed, upskilled and empowered to deliver on climate action
C.WT2	Climate conscious investment and procurement	All investment and procurement by the Council is designed to minimise and wherever possible to reduce carbon emissions and to enable adaptation to climate change.
C.WT3	Low carbon pension funds	Carbon content of all pensions fund is reduced by a minimum of 75% from the baseline by 2030 through a decrease in fossil fuel investment and an increase in low carbon stocks whilst ensuring resilience to future market effects of climate change.

#### Why is this important

The UK economy is ranked 6<sup>th</sup> largest in the world<sup>4</sup> and public sector spending is responsible for a total of £1,043.2 billion in 2022/23<sup>5</sup>. Local authorities have huge spending power and must play their part in the transition to national and global decarbonisation. Equally, our pensions should be divested out of fossil fuels and switched to green investments, supporting a better future. Being 'climate conscious' is part of everyone's job, and training on carbon literacy is essential to give everyone the knowledge and tools that they need.

#### Our asks of others

- A national system of incorporating the value of carbon in budgeting and decision making in a clear and workable way.
- National standardisation set by Government for carbon accounting and monitoring within procurement, to support local authorities to embed robust standards which are consistent, measurable and deliverable.

<sup>4</sup> https://www.forbesindia.com/article/explainers/top-10-largest-economies-in-the-world/86159/1

<sup>5</sup> https://obr.uk/public-finances-databank-2022-23/

# Local story: Developing a sustainable and ethical procurement policy

In 2022 Enfield Council launched its Sustainable and Ethical Procurement Policy to implement climate action in working with partners and suppliers at the core of Council's operations.

The policy focuses on four main themes: social value, ethical procurement, supporting the local economy and local employment, and climate action. It sets out our commitments as a commissioner; our minimum expectations of suppliers, service providers and contractors; and the ways in which organisations will be expected to demonstrate how they will deliver additional social value when competing for Council contracts.

This new policy sets out how we will procure value for money goods, services and works, whilst maximising social value, protecting the environment, ensuring workers are treated and paid decently and ensuring human rights are upheld in supply chains.



#### Our action plan

C.WT1	Climate ready workforce	
C.WT1.A1	Climate Action training and upskilling	Develop and deliver continuous training and support so that staff are equipped with the skills and knowledge necessary to deliver climate action as part of their role.
C.WT1.A2	Climate conscious behaviour	Develop a culture of climate action, through recruitment, developing a behaviours campaign and establishing climate champions.

C.WT2	Climate conscious investment and procurement	
C.WT2.A1	Low carbon and sustainable food	Offer vegan and vegetarian options at events held by Enfield Council where catering is provided, and source food from local organisations, supporting sustainable food initiatives.
C.WT2.A2	Circular council	Implement and monitor the impact of circular economy principles in Enfield's procurement and purchasing policies, prioritising products by quantity most used by the Council.
C.WT2.A3	Sustainable and Ethical Procurement Policy	Implement the Sustainable and Ethical procurement Policy through all procurement activity undertaken by the Council.

C.WT3	Low carbon pension funds	
C.WT3.A1	Pension fund carbon reduction	Reduce carbon across the pension fund portfolios, identifying improved ways to account for the carbon content and make active reductions where possible including increasing investment in fossil free equities and renewable energy funds. Continue to divest from fossil fuel investments
C.WT3.A2	Climate resilience assessment	Undertake a climate resilience assessment in line with HM treasury requirements

C.WT	Climate conscious organisation		
C.WT1	Climate ready workforce		
C.WT1.M1	Employees empowered to take climate action	(%) Percentage of employees who answer positively to annual staff survey question "Do you feel empowered to take climate action in your work?"	
C.WT1.M2	Climate training events delivered	(#) Number of employees who have attended a climate training event	
C.WT2	Climate conscious inv	vestment and procurement	
C.WT2.M1	SEPP compliant contracts - Value	(£) Procurement spend Council-wide with Sustainable and Ethical Procurement Policy compliant contracts by value	
C.WT2.M2	SEPP compliant contracts - Volume	(#) Procurement spend Council-wide with Sustainable and Ethical Procurement Policy compliant contracts by volume	
C.WT2.M3	SEPP contracts minimum standards	(%) Percentage of contracts (by spend) adhering to minimum levels of the Sustainable and Ethical Procurement Policy in minimum 2 categories (e.g. travel, carbon emissions)	
C.WT2.M4	SEPP contracts preferred standards	(%) Percentage of contracts (by spend) adhering to preferred or enhanced levels of the Sustainable and Ethical Procurement Policy in minimum 2 categories (e.g. travel, carbon emissions)	
C.WT3	Low carbon pension funds		
C.WT3.M1	Carbon reduction of pension fund	(%) Reduction of carbon content of equity bond pension fund portfolio over 2019 baseline	
C.WT3.M2	Fossil fuel divestment	(%) Invested of total pension fund invested in fossil fuels	
C.WT3.M3	Clean energy investment	(%) Invested of total pension fund invested in renewable and clean energy infrastructure	

# Carbon neutral borough



# Carbon neutral borough

#### Our vision

By 2040, the borough will be carbon neutral and resilient by reducing emissions from buildings, travel, energy and waste, enhancing the natural environment and promoting sustainable lifestyle choices. This will be achieved with a 40% reduction in scope 1 and 2 emissions by 2030 and 90% by 2040 from our baseline.

Carbon neutral and
climate resilient
buildings

Buildings in Enfield will be carbon neutral and resilient to the impacts of climate change with a reduction of fossil fuel heating carbon emissions of 44% from our baseline by 2030 and 100% by 2040.

# Carbon neutral, sustainable and active travel

Journeys in Enfield will be low or zero carbon and affordable, convenient and healthy with a reduction of road-based carbon emissions of 44% from our baseline by 2030 and 92% by 2040.

# Decarbonised energy systems

Enfield's energy systems will enable the net zero transition through an increase in low carbon electricity and connection to low carbon heat from a heat network.

#### Reduce, reuse, recycle

Enfield will have a circular economy with increased recycling, composting, and waste used as a resource resulting in overall waste reduction of 30% from our baseline by 2040.

# Resilient urban and rural natural environment

Effects of climate change and extreme weather on residents and businesses will be reduced through enhanced urban and rural natural environment with improved biodiversity, air quality and access to green spaces.

# Working together to deliver the Climate Action Plan

Enfield residents, businesses and local partners will be engaged, committed and coordinated to deliver the Climate Action Plan.

#### Borough carbon footprint and trajectory to carbon neutrality

Our borough carbon footprint is the total amount of greenhouse gas emissions occurring due to activities within London Borough of Enfield's geographical boundary. These are also known as "territorial" emissions. Carbon emissions are categorised under three scopes:

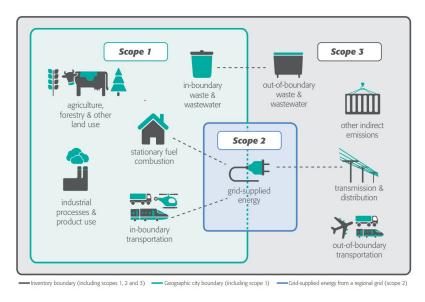
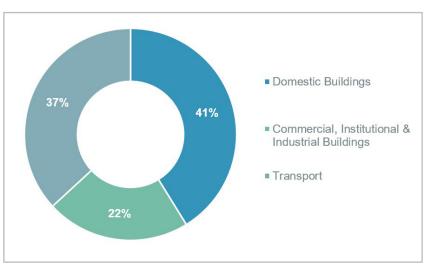


Figure 6 - Sources and boundaries of city GHG emissions (GHG protocol)

Scope 1	Carbon that is emitted directly from a source within the borough's boundaries such as use of fuel for heating of buildings and in transportation.	
Scope 2	Carbon that is emitted from the use of grid-supplied electricity, heat or other energy within the borough.	
Scope 3	All other carbon emissions that occur outside the borough due to activities occurring from within the borough, such as from the items we buy and the way we travel.	

#### Scope 1 and 2 Baseline

Enfield's carbon baseline has been reviewed and revised based on our scope 1 and 2 emissions for a 2018 base year which aligns with best practice reporting using the Greenhouse Gas Protocol and the Science Based Target setting methodology.



Our baseline includes emissions from buildings and transport. Waste has been excluded from our borough carbon emissions baseline as it is being assessed by the Mayor of London at a London-wide scale, which better reflects how waste is managed and processed across the city.

The data is made available to boroughs by the GLA from regionally and nationally compiled data.

#### Borough's scope 1 and 2 emissions

Borough emissions by category (ktCO2e)				
-	Reporting Year (Data Year)	2019/20 (2017)	2021/22 (2019)	2022/23 (2020)
Scope 1 & 2	Domestic Buildings	438	414	409
Scope 1 & 2	Commercial, Institutional & Industrial Buildings	253	232	218
Scope 1	Transport	370	427	366
Total Scope 1 & 2		1061	1073	993

Previously, we have only reported on our territorial emissions, however, we recognise we are part of a larger global system. Supported by work commissioned by London Councils we can establish our consumption-based emissions. These are emissions which are driven by consumption from those living and working within the borough and are calculated based on what residents are spending their money on.

#### Carbon neutral trajectory

The trajectory below sets out the trajectory of the borough's scope 1 and 2 carbon emissions and journey towards becoming a carbon neutral borough by 2040. Changes in technology, policy and consumer behaviour will impact on this timeline. As we get nearer to 2040, the planned actions are less certain and specific. However, this graph shows the trajectory we need to take as a borough, setting the scene for the actions we can take and the support we need from others to achieve this goal. We expect by 2030 to have reduced our carbon footprint by 40% and by 2040 by 90%, aligning with the 1.5°C pathway.

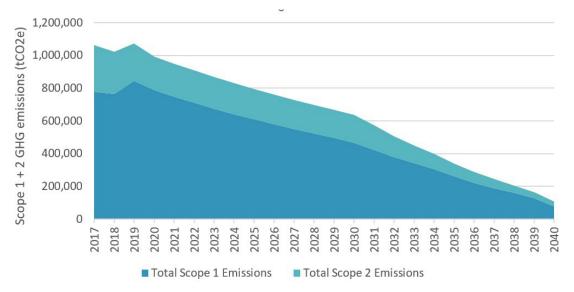


Figure 7 - Enfield borough scope 1 and 2 2040 decarbonisation trajectory

In the following section we have set out the major milestones we expect to achieve to meet this trajectory. We have set out the short-term and long-term milestones we are looking to meet. This will be updated periodically and is based on the evidence base behind the trajectory.

#### Carbon offsetting

We do not see carbon offsetting as a way of meeting our target, but it is a necessary step to balance emissions that cannot be removed. Our carbon neutral trajectory is set against the Paris agreement reduction targets of a 1.5°C pathway, ensuring we are playing our part in meeting UK net-zero.

#### We will:

- 1. Reduce our scope 1 and 2 emissions in line with the targets to meet the 1.5°C target as set out by the Paris Agreement
- 2. Balance our residual scope 1 and 2 emissions in-borough through an offsetting programme will which brings wider community value, using the international <u>Greenhouse Gas Protocol</u>, a globally accepted standard for measuring emissions that is used as the system behind reporting frameworks.
- 3. Develop an understanding of our scope 3 emissions and set reduction and neutrality targets for our scope 3 emissions by 2050.

#### Milestones and targets

Carbon neutral borough by 2	2019 Baseline	2030	2040	
Borough wide emissions	(ktCO2e) Borough wide scope 1 and 2 carbon emissions	1061	586	159
Reduction over baseline	(%) reduction of borough scope 1 and 2 emissions over baseline year	0%	45%	85%
Annual borough building emissions	(tCO2e/yr) Annual scope 1 carbon emissions from all buildings in Enfield	691	381	104
Annual borough road transport emissions	(tCO2e/yr) Annual total GHG emissions from road-based transport in Enfield	370	204	55
Annual borough waste emissions	(kg/hh) Annual waste per household	631.62	TBD	TBD
Recycling rate	(%) Household waste sent for recycling	33%	50%	TBD
Borough solar PV capacity	(MW) renewable electricity utilising Solar PV installed capacity in Enfield	6	134	311
Heat network connections	(#) Total number of properties (domestic and non-domestic) connected to the heat network	743	36000	75000

### **Borough: Buildings**

#### Our vision

Buildings in Enfield will be carbon neutral and resilient to the impacts of climate change with a reduction of fossil fuel heating carbon emissions of 44% from our baseline by 2030 and 100% by 2040.

Buildings account for over a third of the Council's carbon emissions and decarbonising existing and new buildings is essential to achieve our target. This will include working with all stakeholders to improve planning policy, upgrade the fabric of our existing homes and changing the way in which we build new homes. We also have a role to play in enabling the upskilling and reskilling of local people, including our own workforce, in green construction skills.

B.BU1	Carbon neutral planning system	By 2040, our planning system will ensure the delivery of carbon neutral and resilient new buildings and high-quality retrofit, achieved through robust planning policy and approval process.
B.BU2	Low-income and vulnerable residents	By 2040, low income and vulnerable residents will be safe, secure and comfortable in their homes resulting in a reduction in fuel poverty and a reduction in excess deaths.
B.BU3	Carbon neutral homes	By 2040, domestic emissions will be reduced across the borough, by working with partners, sharing information and utilising statutory powers to encourage retrofit resulting in a borough-wide average EPC B.
B.BU4	Carbon neutral public, commercial and industrial buildings	By 2040, reduced emissions and EPC B average will be achieved for non-residential buildings through the council utilising statutory powers to encourage retrofit.
B.BU5	Green skills and employment	By 2040, Enfield will have a highly skilled local workforce of professionals to deliver on building decarbonisation, with thriving local green employment opportunities including digital green skills and tracking progress.
B.BU6	Climate resilient built environment	By 2040, buildings across the borough will be resilient to a changing climate, with reduced risk of overheating and flooding and with opportunities for further adaptation in the future if required.

#### Why this is important

The built environment is responsible for 39% of global carbon emissions, with emissions relating to both the construction and operation of buildings. Emissions from buildings in Enfield make up 60% of our emissions, with homes in Enfield accounting for an estimated 38% of the borough's total emissions. The majority of those emissions are from the burning of fossil fuels to heat our homes.

80% of the buildings that will be in use in the UK in 2050 have already been built<sup>6</sup> and therefore to meet the UK's commitments to the Paris Agreement targets priority needs to be placed on retrofitting and refurbishing existing buildings, and decarbonising the energy we use. The Mayor of London has made commitments to decarbonise heating across the capital, with targets to increase the number of heat pumps and heat network connected buildings, to reduce reliance on natural gas in addition to understanding the importance of renewable energy.

There is also an increasing global understanding around the emissions associated with the construction of new buildings due to the manufacturing, construction and deconstruction process, creating a renewed focus on how we can reduce the carbon embedded in the construction of new buildings.

<sup>6 &</sup>lt;u>UKGBC response to the CCC housing report</u>

In the context of a changing climate, it is also important that buildings and the built environment are resilient to the future climate. UK summers are becoming hotter with more frequent heatwaves and droughts, while sudden outbursts of rain are causing flooding.

To meet the challenge, we need to both ensure new buildings of all types are built to the highest sustainability standards; and retrofit existing buildings to significantly reduce the amount of carbon they emit and ensure they are resilient to extreme weather. This requires substantial financial intervention from Government, a comprehensive investment plan and private sector buy-in, as well as a skilled workforce.

#### Our asks of others

- Central Government to consolidate the different funding streams for retrofit and low carbon new-build
  and reduce competitive bidding processes, give longer lead-in times where bidding remains and provide
  funding over the medium rather than the short-term with multi-year funding arrangements where
  possible. Non-competitive funding reduces administrative burdens and ensures that allocation of funding
  is based on need and opportunity rather than bidding capacity.
- Central and regional government to provide accessible funding streams and back investment to incentivise low carbon retrofit for the able-to-pay market and private-rented market.
- Central government to remove, or significantly reduce, VAT on materials used for retrofitting, to accelerate the conversion of homes to zero carbon homes across all tenures.
- Central government to accelerate the adoption of the Future Homes Standard ensuring alignment with best practice such as Passivhaus standard nationally.
- Central and regional government to set clear restrictions for demolition and incentives to prioritise refurbishment over demolition.
- Central government to support the legal basis for reclaim of abandoned, underused spaces and dwellings for meanwhile uses or temporary accommodation.





# Local story: Decarbonising homes in Haselbury

Ten homes in Haselbury ward have undergone a deep retrofit, converting them into warm, affordable and environmentally efficient homes.

With funding from the Retrofit Accelerator Programme, Enfield Council delivered the project with partners Osborne Property Services and supported by the Mayor of London with funding from the Department for Energy Security and Net Zero.

The ten ageing houses were transformed to highly efficient homes with triple-glazed windows and high-performance doors to retain warmth inside, solar panels, a new efficient heating and ventilation system to regulate the temperature of the home and insulation of external walls to help regulate the temperature. The gas boilers were replaced with Air Source Heat Pumps, which has lower carbon emissions.

This work, led by Enfield Council, is part of a three-year Innovation Partnership with seven social landlords delivering net zero housing retrofits in London and nationally. The investment in Enfield is worth more than £500,000.

The works support the priorities and principles to decarbonise Enfield Council's housing stock and reduce energy bills, easing residents' by helping to combat fuel poverty.



# Our action plan

B.BU1	Carbon neutral planning system		
B.BU1.A1	Carbon neutral plan making	Deliver a new Local Plan with robust policies to deliver carbon neutral new buildings and support high quality retrofit, building on guidance set out by the London Plan and emerging best practice.	
B.BU1.A2	Carbon neutral planning process	Implement and enforce planning policy ensuring the highest levels of carbon mitigation and adaptation measures are achieved, utilising all tools available throughout the planning process, including implementing minimum requirements for embodied carbon.	
B.BU1.A3	Post occupancy and building performance evaluation	Monitor delivered performance and close the gap between design and performance in practice for new build developments approved through planning.	
B.BU1.A4	Retrofit policy and guidance	Support high-quality retrofit through the planning system with updates to policy, guidance and permitted development rights.	
B.BU1.A5	Planning training and support	Upskill and empower planners through access to technical support and delivery of regular training to ensure polices are enforced to the highest standard.	

B.BU2	Low-income and vulnerable residents		
B.BU2.A1	Fuel poverty funding	Work with partners to leverage funding and identify effective delivery mechanisms to support low-income and vulnerable residents at risk of fuel-poverty to upgrade their homes.	
B.BU2.A2	Energy advice	Take part in London-wide initiatives to ensure access to simple and meaningful energy efficiency and saving advice, prioritising the most vulnerable residents.	
B.BU2.A3	Climate event resilience	Develop an understanding of climate risk facing vulnerable residents in their homes and identify initiatives and mechanisms to ensure their homes and services available are resilient to extreme climate events.	
B.BU2.A4	Adaption in health and social care	Work with our health and social care provider colleagues to raise the importance of adaptation and mitigation in the health sector to protect vulnerable residents from extreme weather.	

B.BU3	Carbon neutral homes		
B.BU3.A1	Council domestic assets	Decarbonise council-owned residential assets <sup>7</sup> , such as investment properties, Housing Gateway and Enfield Let homes, by improving monitoring, developing programmes, implementing policies and securing funding.	
B.BU3.A2	Private rented sector	Raise the standard of private-rented sector properties, through enforcement under the licensing scheme to raise the EPC standard of private-rented properties in line with standards.	
B.BU3.A3	Working with partners	Work proactively with housing associations and other housing providers to share knowledge and embed a zero-carbon approach across mixed tenure organisations.	
B.BU3.A4	Retrofit knowledge and communications	Participate in shaping a London-wide approach to retrofit through membership of forums and working groups to share knowledge regarding best practices, tools, technologies and case studies, ensuring clear communication with residents.	

<sup>7</sup> Other than council housing assets, which are addressed in the chapter on carbon neutral council buildings.

B.BU4	Carbon neutral public, commercial and industrial buildings		
B.BU4.A1	Business partnerships	Build relationships with the largest emitters in Enfield to identify barriers and opportunities for supporting and showcasing low carbon retrofit.	
B.BU4.A2	Engage and communicate	Establish an understanding of existing barriers to retrofit of non-domestic buildings, identifying opportunities for the Council to engage, communicate and support retrofit of all scales in the borough.	
B.BU4.A3	Energy efficiency enforcement	Identify mechanisms to utilise powers to enforce increasing energy efficiency standards, such as the Minimum Energy Efficiency Standard (MEES), to upgrade non-domestic buildings in the borough.	

B.BU5	Green skills and employment	
B.BU5.A1	Green construction skills training	Work with partners to develop local apprenticeships offering green skills (including digital skills) within the construction industry to increase green skills in the workforce and provide good quality employment opportunities to residents and track the progress.
B.BU5.A2	Green industries	Support inward investment from green industries into the borough utilising the council's role in place-making and as a commercial landowner.

B.BU6	Climate resilient built environment	
B.BU6.A1	Resilience to extreme heat	Implement building design tools to reduce overheating risk in new and existing buildings and use urban design tools to reduce the urban heat island effect through council-led programmes and through our role as a Planning Authority.
B.BU6.A2	Resilience to flooding	Implement best practices to reduce flood risk across the borough through council-led flood management programmes and through our role as a Planning Authority.

B.BU	Overall Outcome	Carbon neutral ar	nd climate resilient buildings
B.BU.M1	Overall Indicator	Annual borough building emissions	(tCO2e/yr) Annual scope 1 and 2 carbon emissions from all buildings in Enfield
B.BU1	Outcome	Carbon neutral ar	nd resilient buildings secured through planning
B.BU1.M1	Indicator	Operational carbon at design stage	(tCO2e) Annual residual operational carbon of all developments required to contribute to the NDCCF
B.BU1.M2	Indicator	Number of units on 'Be Seen' portal	(#) Number of reportable units logged on the 'Be seen' portal
B.BU2	Outcome	Low-income and	vulnerable residents supported
B.BU2.M1	Indicator	People in Enfield in fuel poverty	(%) Proportion of households in fuel poverty
B.BU3	Outcome	Carbon neutral ho	omes
B.BU3.M1	Indicator	Emissions from residential buildings	(tCO <sub>2</sub> e/yr) Annual scope 1 and 2 carbon emissions from domestic buildings in Enfield - as reported by LEGGI
B.BU3.M2	Indicator	Efficiency score of private rented sector properties	(SAP score) Median energy efficiency score of private rented sector properties (Score of 0 to 100, with a score of 100 indicating the most energy efficient)
B.BU3.M3	Indicator	Efficiency of owner-occupied properties	(SAP score) Median energy efficiency score of owner- occupied properties (Score of 0 to 100, with a score of 100 indicating the most energy efficient)
B.BU3.M4	Indicator	Private rented properties with F and G rating	(#) Number of private rented properties registered with the Council's <u>Private Rented Property Licensing</u> with F and G rating
B.BU4	Outcome	Carbon neutral pu	ublic, commercial and industrial buildings
B.BU4.M1	Indicator	Emissions from industrial and commercial buildings	(tCO <sub>2</sub> e/yr) Annual scope 1 and 2 carbon emissions from industrial and commercial buildings in Enfield - as reported by LEGGI
B.BU5	Outcome	Green skills and e	mployment
B.BU5.M1	Indicator	Green jobs in the borough	(#) Number of green jobs in the borough
B.BU5.M2	Indicator	Green skills training	(#) Number of local people gaining a 'green skills' qualification at the Meridian Water Skills Academy

### **Borough: Travel**

#### Our vision

Journeys in Enfield will be low or zero carbon and affordable, convenient and healthy with a reduction of road-based carbon emissions of 44% from our baseline by 2030 and 92% by 2040. This will be achieved by working with national and regional partners to increase walking and cycling (active travel); enhance public transport options; reduce the need for private car journeys; and develop charging infrastructure for electric cars, vans and buses.

B.TR1	Increase in active transport	By 2040, Enfield residents will have access to more high-quality and safe cycling, walking and wheeling routes and facilities across the borough, encouraging everyone to enjoy active travel
B.TR2	Improved public transport	By 2040, there will be greater capacity on the public transport network, with buses powered by non-fossil fuels resulting in an increase in public transport usage
B.TR3	Reduced private vehicle usage and ownership	By 2040, the use of private vehicles will be significantly reduced with a decrease in the number of vehicles and distance travelled by car. Residents will be able to access shared mobility options such as car clubs
B.TR4	Reduced emissions from transport providers and logistics	By 2040, emissions related to public transport, deliveries and business vehicles will be reduced through transition to more efficient and lower carbon transport
B.TR5	Increase in electric vehicles	By 2040, most vehicles in Enfield will be electric, with sufficient infrastructure in place to support the transition to enable people to choose electric vehicles



#### Why this is important

Transport emissions make up 20% of emissions and are the fastest growing source of emissions worldwide.<sup>8</sup> Fair and green travel are related to eight out of the seventeen proposed Sustainable Development Goals (SGDs), illustrating the cross-cutting role that transport has in sustainable development.<sup>9</sup>

The UK is committed to achieving net zero emissions by 2050, and reducing travel emissions are an important part of delivering on this commitment. In September 2023, the UK Government set out that 80% of new cars and 70% of new vans sold in Great Britain, are to be zero emission by 2030. This will increase to 100% by 2035<sup>10</sup>. To effectively prepare for the transition, we need to enhance local infrastructure needed for convenient electric transport and better alternatives. We will use our Local Energy Plan to help us with this.

In August 2023, the Mayor of London expanded the Ultra Low Emission Zone (ULEZ) to cover all London boroughs<sup>11</sup>, reducing the air pollution that causes thousands of Londoners to die prematurely. One of the co-benefits of this will be the reduction of London's carbon transport emissions.<sup>12</sup>

In Enfield, transport emissions account for an estimated 40% of the borough's total emissions. A range of factors contribute to this total, including levels of local car ownership, air pollution from our major roads and travel infrastructure, energy supply and the carbon from making new vehicles. A dual approach includes two key elements: increasing the convenience of and access to better public and active travel, while transitioning vehicles to electric.

As we move towards low carbon transport, prioritising walking and cycling, we will provide a fairer and healthier environment for our residents. We will also contribute towards achieving the Mayor of London's target to increase active and sustainable mode share across London to 80%.

Speaking to our community as part of the external engagement we understood that public transport and walking were important to our residents who preferred better and safer existing modes of transport rather than new solutions. There was a need for a clearer understanding that the reduction in car use needs to be compensated by other options, and that EV charging needed to be fairly distributed. This includes in public carparks, workplaces and on shopping streets.

<sup>8</sup> https://www.statista.com/topics/7476/transportation-emissions-worldwide/#topicOverview

<sup>9 &</sup>lt;a href="https://sustainabledevelopment.un.org/content/documents/8656Analysis%20of%20transport%20relevance%20">https://sustainabledevelopment.un.org/content/documents/8656Analysis%20of%20transport%20relevance%20</a> of%20SDGs.pdf

<sup>10</sup> Government sets out path to zero emission vehicles by 2035 - GOV.UK (www.gov.uk)

<sup>11 &</sup>lt;a href="https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/ulez-expansion-2023">https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/ulez-expansion-2023</a>

<sup>12</sup> https://www.london.gov.uk/press-releases/mayoral/mayor-announces-bold-plans-for-a-greener-london

#### Our asks of others

- Improved low carbon public transport in Enfield delivered by partnership work with Transport for London, train operating companies and Network Rail.
- Greater central government funding for Transport for London to enable investment in connectivity in the public transport network in Enfield.
- Greater investment from national government to enable cheaper public transport.
- National and regional investment in cycle and walking infrastructure.
- National messaging to support a culture change away from car dependency.
- Stronger and more joined-up policy for sustainable charging infrastructure for electric vehicles of all types.



#### Local story: Three new school streets in 2023

We launched a further three 'school streets' in early 2023 at primary schools in the borough to improve road safety for children. School street also encourage more Enfield pupils to walk, cycle and scoot to school safely.

This brings the total 16 permanent projects now in place and still more in the making. The latest additions were launched at Houndsfield Primary School in Edmonton, Hazelwood Primary School in Palmers Green and Wilbury Primary School, near North Middlesex Hospital.

The schemes involve closing roads outside school entrances during arrival and departure times for children and have the added benefit of reducing their exposure to air pollution from car traffic.

# Our action plan

B.TR	Carbon neutral, sustainable and active transport	
B.TR.A1	Transport and travel plan	Create a coordinated Travel Plan for the borough which aligns incorporating sustainable and active travel objectives, network management and low-carbon transport in line with this Climate Action Plan.

B.TR1	Increase in active transport	
B.TR1.A1	Active travel network	Deliver a high-quality borough-wide walking, cycling and wheeling network, including improved pedestrian crossings, upgraded footways, cycleways, cycle parking and shared e-cycle, cargo bike and micro-mobility schemes.
B.TR1.A2	Quieter, safer neighbourhoods	Encourage active travel by delivering quieter, safer neighbourhoods with school streets and other network management measures.
B.TR1.A3	Active travel in planning	Encourage development and urban design which favours sustainable and active travel and reduces reliance on private cars, including increasing the provision of cycle parking and access to shared mobility in new developments, enforced through the planning system.
B.TR1.A4	Sustainable streetscape works	Ensure alterations and maintenance to streets, roads, highways and infrastructure which enable active travel are constructed using sustainable materials and with an awareness of the embodied carbon involved.

B.TR2	Improved public transport	
B.TR2.A1	Public transport access	Work with transport partners and local community groups to increase public transport service provision, including delivering new infrastructure across the borough
B.TR2.A2	Low emission public transport	Work with partners to decrease the emissions from public transport, including increasing the number of low and zero emission buses

B.TR3	Reduced private vehicle usage and ownership	
B.TR3.A1	Car parking provision	Limit the provision of car parking spaces on new developments in line with the London Plan and review existing kerbside space allocation according to desired mode of travel.
B.TR3.A2	Car clubs and mobility hubs	Support the provision of car clubs where it reduces car use and ownership, engaging with Car Club providers and exploring opportunities for mobility hubs.
B.TR3.A3	Network management initiatives	Utilise network management initiatives to incentivise reduced private vehicle ownership.

B.TR4	Reduced emissions from transport providers and logistics	
B.TR4.A1	Business transport and logistics emissions	Work with delivery stakeholders and support real estate identification and planning for introducing delivery hubs in town centres, enabling sustainable last-mile delivery in Enfield.

B.TR5	Increase in electric vehicles	
B.TR5.A1	EV charging for new developments	Support the delivery of EV charging infrastructure for new developments in line with the London Plan.
B.TR5.A2	Increase public EV charging	Increase the provision of public highway and car park electric vehicle charging infrastructure by 1000 points between 2022 and 2026, meeting demand and encouraging the electric transition for residents and businesses, in a way that is coordinated with all relevant stakeholders.

B.TR	Carbon neutral, susta	ninable and active transport
B.TR.M1	Road emissions	(tCO2e/yr) Annual total GHG emissions from road based transport in Enfield
B.TR1	Increase in active train	nsport
B.TR1.M1	Sustainable mode share	(%) Walking, cycling and public transport mode share by borough resident based on average daily trips
B.TR1.M2	Traffic levels	(%) Reduction in vehicular traffic
B.TR1.M3	Strategic cycle network proximity	(%) Percentage of population within 400m of strategic cycle network by borough
B.TR1.M4	School streets	(#) Number of school streets added in a year
B.TR1.M5	New cycle routes added to network	(km) Distance of new designated cycle routes added to the network in a year
B.TR1.M6	New cycle parking spaces	(#) Number of new cycle parking spaces installed on public land
B.TR1.M7	New shared mobility spaces	(#) Number of new shared mobility parking spaces installed on public land
B.TR1.M8	Cycle training	(#) Number of people attended the cycle training programme
B.TR1.M9	Infrastructure embodied carbon	(tCO2e/yr) Annual total GHG emissions from embodied energy related to council delivered infrastructure projects
B.TR2	Improved public tran	sport
B.TRM1	Daily public transport trips	(#) Public Transport (Rail, Underground/DLR, Bus/Tram) Trips per day (000s)
B.TR3	Reduced private vehicle usage and ownership	
B.TR3.M1	Car ownership in Enfield	(#) Number of licensed vehicles in Enfield
B.TR3.M2	Motor vehicle traffic travel	(Km) Annual vehicle kilometres (millions)

B.TR4	Reduced emissions from transport providers and logistics	
B.TR4.M1	Emissions from freight	(ktoe) Annual road transport energy consumption from Freight vehicles (LGV and HGV) (000s)
B.TR4.M2	Industrial vehicle emissions	(ktCO2e/yr) Annual GHG emissions from non-road mobile machinery
B.TR	Increase in electric vehicles	
B.TR5.M1	EV charging sockets	(#) Total number of EV charging sockets on public highway and in public car parks
B.TR5.M2	Electric vehicles in the Enfield	(#) Total number of electric cars (plug in vehicles) licensed in Enfield (All PIV vehicle types and ownership)



### **Borough: Energy**

#### Our vision

By 2040, Enfield's energy systems will enable the net zero transition through an increase in low carbon electricity and connection to low carbon heat from a heat network. This will enable us to deliver on our vision for buildings and transport, by decarbonising heat and power systems. To achieve this, we will work with partners to roll out the uptake of district heating in the borough, prepare for an electric future and increase renewable energy in Enfield.

B.EN1	District Heat Network provision in Enfield	By 2040, the borough will have a highly efficient decentralised energy network, able to supply homes and businesses with low carbon heat. By 2030, 36,000 properties and by 2040 78,800 properties will be connected to the heat network.
B.EN2	Future energy systems and electrification	Enfield's energy systems will continue to support the electrification of buildings and heat, through upgrade of power systems and grid infrastructure.
B.EN3	Access to low-carbon and renewable electricity	In-borough generated renewable and low-carbon electricity will be increased, with a borough renewable energy installed capacity of 134 MW by 2030 and 311 MW by 2040.

#### Why this is important

We are experiencing an energy crisis, which puts the spotlight on how critical, and in many ways vulnerable, our energy supply systems are.

As the Committee on Climate Change has established, the future of energy in the UK will become more complex and decentralised. Increased renewables, a decarbonised grid, further electrification and an increase in lower carbon products means that making decisions on energy supply is increasingly difficult.

In order to meet the UK's net zero targets by 2050, the Committee on Climate Change (the CCC) and National Grid state that there will need to be an energy mix that is both low carbon and which ensures security of supply for the coming decades. Nationally, this means phasing out gas boilers over 25-35 years, expansion of decentralised energy systems and networks, electrification of heating and transport - switching from gap boilers to heat pumps and from petrol/diesel to electric vehicles for example - and expansion of renewable energy. Renewable energy generation is also a way to offset emissions across the borough and provide green employment opportunities.

The Council-owned decentralised energy network (Energetik) presents an opportunity to create an affordable and low-carbon heating alternative to gas-fired boilers, with the ability to make use of multiple heat sources. The heat network is being developed to be flexible to future sources of heat, prioritising utilising sources where heat is currently being wasted, such as from the Edmonton EcoPark where heat from the waste incineration and electricity generation process can be utilised.

#### Our asks of others

- Central government to review re-establishing solar and renewable subsidies, with clear time limits, to bolster the low carbon economy and allow businesses and residents to access renewable energy at scale.
- Cross-governmental and industry support for the roll-out of heat networks in the UK, including with sustainable funding and by identifying and tackling barriers including retrofitting of existing buildings.
- National Government to invest in large-scale rollout of energy infrastructure.







### Local story: Building the Edmonton EcoPark

The new publicly owned Energy Recovery Facility is under construction to replace the current plant, where non-recyclable household waste from all of North London has been used to generate electricity for the national grid. The benefits of electricity generation from waste are threefold. It avoids waste going to landfill, reduces the cost of waste disposal for council taxpayers and generates cheap electricity, which in turn produces hot water as a by-product which will be used to heat homes, helping to make gas boilers redundant.



# Our action plan

B.EN	Decarbonised energy systems	
B.EN.A1	Energy infrastructure oversight	Establish a clear role for the local authority in energy infrastructure planning, to deliver changes to energy systems required to deliver the carbon neutral trajectory as outlined in Enfield's Local Area Energy Plan.

B.EN1	District Heat Network provision in Enfield	
B.EN1.A1	Stakeholder support for heat networks	Support the delivery of heat networks in Enfield through our role as shareholder of Energetik, and engage in national and regional conversations on sustainable long term planning and funding for heat network expansion.
B.EN1.A2	Planning support for heat networks	Plan for the growth of the heat network through strategic planning and utilising levers such as the introduction of planning policy within the new Local Plan to support connections implemented through the planning system.
B.EN1.A3	Strategic heat network connections	Identify council-led strategic regeneration, development and retrofit projects for connection to the heat network to support growth.

B.EN2	Electrified future energy systems	
B.EN2.A1	Grid flexibility for EV charging	Engage with UK Power Network and GLA to shape future flexibility markets that support load levelling for electric vehicle chargers.
B.EN2.A2	Future of Hydrogen	Engage with public and private sector stakeholders to reduce uncertainty around the future role of hydrogen in the transport sector.

B.EN3	Access to low-carbon and renewable electricity	
B.EN3.A1	Council owned land	Undertake a review of Council owned land including carparks and agricultural land, to explore opportunities for large scale renewable energy generation such as solar farms.
B.EN3.A2	Renewable energy schemes	Identify, support and promote schemes which encourage uptake of renewable energy across the borough, particularly roof-top solar.

B.EN	Decarbonised energy systems		
B.EN1	<b>District Heat Network</b>	District Heat Network provision in Enfield	
B.EN1.M1	Council homes connected to heat network	(#) Total number of council managed homes connected to the heat network	
B.EN1.M2	Heat network connections	(#) Total number of properties (domestic and non-domestic) connected to the heat network	
B.EN1.M3	Heat provided from heat network	(MW) Average peak capacity of heat provided by Energetik heat network	
B.EN2	Electrified future ene	rgy systems	
B.EN2.M1	Substation capacity	(#) Number of substations serving Enfield overloaded or with less than 5% headroom (red of amber)	
B.EN2.M2	Heat pumps in Enfield	(#) Total number of heat pumps installed in the borough	
B.EN3	Access to low-carbon and renewable electricity		
B.EN3.M1	Number of solar installations	(#) Number of sites in Enfield with Solar PV installed	
B.EN3.M2	Borough solar PV capacity	(MW) renewable electricity utilising Solar PV installed capacity in Enfield	



### Borough: Reduce, Reuse, Recycle

#### Our vision

Enfield will have a circular economy with increased recycling, composting, and waste used as a resource resulting in overall waste reduction of 30% from our baseline by 2040.

B.WA1	Household waste and recycling	By 2040 we will reduce household waste by 30% and achieve 65% household recycling rates by 2030 through campaigns to improve recycling, reduce food waste, as well as initiatives to share, reuse and repair household items to prevent waste
B.WA2	Commercial waste and recycling	By 2040, we will reduce commercial waste and increase recycling by making recycling more widely available to businesses and schools and promoting initiatives to reduce waste.
B.WA3	A circular economy	By 2040, we will accelerate the transition to a circular economy in Enfield by empowering residents to consume less and make better choices and enabling local businesses and industries to transition to circular operational models.

#### Why this is important

Earth's resources are finite and although thus far it has been able to accommodate human activity, the limit is stretched further and further each year. In 2023 it is estimated that we will use up our annual ecological capacity<sup>13</sup> within only 7 months, 5 months earlier than 50 years ago.

New initiatives are being introduced nation-wide such as taxes on plastic, banning microbeads and measures to restrict the supply of plastic straws.<sup>14</sup>

The Mayor of London has committed to be a zero-waste city, with an aim that by 2026 no biodegradable or recyclable waste will be sent to landfill, and by 2030, 65% of London's municipal waste will be recycled. 15

Enfield, in line with the GLA, has a clear policy to prevent waste going to landfill, to prevent toxic substances leaching into the soil, groundwater and waterways; and the release of methane from organic waste when decomposing anaerobically (without oxygen). Food waste in particular

presents a methane risk, which has a very potent greenhouse gas, highlighting the importance of biodegradable food waste collection for composting and creation of biogas.





<sup>14</sup> https://www.gov.uk/government/news/uk-leads-the-way-on-ending-plastic-pollution#:~:text=We%20have%20 so%20far%20introduced,and%20plastic%2Dstemmed%20cotton%20buds

<sup>15</sup> https://www.gov.uk/government/news/uk-leads-the-way-on-ending-plastic-pollution#:~:text=We%20have%20 so%20far%20introduced,and%20plastic%2Dstemmed%20cotton%20buds

#### Our asks of others

- Central and Regional Government to support the transition to a service economy to incentivise highquality products used for extensive amount of time; and adoption of the sharing economy principles, shifting away from the ownership model to reduce consumption.
- Central Government to introduce a requirement for businesses to manage food surpluses and establish/ seek existing paths for re-distribution.
- Central and Regional Government to increase resources to support behaviour change on waste reduction and recycling including campaigns and support systems for households to better plan groceries and meals around food about to expire.
- Review national guidance around the carbon emissions from incineration, to improve clarity, accessibility and transparency.
- Central Government to improve data and set clear consumption-based emission targets and provide guidance on monitoring from different areas food, clothes, etc. and including the commercial sector.
- Central Government to take prompt decisions to give local authorities time to implement changes without incurring additional contractual costs, recognising that local authorities need a long run-in time to make changes to waste collection and disposal arrangements.

#### Our action plan

B.WA1	Household waste and recycling	
B.WA1.A1	Strategic planning and working groups	Work with strategic partners, such as the NLWA and the GLA, to develop and adopt evidenced-based strategic plans which are reviewed on a regular basis.
B.WA1.A2	Reducing contamination	Reduce household recycling contamination rates through a mixture of education and enforcement.
B.WA1.A3	Composting, recycling and residual waste reduction	Enable and encourage household composting, recycling and waste reduction through provision of services, implementing planning guidance and delivering educational campaigns.

B.WA2	Commercial waste and recycling	
B.WA2.A1	Business plastic reduction	Support the NLWA on all waste reduction campaigns and business engagement initiatives.
B.WA2.A2	School and community groups	Work with schools and community groups to reduce food and residual water and increase reuse, recycling and composting.
B.WA2.A3	Commercial recycling	Develop the Council's commercial recycling service for businesses and organisations.

B.WA3	Circular economy	
B.WA3.A1	Community circular economy	Facilitate a circular economy in the community through introduction and support for initiatives such as 'fixing factories' and 'libraries of things'.
B.WA3.A2	Circular construction industry	Explore and enable a move towards a circular construction industry in Enfield by engaging with local developers and suppliers, implementing policy and supporting innovative tools and platforms.
B.WA3.A3	Circular businesses	Work with the NLWA, local businesses and the industrial sector to implement circular economy practices across the borough.

B.WA	Zero waste and circular economy	
B.WA.M1	Annual borough waste emissions	(tCO2e/yr) Annual waste related emissions
B.WA1	Household waste red	uction, recycling and composting
B.WA1.M1	Residual waste per household	(kg) Annual quarterly average of residual waste collected per household by weight
B.WA1.M2	Household waste sent for reuse, recycling and composting	(%) Percentage of annual kerbside household waste which is sent to be recycled, reused or composted
B.WA1.M3	Contamination rate at material recycling facility	(%) Percentage of annual average contamination rate at material recycling facility
B.WA2	Waste reduction and recycling for businesses and organisations	
B.WA2.M1	Commercial waste sent for reuse, recycling and composting	(%) Percentage of annual kerbside commercial waste which is sent to be recycled, reused or composted
B.WA2.M2	Waste deterred from landfill	(t) Tonnes of commercial waste deterred from landfill
B.WA3	Circular economy in E	Enfield
B.WA3.M1	Reduction in consumption based emissions	(%) Percentage reduction in consumption-based emissions over a 2021 baseline
B.WA3.M2	Material Value Retention on Major construction projects	(%) Percentage from 0 to 100 where 100 would be retaining materials and 0 would be completely new materials for council's strategic regenerations projects

## **Borough: Natural Environment**

#### Our vision

By 2040, the effects of climate change and extreme weather on residents and businesses will be reduced through enhanced urban and rural natural environment with improved biodiversity, air quality and access to green spaces. In doing so, we will improve access to nature with all the health and wellbeing benefits this bring and also contribute to tackling the biodiversity crisis.

B.NG1	Urban blue and green infrastructure	By 2040, urban areas will be more resilient to the effects of climate change through increased urban blue and green infrastructure resulting in reduced urban heat island effect and flood risk.
B.NG2	Green, native and resilient rural areas	By 2040, the borough will have more high-quality rural areas that positively contribute to borough-wide climate resilience. Rural areas offer a mosaic of different habitats and land uses that strengthen the rural economy, enhance biodiversity, provide carbon mitigation and reduce flood risk.
B.NG3	Sustainable urban food	By 2040, we will enhance natural ecosystems through increased sustainable urban food growing. Local food production in the borough will establish a market for producers and consumers, improve public health and reduce food poverty by providing access to locally grown food.

#### Why this is important

In order to align with global climate targets, we need to protect natural resources that provide ecological services to mitigate some of the destruction caused by human development. As part of the commitment in the <u>Government's 25-year Environment</u> Plan, Natural England launched <u>the Green Infrastructure Framework</u> in January 2023, aimed at planners and developers to help reach 40% of green cover in urban residential areas UK-wide, echoed by the Mayor's Environment Strategy which aims for half of London to be green by 2050.

Enfield is one of London's greenest boroughs, including the Lee Valley Regional Park, 123 parks and public open spaces, 37 allotment sites, more than 300 hectares of woodland and 100 km of rivers and streams. We have an important role to play in protecting and enhancing the borough's biodiversity, helping London to respond to the changing climate and helping to decrease carbon through blue and green infrastructure.

As the summers of 2018, 2019 and 2022 demonstrate, our weather is becoming more extreme, with events such as heatwaves, droughts and flooding occurring more regularly and with higher intensity. These tendencies are amplifying the risk of flooding in vulnerable areas within Enfield, impacting social and critical infrastructure. Unfortunately, the areas with the highest levels of deprivation correspond with the areas where there is the highest flood risk. Thames Water have recently advised that more than 10,000 Sustainable Drainage Systems (SuDS) features need to be delivered in London over the next 25 years to respond to effects from climate change, equating to 400 a year in Enfield.

We need to keep responding to these risks through ongoing work such as proactive flood alleviation work, as well as capitalising on the natural assets the borough has to help offset the emissions we cannot prevent in the coming years. Our approach to blue and green infrastructure is about both mitigating and adapting to climate change, as well as offsetting some of our emissions by capturing carbon. We are aiming to significantly increase carbon sequestration opportunities across Enfield.

#### Our asks of others

- Embed adaptation and mitigation to the core of any national planning reforms and National Planning Policy Framework updates.
- Develop a clear national framework for carbon accounting to measure and evaluate carbon emissions against sequestration from blue and green infrastructure projects.
- Government to create and promote a national tool to evaluate the benefits of nature-preservation projects to promote a consistent way to capture and record all added value comprehensively (carbon capture, social value) as well as to enable stacking co-benefits to demonstrate viability and enable blended funding plans for these projects.
- Create conditions to make sustainable diet choices (affordable, local, available) and prioritise preventative measures for health challenges, such as tax cuts for healthy options fruit and vegetables, whole foods.
- Consolidate the different funding streams, reduce competitive bidding processes, give longer lead-in times where bidding remains and provide funding over the medium rather than the short-term with multi-year funding arrangements where possible. Non-competitive funding reduces administrative burdens and ensures that allocation of funding is based on need and opportunity rather than bidding capacity.



# Local Story: Turkey Brook restoration at Albany Park

A major transformation of Albany Park, and restoration of a section of the Turkey Brook has been completed in October 2022. The project included open spaces enhancements to make them more accessible. Re-routing the river, it is also expected to attract wildlife, improve biodiversity, and with the wetland, protect local homes from flooding. These improvements will bring the community together in Albany Park to learn about sustainability and improve wellbeing of the locals.

The restoration project was jointly funded by the Mayor of London, the Environment Agency and Enfield Council's capital programme. It will continue to create more than 300 metres of improved footpaths and cycleways and an outdoor classroom that can be used by local school children and community groups. New entry points will help connect surrounding neighbourhoods to Albany Park. Enfield Council received funds to create new woodlands and wetlands, as well as to carry out work to restore existing waterways, which includes the Turkey Brook.

# Our action plan

B.NG1	Urban blue and green infrastructure	
B.NG1.A1	Resilient new buildings	Through the planning system, ensure all new developments and existing buildings are safe from flood risk and provide improvements in biodiversity through the implementation of robust policies and application review process.
B.NG1.A2	Urban green infrastructure	Explore and implement urban greening and other nature-based solutions used to manage extreme heat and flood risk while also addressing biodiversity, water quality and amenity impact. Continue to deliver our ongoing programme of installing SuDS features such as rain gardens and wetlands throughout urban areas, including in public areas and in school estates.
B.NG1.A3	Urban greenery	Develop and deliver a planting programme across urban areas, to increase coverage by an accumulative 2 ha of green space including 2,000 street trees and other greenery by 2027 and review maintenance regime for grass verges to explore opportunities to improve biodiversity networks.

B.NG2	Green, native and resilient rural areas	
B.NG2.A1	Land based carbon emissions	Establish standardised methodologies for monitoring and reporting carbon emissions from land-use changes and sequestration projects.
B.NG2.A2	Forest and woodland programme	Deliver a 10-year restoration and woodland creation programme in the north of the borough to restore natural habitats and create a mosaic of habitats including creating 500 hectares of woodland.
B.NG2.A3	Sustainable land management	Implement conservation grazing and other land management practices to improve biodiversity and sequester carbon.

B.NG3	Sustainable urban food	
B.NG3.A1	Land for local food production	Support a food partnership with organisations to enable commercially viable food production on council-owned land.
B.NG3.A2	Food Strategy	Develop a comprehensive food strategy for the borough to ensure residents and communities have access to healthy and sustainable food by addressing aspects of food production, distribution consumption and waste
B.NG3.A3	Supporting community initiatives	Support community initiatives such as Energy Garden to utilise under-used in-between spaces for micro-scale food growing, gardens and Photovoltaic installation.

# Measuring success

B.NG	Resilient urban and native natural environment	
B.NG.M1	Homes at medium to high risk of flooding	(%) Percentage of homes at medium to high risk of flooding
B.NG.M2	Homes at medium to high risk of flooding	(#) Number of homes at medium to high risk of flooding
B.NG.M4	Land-use emissions	(tCO2e) Annual emissions related to land-use change
B.NG1	Urban blue and green infrastructure	
B.NG1.M1	Wetland sites	(#) Total number of wetland sites created in the borough
B.NG1.M2	Number of street trees (net)	(#) Net number of street trees planted from 2021/22 baseline
B.NG1.M3	Urban SuDS projects delivered	(#) Number of urban SuDS projects delivered from baseline
B.NG2	Green, native and resilient rural areas	
B.NG2.M1	New woodland created	(ha) Area of new woodland created
B.NG2.M2	New trees planted in new woodland	(#) Number of new trees planted in new woodland
B.NG2.M3	Carbon sequestered from new woodland	(tCO2/annum) Annual carbon emissions sequestered from woodland (existing and new)
B.NG3	Sustainable urban food	
B.NG3.M1	Allotments available	(#) Number of allotment spaces available in the borough

# Borough: Working together

#### Our vision

By 2040, Enfield residents, businesses and local partners will be engaged, committed and coordinated to deliver the Climate Action Plan. This will mean that by 2040, we will need to have established strong and thriving networks to facilitate collective climate action with all local stakeholders. Our success in this will in part depend on how we work with national and regional government as well as specialist groups to collaborate on and lobby for policy, law and incentives that will drive decarbonisation nationally and at a borough level.

B.WT1	Everyone makes low-carbon lifestyle choices	By 2040, people who live, work in and visit Enfield will be informed, encouraged and enabled to make low carbon choices.
B.WT2	Business and external organisation coordination	By 2040, all businesses (of all sizes), developers, schools, NHS, voluntary, community, charity and religious organisations will be knowledgeable, engaged, committed and coordinated to achieve a carbon neutral borough viably and successfully.
B.WT3	Regional and national engagement, coordination and lobbying	The Council will participate effectively in regional and national networks to coordinate, share knowledge and resources and successfully lobby for regulatory, policy and funding changes that enable climate action at scale and at pace.

# Why this is important

We cannot tackle the climate emergency without working with our partners, communities and businesses and without increasing support from national and regional government. To achieve a carbon neutral borough by 2040, we need to work proactively to encourage behaviours which significantly reduce our carbon footprints. The easier, more attractive and more affordable these choices are, the speedier the uptake will be.

We only have control over around 2 to 5%<sup>16</sup> of our emissions (scope 1 and 2). Other areas we can influence through procurement, policy and leading by example (scope 3). Other areas we can do little more than report on. Each of these 'spheres of influence' needs a different approach.

For every 'sphere of influence', coordination with individuals and groups is essential, so that as a borough, there are no types of emissions left unattended, and all the stakeholders who control these emissions are empowered to reduce them, rather than waiting on others. Likewise, coordination reduces the areas where there might be a doubling up, as this can waste effort, create tension and leave people demoralised.

## Our asks of others

- Help from residents, organisations and businesses in delivering impactful carbon reductions in all areas covered in this plan.
- Understanding that our current way of living is leading to the climate change that we are already experiencing and some change to our way of life is inevitable. This Climate Action Plan seeks to make this transition in the best way possible.

<sup>16 &</sup>lt;a href="https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/">https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/</a> - page 5 from report

- Government to increase the powers of local government to act at the scale and pace required, and to
  consolidate the different funding streams, reduce competitive bidding processes, give longer lead-in
  times where bidding remains and provide funding over the medium rather than the short-term with
  multi-year funding arrangements where possible. Non-competitive funding reduces administrative
  burdens and ensures that allocation of funding is based on need and opportunity rather than bidding
  capacity.
- Government to make the policy and regulatory changes called for throughout this Plan to enable us to meet our targets.



# Local story: Leading on retrofit in London

Enfield and Waltham Forest jointly lead London boroughs for the collaborative Retrofit London programme retrofitting homes to reduce carbon emissions, and along with London Councils, were declared winners at the MJ Awards 2022.

Retrofit London brought the 33 London local authorities together to agree a pan-London plan for improving energy efficiency and radically reducing emissions providing potential solutions for other councils across the UK.

As buildings account for about a third of total carbon emissions in the metropolitan area, boroughs are now working together to upgrade their housing stock and decarbonise the built environment, while also reducing fuel poverty and boosting green industries.

# Our action plan

B.WT1	Everyone makes low-carbon lifestyle choices	
B.WT1.A1	Climate communications	Develop and oversee a cross-service climate action communications and engagement plan
B.WT1.A2	Community coordination and engagement	Develop stronger links, engage regularly, and promote the work of local environmental groups to help coordinate action across the borough. Utilise existing governance arrangements to share progress and receive feedback
B.WT1.A3	Resident engagement	Actively engage with residents across Enfield in areas that are directly or indirectly related to climate change, such as the cost of living and energy crisis.

B.WT2	Business and external organisation coordination	
B.WT2.A1	Business engagement	Engage and coordinate with business organisations across the borough from micro, SMEs, to the largest emitters, using existing networks, council led forums and identifying where new forums may be needed to address climate change issues if required.
B.WT2.A2	School engagement	Engage with schools on operational and educational issues related to climate action. Utilise head teacher and business manager briefings and the Enfield Schools Climate Action Network to share knowledge and information between schools.
B.WT2.A3	Sustainable building forums	Engage in building related forums, to share knowledge and coordinate actions.

B.WT3	Regional and national engagement, coordination and lobbying	
B.WT3.A1	National government and environmental groups	Engage with relevant national groups and networks to improve coordination of action and relevant lobbying activity.
B.WT3.A2	London government and regional groups	Engage with London groups, such as London Councils, GLA, TFL, neighbouring boroughs and sub-regional working groups to improve coordination of action at a local and regional level and relevant lobbying activity.

# Measuring success

B.WT	Working together to achieve carbon neutrality	
B.WT1	Everyone makes low-carbon lifestyle choices	
B.WT1.M1	Residents engaged	(#) Overall reach of the council's "Greener Enfield" campaign per year
B.WT1.M2	Community groups engaged	(#) Number of community groups engaged on climate action related topics
B.WT2	Business and external organisation coordination	
B.WT2.M1	Enfield climate action group	(#) Number of active climate action group available for businesses, organisations and schools
B.WT3	Regional and national engagement, coordination and lobbying	
B.WT3.M1	Regional climate- related forums	(#) Number of regional forum Enfield Council's participating in



# Glossary of terms

#### **Actions:**

Actions are how we achieve Outcomes. Actions are split into "Actions" which have flexibility and longevity and "Implementation Actions" are more specific and detailed which are owned by each service team and can be costed in specific business plans.

#### **Additionality:**

The extent to which something happens as a result of an intervention that would not have occurred in the absence of the intervention

#### **Blue and Green Infrastructure:**

Strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem service.

#### **Carbon footprint:**

The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation or community.

#### **Carbon literacy:**

Having a general awareness of climate change and the impact of humankind on the climate.

#### **Carbon neutral:**

Where some emissions are still being generated by an organisation after carbon reductions, these emissions are being offset making the overall net emissions zero.

#### Carbon positive:

Activity that goes beyond achieving net zero carbon emissions to actually create an environmental benefit by removing additional carbon dioxide from the atmosphere.

#### **Carbon pricing:**

A carbon price is a cost applied to carbon pollution to encourage polluters to reduce the amount of greenhouse gas they emit into the atmosphere.

#### Circular economy:

A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

#### Climate change:

A large-scale, long-term shift in the planet's weather patterns and average temperatures.

#### **Climate emergency:**

The intention to take immediate action and develop policy to mitigate climate change beyond current government targets and international agreements.

#### **Climate mitigation:**

Efforts to reduce or prevent emission of greenhouse gases.

#### Climate resilience:

Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.

#### Climate risk/adaptation:

Inertia in the climate system means that rising temperatures, changing rainfall patterns, changes in extreme weather events and sea level rise are unavoidable. These impacts will have consequences for business operations, social services, human lives and many other areas vital to economic and social development.

#### **Climate risk:**

Climate risk includes a ratio of severity of the hazard and adaptive capacity to respond to the threat.

#### **Carbon sequestration:**

The long-term storage of carbon. In this instance using natural measures to store carbon.

#### **Divestment:**

This the process of removing an asset for financial, ethical or environmental reasons. In this case divestment is focused on the removal of all fossil fuels from Enfield's pension funds.

#### **Green House Gas:**

Greenhouse gas, any gas that has the property of absorbing infrared radiation (net heat energy) emitted from Earth's surface and reradiating it back to Earth's surface, thus contributing to the greenhouse effect. There are seven main GHGs that contribute to climate change: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3). Using the conversion factor relating to CO<sub>2</sub>e covers all of these GHG's.

#### **Indicator:**

Every outcome has a specific and measurable Indicator. These align with the Council Plan and will be incorporated into reporting in the council and borough.

#### Medium to high flood risk:

A risk of at least 25% of the building experiencing a chance of between 1 in 100 (1%) and 1 in 30 (3.3%) of flooding each year, or see the latest Local Flood Risk Management Strategy.

#### **Location/market-based emissions:**

A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). It derives emission factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims.", see: GHG Protocol Scope 2 Guidance

#### **Low Traffic Neighbourhoods:**

Low traffic neighbourhoods involve introducing measures which reduce the number and speed of cars going through a neighbourhood. This encourages more people to cycle and walk, making the streets healthier and more pleasant for people.

#### Offsetting:

Carbon offsetting is used to compensate for emissions which may have reached their limit of reduction by using low carbon technology, natural environment or funding an equivalent carbon dioxide saving.

#### **Orientation:**

A design tool that enables new developments passively reduce their energy demand by placing the building to maximise the benefit of the local microclimate to take advantage of the solar radiation, natural daylight and ventilation.

#### **Outcomes:**

Outcomes are what we want to achieve. There is one "Overarching Outcomes" per topic, followed by several "Outcomes". These take the place of the 'vision' in the previous Climate Action Plan

#### **Play Streets:**

Play Streets are where local authorities use their existing powers under road traffic legislation to allow temporary street closures at regular weekly or monthly intervals, so that children are able to play out in the streets where they live.

#### **Residual Emissions:**

The carbon emissions from a development after all the reduction measures have been implemented.

#### **School Streets:**

School-street schemes are where cars are prevented from going up to the school gates at drop off and pick up times. Enfield launched its first two schemes in early 2020.

#### **Service economy:**

The sector of the economy, also known as the tertiary sector, that provides services rather than products. Moving toward the service economy implies switching from products to purchasing the service that the product provides, thereby producing less waste with more durable products.

#### **Stranded Assets:**

Assets that turn out to be worth less than expected as a result of changes associated with the energy transition and the physical impacts of climate change.

#### SuDS:

Sustainable Drainage System: a set of interventions to align our drainage systems with natural water processes incorporated into the local green infrastructure strategy. They are designed to manage excess rainwater on site and encourage infiltration, attenuation and passive treatment.

#### **Urban creep:**

The process of converting gardens and other permeable areas, where green land that naturally soaks up the water is removed by impermeable surfaces such as concrete, causing rates and volumes of runoff to rise and contributing to flood risk.

#### **Urban greening:**

An urban design tool to capture carbon, reduce urban heat and the risk of flooding by integrating green roofs and walls, pockets green spaces and urban trees within the urban fabric.



# Appendix: Global, national and regional context

#### Global context

The United Nations Sustainable Development Goals (SDGs), recognising the limits of growth, set the overarching and comprehensive global objectives to serve as a "shared blueprint for peace and prosperity for people and the planet, now and into the future"1. The 17 goals and 167 targets and numerous indicators help countries, cities and corporations work to ensure that people everywhere and future generations have access to basic resources.

According to the 2022 SDG report2, current policies will almost certainly fail to achieve the reductions in greenhouse gas (GHG) emissions necessary to limit global warming, increasing the threats and endangering ecosystems and populations around the world.

In 2021, COP26 in Glasgow closed with two major achievements: the <u>Glasgow Climate Pact</u> is a pledge signed by almost 200 signatories, detailing decisions and commitments to limit global warming to 1.5°C recognising the role of climate justice among the impacts. The other is the <u>Article 6 rulebook</u> which is a set of new agreements and rules for the international carbon market.

Other documents published by the International Energy Agency (IEA) include the <u>Net Zero by 2050</u> report that plots out the key steps to achieve global net zero by 2050, by shifting from fossil fuels to clean energy sources, as well as the <u>World Energy Outlook 2021 guide</u> on the opportunities, benefits and risks of the energy transition.

In 2022 data from the <u>IRENA trends</u> (International Renewable Energy Agency) showed that while global electricity generation from renewables, especially wind and solar increased by 7.4%, public investment in renewable energy sources fell. For the UK, renewable energy's share of electricity capacity only increased by 1.11% between 2020 and 2022 to a total of 53,025 MW. The overall renewables share in total installed capacity globally was 40% in 2022<sup>17</sup>.

The UN's Environment Programme published the <u>Emissions Gap Report</u> highlighting the lack of progress towards the Paris goals<sup>18</sup>, predicting that with current policies global temperature will reach a 2.8°C rise by 2100 and urging for more robust system-wide transformation to cut GHG emissions.

In 2022 the final decision document from the COP27 conference was the <u>Sharm el-Sheikh Implementation Plan</u> that summarised the agreements achieved by the parties including commitments to loss and damage funding.

## **National context**

The Climate Change Committee's (CCC) <u>Sixth Carbon Budget</u> report (2033-2037) advises a 78% reduction in UK territorial emissions between 1990-2035, and at least a 68% reduction in overall emissions between 1990-2030. This aligns with the **Paris Agreement goals** but accelerates a fall in emissions relative to previous carbon budgets. These targets will enable the UK to remain a global leader in climate action and are feasible with effective policies in place.

The <u>National Risk Register 2020</u>, published by the UK government summarised the main environmental hazards expected in the UK, the level of risk, and actions taken to protect against these risks.

The 2021 <u>Net Zero Strategy</u>, published by Department for Business, Energy and Industrial Strategy (BEIS) also sets out how to reach net zero emissions by 2050, through reducing emissions from each sector of the economy. BEIS's <u>Heat and Buildings Strategy</u> provides a roadmap to reduce emissions from heating buildings through improving energy efficiency and switching from high to low carbon sources of heat.

<sup>17</sup> IRENA: Tripling Renewable Power and Doubling Energy Efficiency

<sup>18</sup> Set out in the Paris Agreement at COP 21 (2015)

The Department for Transport's (DfT) <u>Decarbonising Transport</u> is the plan to deliver the required emissions reductions from transport to meet net zero by 2050, which also highlights the benefits decarbonisation will bring.

The UK CCC's <u>Progress Reports</u> documents the progress made by the government in reducing emissions and adapting to climate risk, and also provides recommendations for future action. <u>The reports</u> identified a strong climate framework but a lack of overall coherent planning jeopardising the achievement of the 2050 net-zero targets.

In 2022, the Independent Assessment of Climate Risk (IACR) investigated the impacts of warming to the UK. This found that adaptation has failed to keep pace with the reality of climate risk. It identified 8 risk areas which require major attention in the next two years, and 10 principles which can inform good adaptation planning.

<u>Building to Net Zero</u>, is a 2022 parliamentary review considering the best pathways to net zero construction taking into account the UK's present and future building needs. The core recommendation of the review was for the government to introduce a mandatory requirement to undertake whole-life carbon assessments for major developments, as well as develop progressively stringent carbon targets for buildings, in line with its trajectory towards net zero.

The UK's 2022 Nationally Determined Contribution (NDC) is an updated version of the 2020 non-binding national plan to reduce greenhouse gas emissions, following the Glasgow Climate Pact. The four major updates demonstrate how the UK's target aligns with the Paris Agreement temperature goal; how the UK will deliver on its NDC by 2030; the progress made to expand the territorial reach of the NDC; and the enhanced information to achieve the UK's approach to levelling up, just transition and green skills.

The 2022 ONS Energy prices and their effect on households analysis points out how rising energy prices are influencing household behaviour to make greater energy savings, while the <u>UK National Risk Assessment on Security of Gas Supply</u> (by BEIS) reports that gas supply in the UK is very secure, with supply able to meet demand across a variety of potential future scenarios.

# Regional context

London has been leading on climate-conscious decision-making and policies on the trajectory to achieve carbon neutrality by 2030. The 2020 <u>Green New Deal (GND) for London</u> aims to tackle the climate and ecological emergencies, alongside the issue of air quality, by doubling the size of London's green economy by 2030 through three core practical priorities: getting London's buildings to net zero; modernising public transport; and building the economic, industrial, and political foundations for London's green economy to grow.

In 2021, the Mayor released the <u>London Environment Strategy</u> to safeguard London's environment, aspiring to make the city greener and cleaner in the long-term. The strategy addresses air quality, green infrastructure, climate change mitigation and adaptation, waste, ambient noise, and a low carbon circular economy.

In 2022, the GLA published an <u>analysis of net zero targets for 2030</u>, to check against progress and offered four possible scenarios, with different levels of decarbonisation ambition, through which London could meet its target for net zero by 2030.

In 2022, the London Assembly introduced the <u>Grow Back Greener Fund</u> and the Green New Deal mission to reduce inequalities of access to green spaces in London.

London Councils conducted a survey on Londoners' perspectives on climate change, and the impact the cost-of-living crisis is having on their ability to act on it. The <u>What do Londoners think about climate change</u> found that Londoners are well informed about climate change and support ambitious action, though there are some barriers to changing behaviours.

#### Local context

Enfield's 2023-2026 Council Plan sets out the overarching priorities and associated high level actions for the Council for the next three years. One of our five priorities is to deliver clean and green places. This includes the action to enhance biodiversity and protect our parks, open spaces, woodlands, watercourses, wetlands, urban trees and shrubs. It includes enabling active and low carbon travel; facilitating reuse of materials, reducing waste and increasing recycling rates, and reducing carbon emissions from our buildings, street lighting, fleet and the goods and services we procure. Our Climate Action Plan sets out the detail for how we will deliver on these actions.

More and better homes is another of our five priorities. We need to respond to the housing crisis and increase the supply of affordable homes in an extremely challenging financial climate. It is in this context that we need to reduce the emissions produced from our existing and new homes, and in the building of new homes. One of our actions is to deliver low carbon and climate resilient new-build homes and retrofit existing homes – our sections on buildings in this Plan explains more about how we will do this.

To achieve our targets of net zero for the council as an organisation and for our borough and to adapt to the climate change already underway, we need to consider climate impact in everything we do – our cross-cutting principle of 'climate conscious' in our Council Plan commits us to consider energy consumption, carbon emissions, and environmental risks associated with our decisions, and how we will adapt to the effects of climate change.

Our Council Plan sets out priorities and actions to invest in Enfield in order to positively impact on six long term outcomes. Effective climate action contributes to all these outcomes – but most explicitly to the long-term goal for residents to live in a carbon neutral borough, which is one of the six outcomes set out in the Council Plan.

Alongside the Council Plan, other key related strategies for climate action include the **Enfield Blue and Green**Infrastructure Plan the Local Flood Risk Management Strategy which set out in detail how the Council will use nature-based solutions to make the borough more resilient; the Journey's and Places plan and principles to make the borough more liveable focusing on the urban public sphere; and the **Sustainable and Ethical Procurement**Policy which sets out how we will procure value for money goods, services and works, whilst maximising social value including by protecting the environment and reducing carbon emissions





