

Haringey Climate Change Action Plan – A Route Map for a Net Zero Carbon Haringey

March 2021

Foreword from Councillor Hearn

The significant community interest and engagement on this Action Plan has shown that there is high level of support from the community on tackling Climate Change. Nearly 4 in 5 respondents said that they were very concerned about climate change and that action should be a priority for the borough. Climate Change is a risk to us all through heatwaves, energy costs rising and local flooding. We have demonstrated through the recent pandemic that as a community we can change for the better, and we can tackle emergencies together.

In the last year we as a Haringey community have had to deal with the COVID emergency. It has impacted us all with positives and negatives. It has shown how together we can address an emergency. In addressing this pandemic, the Council has had to alter the way it delivers services, we have seen the health and economic benefits of reductions in traffic on our roads, and the benefits from increasing numbers cycling. The community across the borough has also responded by growing community networks. Sharing knowledge, resource and developing projects that have brought us closer.

This Action Plan sets out how the Council will be a leader and how together we will deliver homes that are healthy, comfortable, and affordable places to heat and power. It sets out how as a community we can support our local businesses with low carbon buildings and purchasing local goods. The Plan enables us to all share the benefits of quiet and calm neighbourhoods with accessible and safe, low carbon travel options. The Plan also sets out how we can increase the amount of power generated in our borough through clean and green energy. Most importantly, the Plan sets out how we as a community will work together to address the Climate Emergency.

Since the draft Action Plan was launched a year ago, we have not stopped action on delivering carbon reduction projects. In the last year we have started our School Streets Programme, worked with local businesses on e-cargo bikes, and started the Homes for Haringey retrofit programmes. We are delivering policy documents such as the New Local Plan and the draft Walking and Cycling Action Plan. We launched web-based tools to help awareness and understanding of low carbon choices with the Ecofurb web page, and a Clean Car App to assess the options of electric vehicles.

Communities with low car ownership are blighted by the worst air quality, and their access to public transport and active travel options need to be improved. This has become worse when public transport capacity was reduced to support social distancing. In response, the Council is supporting new walking and cycling infrastructure so we can deliver better air quality and carbon reduction. Delivering healthier lifestyles and increased access to jobs and services are also key parts of the Action Plan. The Climate Change Action Plan will also support our work in addressing poor quality housing and the rising number of families in fuel poverty, again a situation that has been exacerbated during the pandemic. The Action Plan can deliver a win for the many.

For Haringey to become Net Zero Carbon, the Council, residents, visitors, stakeholders, local businesses, and government need to work together to deliver the Action Plan's ambition. Combating climate change is a collective endeavour, and we will continue to work with colleagues across the sector to share knowledge so we can keep Haringey's target date of 2041 – and if we can confidently bring it forward, we will.

Councillor Hearn, Cabinet Member for Climate Change, Equalities & Leisure

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Introduction and Background

Our vision for Haringey in 2041

Our 2041 vision is for a Haringey that is healthy and sustainable, with walking or cycling to local amenities and taking the long-distance trains for holidays being the norm. Roads will have been repurposed to give way to street-side planting, play areas, dedicated charging areas for electric vehicles, with safe space to get to your destination by using any non-motorised set of wheels or by foot. The Council will have finished the deep retrofitting of all council-owned properties, resulting in lower energy bills and more control over thermal comfort at home and at work. All households will live in homes that are warm in the winter and cool in the summers; homes that are desirable, warm, and affordable to run. Local energy generation is widespread and usage can be tracked, increasing awareness. Photovoltaic (PV) solar panels power Council buildings, homes and businesses, and thousands of homes are connected to low carbon heat networks, delivering affordable, low carbon, and locally generated energy.

Purpose of this Document

Haringey has been a leader in carbon dioxide (CO₂) reduction and in its work on Climate Change. The borough is on target to deliver its 40% carbon reduction by 2020 from its 2005 baseline. It has a better performance than neighbouring authority areas. But there is now increased awareness on the impact of carbon and greenhouse gases as scientists have learnt and are seeing the impact of carbon emissions on our climate across the globe. The globe is now in a Climate Change Crisis and dramatic action is required.

In March 2019, Haringey Council declared a Climate Emergency. In doing so, the Council committed to developing an action plan to decarbonise the borough by the earliest date that was both ambitious but achievable. The foundation work was done with ARUP when the Council first committed to becoming a net zero-carbon borough, in the Borough Plan (2019-2024). ARUP provided science-based analysis that informed the actions that could be delivered and to what timeframe. Based on the Climate Emergency declaration, Haringey Council revisited this initial action plan and agreed to bring forward both the timeline and scale of actions, aiming to be net zero carbon by 2041. This document sets out the actions as to how we can achieve this goal.

This Action Plan is a borough document which requires collective ownership to deliver this level of ambition, rather than a 'top-down' Council approach. This is a fundamental part of the approach which will be needed to deliver the 2041 date.

The Councillors and officers are committed to taking urgent action to deliver a net zero-carbon borough by 2041. Because the Council cannot deliver it all on its own, a large part of this commitment is to take a leadership role in influencing stakeholders in Haringey; and empowering residents and businesses to mitigate their own emissions. But it also requires changes at a higher level and the Council will lobby the Mayor of London and UK Government to take responsibility for their own emissions and adopt ambitious legislation and policies. The Government's legislation and policies should be supported with funding streams and increased powers to enable an increased rate of delivery at the local level.

As these actions were developed, they were reviewed and commented on by stakeholders to inform the actions. The Action Plan was also challenged by leaders in the sustainability and built environment sectors to sense check and challenge the actions and assumptions.

This Action Plan will enable Haringey to become a net zero-carbon borough by 2041.

Background of Climate Change Globally

Climate change is an increasingly global crisis, disproportionately affecting those least able to bear it and with the least responsibility for causing it. Extreme weather linked to climate change has created devastation around the world. These changes are being felt through more frequently occurring short-term events such as droughts, flooding, heat waves and storm surges as well as longer term pressures including sea level rise and loss of productive land.

The UK set a statutory target in the Climate Change Act 2008 to reduce UK greenhouse gas (GHG) emissions by 80% from 1990 levels by 2050. In 2015, the UK committed to keeping emissions well below 2°C by signing up to the Paris Agreement of the United Nations Framework Convention on Climate Change. The Intergovernmental Panel on Climate Change (IPCC)'s *Special Report on Global Warming of 1.5°C*, published in October 2018, sets out the impacts of global warming of 1.5°C above pre-industrial levels with available scientific, technical and socio-economic evidence. Due to historic GHG emissions, the globe is set to warm significantly, with wide-ranging impacts as a result. Following a recommendation by the UK Committee on Climate Change (CCC), the UK legally amended the target in June 2019 to reduce all GHG emissions to net zero by 2050.

Human pressures on the world's ecosystems and natural resources and the changing climate have also resulted in a serious threat to our biodiversity, with nature eroding at unprecedented rates and resulting in the acceleration of the sixth mass extinction of wildlife. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) published its Global Assessment Report on Biodiversity and Ecosystem Services in May 2019 warning of the severe loss of biodiversity and how this will impact people. Climate change and large-scale biodiversity loss need to be tackled simultaneously and are both critical in ensuring human wellbeing, economic viability and the functioning of the natural world.

In response to clear scientific evidence and consensus on climate change, and rising public concerns, Haringey Council declared a Climate Emergency in March 2019, being one of the first London Councils to do so. The Draft Haringey Climate Change Action Plan was published in March 2020. Following its launch, the Action Plan underwent a process of public engagement to increase the awareness of the issues around climate change, to highlight the level of work required to deliver this ambition, to gather the views of the community on the Action Plan, and to help prioritise actions. Over 1,000 comments were received by the Council as part of this process.

Why Reduce Carbon in Haringey?

The quickly changing climate and large-scale loss of biodiversity will impact our borough too, and the impacts will continue to worsen due to the borough's urban location, including:

- Heat waves will intensify due to the urban heat island effect and buildings not being adapted to higher external temperatures;
- Impermeable built-up areas will cause surface water flooding;
- Higher demand on the grid during extreme weather events will result in more power outages.

Haringey's incomes and living standards vary considerably and the impacts of climate change will exacerbate inequality across residents and businesses. This plan targets a borough-wide reduction on carbon emissions which will improve living standards for all residents.

Figure 1: Line graph showing Haringey's proportion of emissions for the domestic, industrial and commercial, and transport sectors between 2005 and 2018. It shows that the reduction in emissions from 2005 to 2018 is 50% for the domestic sector (from 538 ktCO₂ to 327 ktCO₂), 27% for the industrial and commercial sector (from 296 ktCO₂ to 176 ktCO₂), and

23% for the transport sector (from 201 ktCO₂ to 153 ktCO₂). (Source: Haringey Annual Carbon Report, 2020)

Haringey Council has for some time been committed to reducing the borough's emissions by 40% by 2020, from a 2005 baseline (coined as '40:20'). In 2018 we set a new target to become a net zero-carbon borough by 2050. The Council had worked with Arup to set out a road map to 2050 and, after the Council declared a climate emergency in March 2019, it followed up with a Climate Emergency Report bringing the 2050 target forward to the earliest possible date, which we now believe to be 2041.

As every tonne of carbon is vital to be reduced, and in the context of an emergency, we need to deliver many of the actions urgently. Therefore, rather than accepting a linear decrease in carbon emissions, we have chosen to accelerate actions in response to the climate emergency. For this reason, the Haringey Climate Change Action Plan proposes a steeper rate of decrease in areas that the Council has greater control and powers to achieve this. This is shown through actions such as the Council's operational buildings becoming Net Zero Carbon by 2027, and increased action to improve the take up of active travel options.

Although nationally the UK Government are aiming to become zero carbon by 2050, the Council believes this is too late to act. By 2050, the borough and beyond could be experiencing catastrophic weather events, and displacing people from their homes. The Council believe that with the right support from regional and national government, that a 2041 timeframe is achievable and therefore we should be striving to achieve this.

When Haringey started work on delivering a reduction on its carbon emissions in 2005, the borough's emissions were estimated to be at 1,041.30kt (4.5t emissions per capita). In 2017, the estimated emissions for Haringey (within the scope of influence) were 667.7kt (2.5t per capita). A projected 40% reduction on 2005 levels is to achieve a reduction to 624.78kt of emissions by 2020.

How Has Haringey Reduced its Emissions So Far?

Since 2011, Haringey has published its Annual Carbon Report to provide an overview of the carbon emissions in relation to the 40:20 target. The 2020 Annual Carbon Report shows that, as a borough, we have helped reduce carbon emissions from the borough by 36.7% and Haringey is on target in meeting the 40% reduction by 2020 (also known as 40:20 target) from our 2005 baseline.

Our historic success in reducing emissions in the borough is due to our proactive working with businesses, the community and other stakeholders. Our work has included undertaking pilot studies and projects, encouraging active travel across the borough, implementing various improvements to the Council's estate through LED light fittings and other energy efficiency savings, installing 2,200 solar panels which generate 565,000 kWh of electricity per year, and supporting community groups in reducing their emissions through community energy installations, home visits and giving energy efficiency advice. Three significant projects that have delivered this level of carbon reduction are highlighted below:

- Haringey's Smart Homes project was delivered between 2013 and 2015 for private homeowners. It was led by Haringey in cooperation with other north London boroughs under the Smart Homes scheme, with ECO funding and £6.5m funding from the Department for Energy and Climate Change (DECC). Grants of up to £6,000 were made available to private homeowners following a Green Homes assessment (with residents contributing at least 25% of the cost). With a value of £1.4m, a range of energy efficiency works were undertaken including internal and external insulation, boiler replacements, double/secondary glazing and draught proofing. With 4,000 expressions of interest, a total of 1,250 grants were awarded. 72 businesses also took part in the equivalent Smart Business project where grants of up to 50% of the

cost were awarded. The total Smart Homes programme saving was estimated at 42,338 tonnes of CO₂ (1.05 tCO₂ per household), per annum.

- The Haringey Innovation Hub was awarded £100k by Climate KIC (EU's Knowledge and Innovation Centre) to support new clean technologies from universities and start-ups to reduce carbon emissions. With over 50 technologies reviewed, 15 emerging clean technologies have been developed further for testing in the borough. Some of the designs have included heat recovery from sewers, gas boiler optimisation, combined solar PV & thermal collectors, passive ventilation and pollution reducing pavement. This initiative has since grown to a London-wide Better Futures initiative, a low carbon business incubator hub with the aim to support 100 businesses over the period 2017-2020.
- En10ergy is a social enterprise that was set up by the Muswell Hill Sustainability Group. It aims to promote and invest in local renewable energy and to encourage and facilitate the reduction in carbon emissions and waste by households, businesses and community buildings. The enterprise has grown and delivered significant carbon reduction since its creation. En10ergy works with local households, businesses and schools, and has also been involved in negotiating bulk deals with energy suppliers. With 140 investors, of whom most live in the borough, En10ergy has installed solar PV panels through community share offers in four locations: M&S store in Muswell Hill (100 panels), Methodist Church in Muswell Hill (39 panels), Woodside High School in White Hart Lane (150 panels) and Fortismere School in Muswell Hill (105 panels). In total, their installations are now producing 128,000 kWh per year, having generated 290,000 kWh of energy to date. This is the type of project we need to nurture and grow to realise our carbon reduction targets across the borough.

Although we are on track to meet Haringey's 40:20 target, emissions need to be reduced at a much larger scale to achieve the new target of becoming a net zero carbon borough by 2041 and help the UK to meet the Paris Agreement.

Scope of Emissions within this Action Plan

The Haringey Climate Change Action Plan covers Scope 1 and 2 CO₂ emissions across the borough, as set out by the Greenhouse Gas Protocol. The carbon emissions are categorised into three groups to clarify how the emissions are generated, and who is accountable for these:

Figure 2: Scope of emissions targeted within this Climate Change Action Plan. Scope 1 includes direct emissions from sources that we own and control, including fuel combustion, company vehicles, and fugitive emissions. Scope 2 includes indirect emissions generated from the electricity and heat that we purchase and cooling we require. Scope 3 covers all other indirect emissions, such as waste disposal, aviation, diets, and behaviour change. In this action plan the Borough's emissions are Scope 1 and 2 only, whereas the Council's emissions are Scope 1 to 3.

To ensure that this Climate Change Action Plan is realistic and measurable, Scope 3 emissions are not included within the borough-wide actions and measurements. The Council is unable to measure Scope 3 emissions across the borough, as we cannot access data on how many residents eat meat, buy local products, or fly.

To demonstrate leadership, the Council will include Scope 3 emissions within its own targeted actions. The Council will develop policies around promotion of vegetarian and vegan food, local supply chains, and Council flights in response to this challenge. The Council will also develop its own waste management plan for waste it generates itself in line with the waste hierarchy.

The Action Plan does include actions to influence and educate stakeholders to reduce their wider emissions. However, these emissions are not quantified or measured within the zero-carbon target of this report.

Other sectors have also been scoped out of this report. Aviation and shipping are two large contributors to global carbon emissions; these are not currently accounted for in national emissions and the borough does not contain any ports or airports. Waste is part of the borough's carbon footprint. However, while domestic waste is in the control of the Council and measured by the North London Waste Authority, most of the commercial waste is collected through privately procured companies and the Council cannot obtain this information.

Whilst national targets are set for GHG emissions, in Haringey CO₂ makes up around 85% of total emissions, with methane (CH₄) and nitrous oxide (NO_x) making up the remaining 15%. Targets in Haringey are set for carbon emissions only, however our actions will indirectly reduce other GHGs simultaneously.

Trajectory to Reduce Emissions by 2041

Figure 3. This graph shows the rate of decarbonisation required across the energy sectors from around 750 kilo tonnes (kt) CO₂ equivalent to less than 100 ktCO₂ equivalent. It shows that some sectors, such as domestic energy and road transport, need to decarbonise as soon as possible as these reduction targets are more achievable now with known technology responses. The graph also shows that emissions from road transport is increasing at this time. (Source: ARUP's Climate Action Haringey: Towards a Zero-Carbon Future Final Report, November 2019)

Under the Haringey Climate Change Action Plan, it is estimated that emissions in the borough would be reduced to less than 100 ktCO₂e, a reduction of over 90% from the baseline scenario (Figure 3). While this still is short of net zero, it would represent a considerable achievement and a very great acceleration in the process of decarbonising the UK economy and Haringey's operational carbon footprint. The borough's carbon emission trajectory shown in this report goes only as low as can be achieved given the constraints of the modelling and current government projections for national infrastructure futures. Offsetting and/or carbon capture and storage (CCS) will be required to reach true zero.

Key crosscutting themes have emerged during the development of the Haringey Climate Action Plan which have been embedded in the actions and objectives. These include:

1. The scale and impact of the climate crisis requires Haringey to be ambitious;
2. Action on climate change at a local level is action for social justice since a changing climate will impact most significantly on those who cannot avoid these impacts;
3. Taking action on climate change creates opportunities to deliver wider benefits for health, wellbeing and the local economy;
4. This Action Plan is an evidenced-based approach, but the scope of our ambition should also extend beyond what is easily measured by the Council. Many of these factors, such as aviation and food, have a significant impact on climate change, but are not included in this plan;
5. Delivery of a target to be net Zero Carbon by 2041 cannot be achieved by the Council working alone. All the borough's stakeholders will need to support this ambition – residents, businesses and visitors. The Council will need to lobby central government and others to secure the action and investment needed at a national and regional level;
6. Achieving a carbon neutral future is as much about culture change as it is about infrastructure. Communication and engagement with stakeholders will be of fundamental importance. To do this in a credible way, the Council must demonstrate leadership in terms of its own estate and operations.

7. There are significant challenging issues ahead to address to deliver this carbon reduction ambition. With strong views on all sides. These include addressing emissions from council staff vehicles which are used for service delivery (social workers etc), reducing carbon from staff car parking across the public sector (doctors, school workers, and school governors, etc), and reprioritisation of highways space for active travel and community uses. The Council recognises these challenges and will focus engagement work with those most affected by these challenges, to bring forward solutions.

Structure of the Report

This Haringey Climate Change Action Plan is informed by the recommendations set out by Arup's Technical reports which are published on the Council's [web pages](#). This work was initiated with the ambition of becoming a zero-carbon borough by 2050. This work has been reviewed in light of the Climate Emergency and was concluded with the 'Climate Action Haringey: Towards a Zero-Carbon Future' Final Report, which was finalised in November 2019.

The Haringey Climate Change Action Plan is structured as follows:

- The six focus areas on reducing carbon emissions for the Climate Change Action Plan:
 - Council;
 - Housing;
 - Workplaces;
 - Transport;
 - Energy;
 - Community.
- Specific sections on Delivering the Ambition:
 - Governance and monitoring;
 - Financing;
 - Lobbying asks to government and the Greater London Authority (GLA).

Each focus area is set out with a context, overall objective and set of actions.

Haringey's Action Plans

The Council

Overall Objective: Reduce the operative carbon footprint of the Council to net zero by 2027

The Council's corporate buildings contribute approximately 0.8% of the borough's emissions. The major sources responsible for emissions in the borough are outside the Council's control and will require significant investment and work by private businesses and residents who will need incentives to achieve this. It will also require a greatly accelerated rate of decarbonisation in the national generation of electricity and road transport at a London-wide level. But as a local authority, we recognise that we have a responsibility to take positive action and provide strong leadership on averting the dangerous effects of climate change. This is the reason why the Council will work harder to achieve meaningful carbon reduction within a shorter timeframe.

The Council has set the date for a zero-carbon council at 2027. This will include core council operational buildings and all transport-related activities undertaken by the Council in the delivery of core services. The rest of the buildings from which the Council delivers services and is directly responsible for the energy bills (such as leisure centres, libraries and schools) will be net zero carbon as soon as it is possible. To bring this forward, the Council will publish a work plan for each building or site by the end of 2021, setting out how this can be achieved. To support this, the Council will require new council buildings to be zero carbon on site from the date of adoption of the Action Plan. Alongside these measures, the Council will start delivering a large-scale retrofitting programme across the Council's buildings, while removing carbon from the vehicles delivering front-line services as soon as it can.

The Council will share learning on what works on projects, it will support the supply chain as it develops, seek to attract green investment into the borough, and show leadership in our ambition and delivery. As a publicly funded organisation, we will do this in an efficient, cost effective, and responsible way. In doing this we will deliver the borough's carbon reduction ambition, improve local air quality, and demonstrate strong financial management by reducing the Council's future energy spend.

Historic performance

Haringey Council has made significant efforts to reduce emissions from our estate and operations. In 2008 we undertook our first Carbon Reduction Plan and since then we have reduced our emissions by 36% compared to 2005 levels¹.

The 2008 Plan set out a strategic and planned approach to reducing carbon emissions from our estate and operations. The Plan targeted the areas of the Council's activity which contributed most to our carbon emissions (e.g., swimming pools and leisure centres, car parks, the vehicle fleet, offices, and community centres).

Since Haringey's First Annual Carbon Report in 2011, the Council has undertaken a multitude of climate initiatives. The key measures delivered through the Plan included:

- 38 solar PV systems installed on the roofs of Council schools, housing and corporate sites, which generated 380,000 kWh of electricity in 2019/2020, saving our sites around £45k in electricity;
- Boiler upgrades across the Corporate estates;
- Approximately 50% of street lighting upgraded to LED
- LED lighting in main Council buildings and schools;

¹ BEIS data

- Electric staff pool car and new car club installed and open to all staff;
- Active Travel programmes across the borough including community grants and behaviour change education in schools and community centres;
- Energy improvements included into the specification of refurbishment at George Meehan House; and
- School Streets Plan across the borough.

The Council bought £5.2m of electricity and gas for the corporate estate in 2018/19. This covers energy for schools, corporate buildings (including libraries, mortuaries, park buildings) and operational buildings. It does not include Homes for Haringey. Reducing our energy consumption will improve our environmental performance, and reduce our revenue spend on energy.

Key partners which are required to deliver this vision include providers of currently outsourced services such as Veolia and other members of the Council's supply chain.

Three-Stage Delivery of Zero Carbon Council

To deliver this level of ambition of a Zero Carbon Council, the Council will deliver a three-stage process. Alongside this, we will work to demonstrate a leadership role in reducing the Council's emissions.

As the first stage in this approach the Council has identified its core operational buildings together with the transport emissions from the Council's fleet and the Council will make these Net Zero Carbon by 2027.

The Council will transition transport-related activities that are directly related to front-line service delivery (such as Council fleet vehicles) to zero carbon fuels. This will be achieved by reviewing the type of vehicles required to deliver these front-line services, and by working to replace carbon intensive vehicles with active travel options, or zero carbon vehicles where a viable option exists. For in-house fleet this will be delivered by 2027. For out-sourced fleet activities this will be undertaken at each contract renewal, and for staff who use their own vehicles for service delivery the Council will work with them to transition as soon as is feasible. The Council will bring forward a plan for the out-sourced fleet activities by the end of 2021 setting out estimated timeframes.

Secondly, the Council will review all its corporate operations. These cover the buildings that are owned by the Council, buildings from where Council services are delivered, buildings that have Council employees in them, and where the Council pays the energy bills – as well as the activities carried out from these buildings. This will include schools, libraries, leisure centres, depots, adult centres, and children's centres, as well as the Council and Homes for Haringey's offices. However, it will not include Council homes, which are covered separately by this Action Plan. Each one of these buildings will have an individual plan setting out the measures required, and the cost of delivery to get the building to zero carbon. We aim to have these plans in place by the end of 2021.

Each of these buildings will be reviewed in terms of:

- a) consuming less carbon in carrying out the operation itself, distinct from the building;
- b) improving the energy efficiency standards of the building – double glazing, wall insulation etc.
- c) improving current heating and hot water systems to reduce carbon emissions, while improving air quality and operational costs – new boilers, the use of air source heat pumps etc.
- d) reviewing and maximising the delivery of renewable energy generation in each building – solar PV panels, solar thermal panels, heat pumps, etc.
- e) intention to reduce staff car parking spaces and provide EV charging points to reduce associated travel emissions.

Through reviewing and working to implement measures on the Council's buildings, the consumption of each building will be significantly reduced. To achieve the net Zero Carbon standard, all remaining energy required (gas and electricity) for the building will be purchased from a certified Green Energy Supplier. To demonstrate true additionality of renewable energy generation, the Council will work with other authorities across London to develop a business case for a Power Purchase Agreement (PPA) with the opportunity for direct investment in renewable generation.

Any Council new build projects that the Council delivers for schools and operational use will be designed and constructed to be Zero Carbon on site and maximise renewable energy generation. This is already being designed into new buildings and planned to be delivered on sites such as the new council depot at Marsh Lane, the redevelopment at Osborne Grove Nursing Home and the residential new build at Edith Road.

After 2027, the final stage will be to switch energy suppliers from carbon fuels (grid electricity, gas, diesel) and fund the purchase of green energy. This may include green electricity, green gas, electric vehicles powered by renewable electricity. Any services that have no choice but to emit carbon for core service delivery (such as flights required for social services) these will be offset through local offsetting schemes with a verified additional carbon reduction. These will be projects that have not yet identified funding and would not happen without this funding.

The Council will report on this in the Annual Carbon Report, which is required in the Council's Constitution. The report will highlight the work that the Council has done, alongside stakeholder projects.

Council Actions

Objective C1: Work towards a zero-carbon footprint of the Council in its operational buildings (not including housing or commercial property) and transport, with core council buildings being net zero by 2027.

The Council's corporate buildings contribute approximately 0.8% of the borough's emissions. The Council has full control of these and will lead by example to be zero carbon as soon as it can for the whole stock, but core buildings and all transport emissions by 2027.

- Action owner: Property Services / Carbon Management
- Cost: In order to build to a zero-carbon specification, new corporate buildings across our corporate estate are likely to increase in the magnitude of <5%. Refurbishments to corporate buildings will be considered on a case-by-case basis as part of the Council's review process. Energy prices are currently volatile. It is expected that by 2025, the price of electricity will be between 11% and 67% higher based on 2018 prices, and in relation to gas the price variance could see an increase of 55% based on 2018 prices. Switching to a Green Energy Supplier for electricity across the Corporate Estate has already been agreed within the current contracts and will only increase bills by 0.3% (£17k) in year 1.
- Measurable metrics: Annual utilities (Electricity & Gas) consumption data and % green energy supplied, and kilowatts of annual electricity generation on Council-owned properties
- Potential carbon reduction: Significant in terms of the Council's performance, and leadership role. But the Council's corporate buildings and schools only account for approx. 0.8% of the borough's overall carbon footprint.
- The detailed actions for Objective C1 are listed below.
 1. Action: For the Council's core operational buildings, and all transport related activities for service delivery to be net zero carbon, by 2027. Action owners are Carbon Management / Strategic Property Unit. Note: funding in place for action plan; business case to be developed and funded.

2. For the Council to move to 100% green tariffs (electricity, gas and fuel) by 2027. Owners: Carbon Management / Strategic Property Unit. Note: delivered by energy efficiency and green tariffs (+0.3% on electricity), there is increasing demand from the schools to switch. Energy contracts are in three-year cycles.
3. To develop a Power Purchase Agreement (which would mean direct investment in renewables) with an energy supplier for the Council's Electrical needs by 2025. Owner: Carbon Management.
4. Deliver a net Zero Carbon Action Plan for all corporate buildings (including schools and leisure centres). Start to deliver measures based on the local business cases. Deadline: By 2022. Owner: Carbon Management. Note: This will be picked up as it is a requirement secured in the new energy contracts.
5. All new Council corporate building projects to be zero carbon or carbon positive on site. And that the Council's New Ways of Working (NWOW) incorporates carbon reduction as a key objective. From 2021. Owner: Carbon Management / Property Services.
6. All refurbishments of council buildings to maximise opportunities for carbon reduction, through lean, clean, green and seen measures, targeting an EPC B standard. Roll out a boiler replacement programme in core buildings. From 2021. Owner: Carbon Management / Strategic Property Unit.
7. For all new build and major refurbishments to include a 'real time' usage and generation display in reception areas (Ongoing). Owner: Carbon Management / Strategic Property Unit. Note: New build monitoring is required by the new London Plan, this is key for awareness and cultural change.
8. Seek to expand the number of council solar installations and work to support community installations on council assets. From 2021. Owner: Carbon Management, Strategic Property Unit.

Objective C2 - To reduce the carbon emissions from the council fleet and service-required transportation through active travel electric vehicle initiatives and for the fleet to be zero emission by 2027

Zero emission vehicles, including two-wheeled transport, should be prioritised when procuring new fleets. This should be supported by high quality facilities for active travel users.

- Action Owner: Carbon Management / Fleet Management / HR / Parking
- Cost: Business cases will be made on the Corporate Fleets and the switch to EVs. Although active travel infrastructure may increase costs, a healthier work force would be delivered with active travel.
- Measurable metrics: Number of Council staff and teacher permits issued; % of staff taking active travel options to work (Staff Travel Survey); Number of vehicles and % of zero emitting vehicles in the Council Fleet.
- Potential carbon reduction: Small, but will also deliver significant air quality improvements and a healthier work force through active travel options.
- The detailed actions for Objective C2 are listed below.
 1. To annually, review, update, and promote the Active Travel Plan to all staff (Ongoing). Owner: Active Travel / Carbon Management.
 2. Deliver new accessible cycling and shower facilities in all new council build projects which are a base for staff, from 2020. Owner: Carbon Management / Strategic Property Unit.
 3. To continue the delivery of a cleaner and a zero-emission fleet for all in-house vehicles. Support staff who use vehicles for service delivery to transition to Zero Carbon vehicles as soon as possible. By 2025. Owner: All Services.

Note: In line with the Ultra Low Emission Vehicle Action Plan. Some of the fleet will be acquired by applying for a grant for e-cargo bikes from Department for Transport in 2020.

4. Review the Parking Policy and review all staff parking spaces and permits with the objective of reducing overall car parking spaces and permits. This will improve air quality, deliver carbon reduction, and more public space. Work with staff to increase active and zero carbon transport travel for and to work. From 2021. Owner: Highways, Human Resources, Facilities Management, Planning. Note: This strategy will be underpinned by engaging with staff members on why people drive to work, how they choose to travel can change and what the impacts will be. Space will continue to be provided for blue badge holders and essential car users.
5. No new car parking in Council Buildings and remove all parking spaces for staff in schools, except for key users (Blue Badges) and deliveries. From 2020. Owner: Strategic Property Unit / Parking. Note: To review the key users list by removing teachers.
6. All parking bays on the corporate estate to include fully accessible charging infrastructure for electric vehicles and e-bikes from 2020. Owner: Strategic Property Unit / Parking.

Objective C3 - To reduce the carbon emissions from the wider aspects of the Council's operations and investments

The Council's wider impact is significant to leading by example, and to influence our partners to implement change.

- Action Owner: Finance / HR / Carbon Management
- Cost: Projects may increase in capital costs, but often deliver revenue savings. To be assessed on a case-by-case basis.
- Measurable metrics: % of key decisions that have considered carbon reduction; % of the Council finance portfolio investing in low carbon investments.
- Potential Carbon reduction: Significant, as the Council investments (such as pension) have the potential to help grow the low carbon industrial sector and reduce indirect Council emissions.
- The detailed actions for Objective C3 are listed below.
 1. All council decisions need to factor in carbon reduction. Ongoing. Owner: Carbon Management, Corporate Policy, Cabinet.
 2. To review the Council's banking and pension investments, ensure they are investing in low-carbon investment schemes and avoiding carbon-based industries where this is consistent with our fiduciary duty. To measure the carbon intensity and footprint of the Council's pension investments and monitor for improvements. Ongoing. Owner: Finance, Carbon Management, Procurement. Note: The Pension Fund has over 50% of its equity investment in low carbon investment fund at the moment and plans are in place to increase this to 100% of equity investments in low carbon strategies in 2021. Low carbon investments reduce the fund exposure to carbon emissions.
 3. Promote vegetarian and vegan foods through meals procurement and cafes that the Council lets from 2020. Owner: Procurement / Carbon Management.
 4. For the Council and public bodies to support the local supply chain, including food suppliers, and other businesses as part of carbon reduction programme, from 2020. Owner: Carbon Management / Procurement. Note: Subject to approval by the relevant service area. Supports local wealth agenda.
 5. Promote vegetarian and vegan food that is locally produced at Council events through our procurement strategies, from 2021. Owner: All Services / Procurement.

6. To include carbon reduction as a core requirement in all procurements and seek to set targets to reduce embodied energy from 2021. Owner: Procurement / Carbon Management. Note: This is included in the social value tool kit and where appropriate will be a contractual obligation.
7. Ensure all projects and programmes have considered carbon reduction during their design, and that all projects and programmes over £1m deliver a carbon reduction. Deadline 2020. Owner: Finance / Carbon Management / Projects.
8. Promote the Council's policy of flights only being allowed for key services (such as coroners, social workers etc.). Deadline: 2025. Owner: Finance / Carbon Management / HR. Note: policy is no flights may be booked for destinations served by rail (including Eurostar).

Objective C4 - To increase awareness and empower staff to take positive carbon reduction decisions

Awareness raising is vital for staff to take ownership of, and deliver, carbon reduction initiatives, as well as to instigate behavioural change.

- Action Owner: HR / Carbon Management / Staff
- Cost: <£5k and existing staff time
- Measurable metrics: Number of staff events focused on sustainability each year
- Potential carbon reduction: Medium. Many staff are local residents, and this has the potential to engage and support wider stakeholders through action and information. It increases ownership of the agenda issue throughout the organisation.
- The detailed actions for Objective C4 are listed below.
 1. Work with HR and the Unions to include environmental standards (like equalities) within all staff job descriptions and contracts. Deadline: 2020. Owner: Carbon Management / HR / Unions.
 2. Deliver training and guest speaker events on carbon reduction in life / work choices. Promote behaviour change ideas around carbon reduction including lifestyle choices. From 2021. Owner: Carbon Management. Note: This will form part of the initial engagement period in 2020 and continue from the adoption of the Action Plan.
 3. Work with the staff networks and Unions to promote environmental schemes and programmes from 2020. Owner: Carbon Management / HR / Unions.
 4. Monitor and publish our performance on carbon reduction in the Annual Carbon Report, by 2021. Owner: Carbon Management / Comms. Note: This has been published annually since 2011 and will be adapted to include performance on carbon reduction against the Action Plan.
 5. To develop and deliver a Council waste management plan. To focus staff and council systems to follow the waste hierarchy: to reduce, reuse, repurpose, repair resources before recycling, with recovering or disposing as a last resort. By 2021. Owner: Waste Services, Facilities Management, Procurement. Note: This supports the emerging Single Use Plastic Policy and new ways of working and should also include office furniture, electronics and food waste.

Housing

Overall Objective: Achieve an EPC B on average in all in domestic buildings by 2041

The borough's homes make up 50% of the borough's total carbon emissions, through electricity demand and heating requirements. This is by far the biggest sector we need to target if we are to deliver our borough Net Zero Carbon ambition. New homes are an opportunity for the adoption of best practice and can minimise emissions easily as they are often built to a high standard. The bigger challenge, technically and financially, is the ability to reduce emissions within the existing building housing stock. Although the cost of action is expensive, analysis shows that over the same time period it is only slightly more than the cost of business as usual.

The Council owns approximately 17 per cent of the borough's housing stock, which is managed by Homes for Haringey. These homes amount to approximately 7-8% of the borough's total emissions. And the Council can deliver projects to reduce these emissions to benefit the residents in these homes. The challenge lies where the Council has a more constrained influence within the wider borough stakeholders – landlords and private homeowners. The Council needs to be supported by regional and national government to increase our influence, both with legislation and funding opportunities to help residents bring forward positive measures. In response to this, the Council will lobby relevant bodies will reflect these barriers and work in partnership with homeowners to encourage and enable action.

Co-benefits of healthy, warm homes

Insulating homes with passive design solutions will deliver healthier homes for people to live in. Making people feel thermally comfortable in their homes mean they are less at risk of physical and mental health issues and will be more productive working.

The Council will work to insulate homes and ensure they are ventilated properly, ensuring passive solutions are installed before relying on renewable energy technologies.

Figure 4: Domestic carbon emissions, comparing emissions in 2015 and 2041. It shows that half the emissions in 2015 came from domestic heating (240,000 kilo tonnes (kt) of CO₂). This needs to be reduced drastically to 28,000 kt CO₂ in 2041, when it is expected that half the domestic emissions will still be due to heating homes.

Historic Performance

The Council's capacity to improve social housing has been demonstrated by the Decent Homes programme improvements to 11,000 homes over a ten-year programme to ensure that homes met the minimum comfort, and health and safety standards set out by the governments' Decent Homes criteria. Emission savings associated with interventions, such as boiler replacement, insulation and double glazing, are estimated to be approximately 5,000 tCO₂/year.

Housing Challenge Ahead

The majority of existing homes in Haringey will still be standing in 2041, with current UK estimates showing that 80-85% of homes in the UK will still exist in 2050. Currently, homes in the borough have an average Environmental Performance Certificate (EPC) of D (see Figure 5). To achieve significant reductions in people's heating, electricity and cooling use,

we all need to undertake deep retrofits across our homes, ensure all new homes² are built to zero carbon standards, and focus on changing people's energy behaviour.

Whole-home deep retrofits will include insulating walls internally or externally, upgrading all windows and doors, insulating roofs, floors and heating systems, upgrading ventilation systems and connecting homes to low carbon heat and electricity sources. When retrofits are completed, installers need to explain how heating and ventilation systems operate (ideally through web links to hand over to future residents) and highlight how to reduce energy use. Potential financial models to help residents to fund their retrofit interventions will be investigated.

New homes will need to meet the Zero Carbon Standard to avoid requiring a further retrofit in the next 10 years. Haringey adopted the new carbon offset price of £95 on 1 January 2020 and will progress the implementation of a higher carbon offset price.

Figure 5: Chart showing the spread of energy performance data of all homes in Haringey (Source: EPC data from CROHM Parity Projects database). Only a small proportion of homes have an EPC of B or better, with the majority of homes achieving EPC D.

The Council will work with key partners to deliver the housing targets, including Homes for Haringey, Parity Projects, the Mayor's Retrofit Accelerator programme, SHINE, Local Energy Advice Partnership, housing associations, landlords, and private homeowners.

Housing Actions

Objective H1 - Programme of deep retrofitting 1,300 council-owned homes per year to achieve an average of EPC of B by 2035 (or equivalent standard).

Council-owned housing equates to approximately 8% of the borough's emissions. However, the council has direct influence over these emissions.

- Action Owner: Property Services / Carbon Management / Housing / Homes for Haringey
- Cost: HRA capital funding of £101m was agreed by Cabinet in February 2020, covering the cost for the Affordable Energy Programme to bring all council-owned properties to EPC C. Further work and funding will be required to cover retrofitting properties to EPC B.
- Measurable metrics: % of council-owned housing units at or above EPC B
- Potential carbon reduction: Significant. By 2035 Council housing retrofits to have reduced energy use in these homes by 68GWh per year, compared with 2015, delivering an average reduction of 20% per property.
- The detailed actions for Objective H1 are listed below.
 1. Implement an estate-wide pilot scheme of at least 150 homes with the ability to be replicated and scaled up to reach peak installations of 1,300 homes per year by 2035. Integrate a post-retrofit handover to train users on how to use their home the most efficiently. Deadline: 2021. Owner: Carbon Management / Housing / Homes for Haringey. Note: Develop a model that can deliver quick and significant energy improvements and use Decent Homes programme as a basis. Currently developing an Energiesprong pilot project.
 2. Review contract KPIs and programme to integrate ambition for an average of EPC B into maintenance and regeneration programmes. Improve all existing housing stock bought by the Council to EPC B before occupation of these units. Deadline: 2022. Owner: Carbon Management / Housing / Homes for Haringey.

² The London Plan target for Haringey is to build 52,000 homes by 2050. The next ten years we will need to build 1,502 homes per year (Policy H1, New London Plan).

3. Work up a delivery plan to achieve an average of EPC B rating for all council-owned residential properties by 2035, reviewing void strategies, existing EPC data from CROHM tool. Owner: Carbon Management / Housing / Homes for Haringey. Note: Use data from CROHM tool by Parity Projects with input from Homes for Haringey.
4. Set up a follow-up delivery plan to retrofit council-owned housing up to EPC A by 2041, where practically feasible. Owner: Carbon Management. Note: Relies on future technologies to retrofit, no costing has been undertaken for this.

Objective H2 – Deliver a net zero carbon housing portfolio for the first Council new build homes delivered by 2022.

The Council has direct influence over these emissions and should therefore ensure that these homes are zero carbon upon completion.

- Action Owner: Carbon Management / Housing
- Cost: It is estimated that to deliver zero-carbon units range between 3.6-6.8% above baseline of delivering a business as usual with gas boilers scenario. Long-term savings for occupiers would reduce risk of debts occurring.
- Measurable metrics: Average SAP score of Council new housing portfolio
- Potential carbon reduction: Delivering new build schemes to the zero-carbon standard would deliver a 65% reduction in carbon emissions compared to the current benchmark of a 35% improvement to Building Regulations.
- The detailed actions for Objective H2 are listed below.
 1. Develop a Council Standard Housing Design Guide, setting out sustainable design including carbon reduction principles by 2020. Owner: Carbon Management / Housing.
 2. Embed carbon reduction and minimising overheating risk as essential criteria within all tenders in the house-building programme by 2021. Owner: Carbon Management / Procurement / Housing. Note: Through the social value tool kit and liaison with the service areas, this will be embedded within all appropriate contracts.
 3. Reduce carbon emissions in council-bought new build properties to 100% improvement on Building Regulations Part L, where feasible. Deadline: 2022. Owner: Housing / Carbon Management. Note: To consider both operational and embodied carbon emissions.
 4. Monitor energy performance and occupancy in all Council new build properties to review and inform future zero-carbon house building portfolios and tenants by 2022. Owner: Housing.

Objective H3 – Provide technical advice on energy efficiency to 6,000 fuel poor and able-to-pay domestic property owners and occupiers per year to support Objective H4.

Separate approaches and funding mechanisms would be required to effectively support both fuel poor and able-to-pay residents.

- Action Owner: Carbon Management
- Cost: There would be no capital or programme costs by the Council. The engagement with approx. 86,000 households should be done at a regional level. And it being designed with the GLA. This action will be supported by the work currently being undertaken by the Council in partnership with Parity Projects in a scheme funded by the Department of Business, Energy and Industrial Strategy to increase retrofit uptake in the able-to-pay market through support for supply chain co-ordination.

- Measurable metrics: Number of training/advice sessions per year; % of homes engaged with through home visits
- Potential carbon reduction: Reduced energy costs delivering 260GWh/year reduction in energy consumption by 2035 if all non-council owned homes are improved to EPC C, equal to 16% of domestic energy demand in 2015.
- The detailed actions for Objective H3 are listed below.
 1. Lobby the GLA to coordinate London-wide provision of technical energy efficiency advice (to achieve delivery of advice to 6,000 private households per year across Haringey) by 2020. Owner: Carbon Management.
 2. Identify the streets/areas with the greatest potential for energy efficiency improvements including energy generation. To inform a neighbourhood approach to delivering education and awareness campaigns to retrofitting. By 2021. Owner: Carbon Management / Housing / Homes for Haringey. Note: Parity Projects' database will enable this analysis to take place. Analysis for feasibility of solar PV in Haringey will also feed into this, with London's Solar Opportunity Map and London Building Stock Model. Campaigns could be delivered with help of community groups.
 3. Develop homeowner guidance to advise on domestic improvements required to reach EPC B, and specifically develop guidance for retrofitting heritage assets by 2025. Owner: Housing / Carbon Management / Heritage. Note: Link to Parity projects.
 4. Support 'smart retrofit academies' to train local builders and apprentices in retrofit techniques for modern and old buildings, digital innovations and natural building materials. Reskilling as existing carbon related jobs decline. By 2025. Owner: Economic Development. Note: To be put explicitly into Economic Development Strategy.
 5. Deliver external training sessions for homeowners and aim to reach at least 37,000 homes by 2026, targeting a mixture of unit and tenure types. Owner: Carbon Management / Housing. Note: Partner with local initiatives such as RetrofitWorks, LEAP and SHINE London.

Objective H4 – Provide and identify funding assistance to support delivery of improvements in privately-owned residential properties.

Separate approaches and funding mechanisms would be required to effectively support both fuel poor and able-to-pay residents.

- Action Owner: Finance / Regeneration / Carbon Management / Borough Stakeholders
- Cost: To attract this level of funding for private homeowners, the Council would need to coordinate private-sector funding and work up business cases for external funding, loans and investment. External capital cost of £660m (average of £7,700 per property) would be required for privately-owned properties.
- Measurable metrics: Number and value of grants and/or loans awarded by the Council to homeowners; % improvement on EPC score and reduction in energy by residential property following grant
- Potential carbon reduction: Minor but needed. Reduced energy costs delivering 260GWh/year reduction in energy consumption by 2050 if full retrofit of private housing sector is achieved. This represents 16% of domestic energy demand in 2015.
- The detailed actions for Objective H4 are listed below.
 1. Lobby government to increase homeowner funding to retrofit their properties to EPC B and cut VAT on refurbishment, repair and

- maintenance from 20% to 5%. Deadline: 2020. Owner: Carbon Management.
2. Identify external funding streams and help the bidding for funding to enable delivery of EPC B across all existing housing stock. temporary housing, hostels and bed & breakfasts. From 2021. Owner: Finance / Carbon Management / Housing.
 3. Build internal business cases to embed carbon reduction in all Council projects to deliver EPC B by 2023. Owner: Procurement / Finance. Note: Strategic Procurement will review business cases to ensure this has been considered.
 4. Seek appropriate finance models for leaseholders on council estates that are undergoing retrofits, and ensure they are able to 'opt in' to the works to ensure a whole-building or whole-estate approach. From 2021. Owner: Legal / Carbon Management / Housing / Homes for Haringey. Note: A different model may need to be developed for fuel poor households.
 5. Advertise funding and loan opportunities to individuals and stakeholder groups. From 2021. Owner: Housing / Carbon Management.
 6. Partner with external parties to help deliver larger scale retrofit projects across the private sector by 2025. Owner: Regeneration / Housing / Procurement. Note: Such as RetrofitWorks and housing associations.
 7. Explore the setting up of local pop-up advice centres or stalls to help residents and businesses with retrofitting and installing renewable energy technologies. 2021-2022. Owner: Carbon Management / Regeneration / Town Centres.

Objective H5 – Work with landlords to go beyond the minimum standard of Energy Performance required, and aim for an EPC C standard for private sector housing by 2035.

Having a clear framework of national regulations and enforcement mechanisms are key to delivering objectives in the housing sector. This is especially important as the objectives set out in this Action Plan are more ambitious than that set at regional and national level.

- Action Owner: Environmental Health
- Cost: New Government ask of £140k to fund identification of non-conforming properties. External capital cost to improve failing properties is £320m to be paid for privately to retrofit 43,000 privately rented homes (which is a proportion of the £660m estimate for all private homes in H4).
- Measurable metrics: Number of Private Rented Sector properties that have applied for a property licence which have a rating of less than E and the action taken by those Landlords to ensure compliance voluntarily or through the use of statutory interventions; Number of landlords and letting agents who have attended training events per year on how to achieve more energy efficient homes.
- Potential carbon reduction: Current legislation only requires compliance to EPC level E, so carbon reduction will be low until MEES are increased. Energy efficiency works in the private rented sector to bring all properties up to a high EPC C could deliver 120GWh of energy savings.
- The detailed actions for Objective H5 are listed below.
 1. Lobby national government to enable Councils to recharge the true costs of enforcing this legalisation and revise minimum EPC rating required at point of sale/let for all private sector homes to EPC B by 2035 (current requirement is EPC E). Deadline 2021. Owner: Carbon Management. Note: Can use benefits and existing data on how energy efficiently is delivered.

2. Develop approach to identify non-compliant properties and target these properties to comply by 2021. Owner: Environmental Health / Building Control. Note: Initial analysis of CROHM tool to inform approach.
3. Identify penalties and incentives for landlords to comply with legislation and go beyond the minimum requirements, by 2021. Owner: Carbon Management / Building Control. Note: Review against the cost to retrofit properties.
4. Require all landlords of privately rented homes to provide an EPC certificate where applicable when applying for a property licence, from 2021. Owner: Housing / Licence.
5. Organise training events for estate agents, landlords and landlord associations on EPC requirements and advice on how to retrofit properties. By 2022. Owner: Carbon Management / Housing.

Objective H6 - Achieve zero carbon in new and redeveloped homes on site.

Ensuring new homes are built to the highest fabric and energy efficiency standards the first-time round, will circumvent these homes needing to be retrofitted in the future.

- Action Owner: Carbon Management / Planning Policy
- Cost: <£10k gathering evidence, specific campaigns etc (to be funded through the Local Plan review funding). This action requires reprioritisation of existing work programmes to enable delivery.
- Measurable metrics (Data Owner): Average % of carbon emissions saved on site in residential schemes permitted per year
- Potential carbon reduction: Significant. Reduced energy costs in operation and avoided cost of future retrofit works.
- The detailed actions for Objective H6 are listed below.
 1. Lobby national government and GLA to improve fabric requirements in Building Regulations Part L beyond October 2019 proposals, before 2025 which requires carbon emission modelling software in new developments; Remove VAT on refurbishments; and change policy to allow for energy efficiency measures to be installed in buildings in conservation areas. Deadline: 2021. Owner: Carbon Management. Note: To update existing SAP modelling which does not accurately represent carbon emissions in developments.
 2. Deliver training for planning staff and proactively engage in the planning process to deliver policy requirements by 2021. Owner: Carbon Management.
Note: This will ensure that carbon reduction strategies are also considered in minor applications.
 3. Produce new planning guidance on overheating, green roofs and on-site carbon reduction measures, and update the Sustainable Design and Construction SPD by 2021. Owner: Carbon Management / Planning Policy. Note: Within remit of existing Carbon Management staff.
 4. Update the cost of carbon to a price that incentivises on-site reduction and review every 2 years from 2020. Owner: Carbon Management / Planning Policy. Note: First increase to £95/tCO₂ took effect on 1st January 2020. Further review underway following the publication of the Cost of Carbon Report by LETI (May 2020).
 5. Deliver updated retrofit design guides for conservation areas to set out the recommended approach to retrofitting sensitively and minimising impact on heritage assets. To engage on implications of fabric improvements and energy reduction technologies on a cross-disciplinary basis. By 2021. Owner: Carbon Management / Planning Policy.
 6. Set ambitious carbon reduction planning policies for existing and new buildings in forthcoming Local Plan reviews by 2022. Owner: Carbon

Management / Planning Policy. Note: Subject to any changes to Building Regulations implemented at national level that may restrict local powers to set higher standards.

Non-Domestic Building and Workplace Emissions

Overall Objective: Achieve an EPC B on average in all in non-domestic buildings

Similar to the domestic sector, carbon emissions from businesses in Haringey are mostly related to the buildings they occupy. Most of non-domestic buildings are commercial buildings owned and managed by private landlords. Another challenge for the borough is that most of Haringey's businesses are micro- and small businesses meaning that these organisations often have limited resources to deliver action. Other non-domestic buildings included under this section include schools, healthcare, leisure and community buildings.

The emissions from non-domestic buildings are primarily those from heating and lighting buildings. These are responsible for just over 20% of the emissions in the borough.

'Process emissions' from industry are the emissions associated with fuel and energy used by businesses for industrial and manufacturing processes (i.e., the other energy they use that is not for heating and lighting the buildings they occupy). These are accounted for separately in the data and make up a small proportion of emissions in the borough, reflecting the fact that Haringey does not have heavy industrial activity within the borough.

The Council can directly influence businesses in properties which we own, by implementing energy efficiency measures. We can also work with the largest emitters in the borough (Alexandra Palace, Wood Green Mall, the Crown Court, and Tottenham Hotspur Stadium) to work together to mitigate their emissions.

The actions focus on refurbishing existing buildings, energy supply choices, and behavioural changes within the workforce and high standard new buildings.

Workplace Actions

Objective W1 – Target all businesses to increase prioritisation of carbon emission reduction in commercial decision making and facilitate a retrofit program by 2025 (approx. 11,750 businesses).

The majority of businesses in Haringey are micro-businesses, sometimes meaning that carbon reduction is not a priority. This action sets out to aid businesses to consider carbon reduction initiatives and the economic benefits of doing so.

- Action Owner: Carbon Management / Property / Economic Development
- Cost: Capital cost of £100m to be funded and spent externally to deliver the necessary retrofits in privately-owned non-residential buildings at a rough average of £22,000 per property (across roughly 4-5 different typologies). Additional funding may be required to cover the cost of technical studies and project development assistance.
- Measurable metrics: Number and value of grants and/or loans awarded by the Council to businesses; Number of engagements per year (new businesses, and repeat engagements); Average EPC score across all commercial properties in the borough (dependent on how the London Building Stock Model is developed and when it is launched).
- Potential carbon reduction: Medium but significant wider impact to help businesses become more efficient and reduce running costs. Retrofit activities in small, medium and large enterprises in the borough could deliver up to 140GWh/year of savings by 2050.
- The detailed actions for Objective W1 are listed below.

1. Lobby government to require EPC B for all commercial properties by 2035. Deadline: 2021. Owner: Carbon Management. Note: To be required for any commercial properties that are let or sold.
2. Embed carbon reduction requirements within all Council engagement with businesses by 2022. Owner: Regeneration / Business engagement.
3. Educate businesses and retailers in their role in addressing climate change. Develop guidance on integrating reduction of carbon emissions within commercial decision making. From 2021. Owner: Economic Development / Carbon Management / Community.
4. Identify external funding sources for non-domestic properties and manage distribution of funds by grouping similar retrofit intervention. From 2021. Owner: Finance / Economic Development. Note: Tie into community wealth building principles.

Objective W2 – Engagement with ten of the borough’s largest emitters to enable and support large-scale projects and high-profile action.

Working with the largest emitters in the borough can make a significant impact in a relatively short period of time, especially as these businesses are likely to have the financial capacity to implement change.

- Action Owner: Carbon Management / Businesses
- Cost: <£5k and existing staff time to promote and engage with the big emitting businesses
- Measurable metrics: How many businesses set targets to reduce emissions and improvement in EPC rating (every 5 years)
- Potential carbon reduction: Significant with up to 65GWh/year that would be delivered by retrofit of all large enterprise premises.
- The detailed actions for Objective W2 are listed below.
 1. Identify the largest ten carbon emitters within the borough, understand their priorities and business drivers. Deadline 2021. Owner: Carbon Management. Notes: Use results of Energy Savings Opportunity Scheme (ESOS) and EPC database to inform this work.
 2. Help largest emitters to understand the risks of increasing energy costs and to agree targets to reduce carbon emissions through behavioural changes and retrofitting their properties. Local business cases will have to be made with them. Deadline: 2021. Owner: Carbon Management / Economic Development. Note: To start this work during the engagement period in 2020.
 3. Encourage the businesses to commit to sustainable business practices (such as signing up to renewable energy, choosing sustainable suppliers etc). Deadline 2023. Owner: Carbon Management / Economic Development.
 4. Deliver a local energy fund to encourage these companies to fund local carbon offsetting of their emissions on flights or carbon emissions. Deadline: 2023. Owner: Carbon Management / Stakeholders.

Objective W3 – Engagement with public bodies to support energy efficiency improvements in health & education public buildings across Haringey by 2034.

Public buildings larger than 250 m² are required to have a Display Energy Certificate (DEC). The DEC register provides a ready list of buildings to target. As a public body, the Council is well positioned to connect with other public sector organisations within the borough and encourage change.

- Action owner: Social Care / Education / Energy and facility managers of public buildings if in-house

- Cost: External £10-12m capital cost to be secured by public bodies for retrofit of health and education-related buildings (high-level estimate). Government will be lobbied to commit to this cost.
- Measurable metrics: Average operational rating (DEC) across all public buildings per year
- Potential carbon reduction: Full retrofit of the sector could reduce energy consumption by around 28GWh/year.
- The detailed actions for Objective W3 are listed below.
 1. Lobby government (Department for Education, NHS) to ringfence funds to pay for creating a Zero Carbon Action Plan for all schools (see Action C1) and fund delivery of energy efficiency measures in all health and education buildings to EPC B. Deadline 2021. Owner: Carbon Management. Note: The funding could be in the form of a loan scheme (based on infrastructure pay-back terms).
 2. Support public bodies to set targets to apply for funding, deliver energy efficiency improvements and provide technical guidance. Ongoing. Owner: Carbon Management / Asset Management. Note: This should be integrated within the wider maintenance and repairs programme for schools.
 3. Enable pooling of projects and resources to reduce the cost of retrofit activities by 2034. Owner: Carbon Management / Procurement. Note: Strategic Procurement will closely work with key stakeholders on a case-by-case basis to explore these outcomes.

Objective W4 – Reduce carbon emissions by bringing all existing council-owned commercial assets to an average of EPC B or better by 2035.

The council has responsibility for a significant number of buildings in the borough, either through ownership and/or operation and has a responsibility to lead by example.

- Action Owner: Property and facilities management / Commercial lettings / Landlord and Tenant Functions (Commercial)
- Cost: Programme delivery covered by the existing Council property management teams. Business cases will be made on a case-by-case basis. The retrofit works need to be aligned with the maintenance and repair programme.
- Measurable metrics: Average EPC score across all Council-owned commercial properties; % of contracts of Council-owned commercial properties including a carbon reduction clause
- Potential carbon reduction: Significant and reduced energy costs for the occupiers of council commercial units. Opportunity to increase rents for a better unit.
- The detailed actions for Objective W4 are listed below.
 1. Require all Council operators to report energy consumption data year on year. Set energy reduction targets in operating contracts, such as for leisure centres. Deadline 2022. Owner: Property Services. Note: Targets can be set into new contracts or contracts up for renewal.
 2. Specify scope of works required to reduce energy consumption in all commercial council-owned buildings to EPC B by 2035 (approx. 1,200 units across around 640 assets). Deadline: 2022. Owner: Carbon Management / Property Services. Note: Discussions have already been occurring between Carbon Management and Property Services on specific properties.
 3. Group types of Council supply chain contracts and set out new carbon reduction clauses. Deadline 2022. Owner: Procurement / Carbon Management To set a contract value threshold for this clause by type of contract.
 4. Deliver Action Plan to improve properties and future lease conditions within the Council's commercial let portfolio, mapping out future purchasing and

selling requirements. Deadline 2025. Owner: Property Services. Note: Using the Asset Management Plan to inform this process.

Objective W5 – Achieving zero carbon in all new build non-residential developments

It is expected that there will be a need for an increase of over 20% in the commercial and non-domestic floorspace in the borough by 2050 (GLA - London wide average). This is a considerable opportunity to limit additional emissions from new developments.

- Action Owner: Planning policy / Carbon Management / Development Management / Housing / Regeneration / Businesses / Developers
- Cost: No additional cost to the Council, some additional cost to developers.
- Measurable metrics: Average % of carbon emissions saved on site in non-residential schemes permitted per year
- Potential carbon reduction: This is medium to significant depending on the industry / non-domestic users' profile. Reduced cost in operation and avoidance of future retrofit costs.
- The detailed actions for Objective W5 are listed below.
 1. Lobby national government and GLA to improve fabric requirements in Building Regulations Part L beyond October 2019 proposals, before 2025. Deadline 2020. Owner: Carbon Management. Note: To update existing SAP modelling which does not accurately represent carbon emissions in developments.
 2. Deliver training for planning staff and proactively engage in the planning process to deliver policy requirements. Deadline 2021. Owner: Carbon Management.
 3. Produce new planning guidance on overheating, green roofs and on-site carbon reduction measures, and update the Sustainable Design and Construction SPD. Deadline 2021. Owner: Carbon Management / Planning Policy. Note: Within remit of existing Carbon Management staff.
 4. Update the cost of carbon to a price that incentivises on-site reduction and review every 2 years. Deadline 2020. Owner: Carbon Management / Planning Policy. Note: First increase to £95/tCO₂ took effect on 1st January 2020. Further review underway following the publication of the Cost of Carbon Report by LETI (May 2020).
 5. Review existing Conservation Area boundaries and update conservation area appraisals and management plans that enable more carbon reduction measures to be installed sensitively. Deadline 2021. Owner: Carbon Management / Planning Policy. Note: Within the lobbying ask.
 6. Set ambitious carbon reduction planning policies in forthcoming Local Plan reviews. Deadline 2022. Owner: Carbon Management / Planning Policy. Note: Subject to any changes to Building Regulations implemented at national level that may restrict local powers to set higher standards.

Objective W6 – Supporting local business reduce their wider carbon emissions

The businesses of the borough can reduce their carbon footprint through using local supply chains, promoting active travel for their staff, and choosing lower carbon products.

- Action Owner - Carbon Management / Regeneration / Businesses.
- Cost - Minor additional cost to the Council but will align with existing regeneration programmes and the High Streets Recovery Plan, through which funding can be secured.
- Measurable metrics - Number of businesses engaged on carbon reduction projects.

- Potential carbon reduction - This is minor, but this depends on the businesses level of engagement. Reduced cost in operations and positive public relations for the businesses.
- The detailed actions for Objective W6 are listed below.
 1. For the Council to signpost and advise businesses on their role in carbon reduction. Promoting positive action through operations and supply chains. Enabling businesses to use local supply chains and increase community wealth building. By 2021. Action Owner Carbon Management / Regeneration. Note: This aligns with the work around the long-term sustainability of the High Street. And promote Community Wealth Building.
 2. To encourage businesses to switch to green energy suppliers, from 2020. Owner: Businesses.
 3. Set up a cargo bike or e-cargo bike delivery service trial for local businesses. Deadline 2022. Owner: Carbon Management / Town Centres Team
 4. Increase education to encourage the adoption of a circular economy approach to their business model. From 2022. Owner: Carbon Management / Town Centres Team / Employment & Socio-Economic Regeneration
 5. For businesses to promote their low carbon credentials, from 2020. Owner: Businesses. Note: Several businesses already doing this.
 6. Promote Active Travel to businesses, from 2020. Owner: Carbon Management / Regeneration.

Transport

Overall Objective: Reduce emissions related to road transportation by 50% by 2025, by growing public and active travel options, low-carbon transport options and infrastructure (e.g. EV charging stations)

Transport is the third largest source of emissions in the borough and is responsible for approximately 20% of the borough's emissions. In London, 96% of the emissions come from private vehicles which are also associated with poor air quality, noise, social isolation, and health issues within the borough. Whilst low carbon forms of motorised transport do exist, there are still air quality issues associated with these solutions (e.g., tyre wear and braking). Furthermore, congestion issues are not solved by making every car electric. For these reasons, the Council prioritises adoption of public and active transport modes.

Cycle sharing, cycle infrastructure, parking restrictions, walkable streets, pedestrianisation and prohibition of vehicle use in some contexts can all help deliver a mode shift for the borough. Research indicates strongly that the best way to stimulate an uptake in walking and cycling (and a reduction in car use) is through a complementary package which includes both hard (new cycle lanes and bike storage) and soft (cycle training) measures. In Haringey, parking management and control schemes such as Controlled Parking Zones (CPZs) have helped to reduce the number of non-local cars (commuters and shoppers) in the borough. Across London similar schemes have helped to improve air pollution, access and accessibility and promote the local economy (Source: 'Benefits of Parking Management in London' report by Integrated Transport Planning (August 2018)).

It is acknowledged that dangerous driving exists on our roads, impacting people's perception and experience of safety. These safety fears need to be overcome in tandem with improving people's driving behaviour to unlock the necessary growth in active travel.

There are some limitations to addressing transport emissions. It is a complex issue due to the transience of journeys and the fact that journeys are not necessarily contained within the borough. Journeys may start and finish outside Haringey. In addition, TfL has a high degree of control over public transport and key road networks, leaving the Council with more limited influence. To manage these in a strategic manner will require the Council to work closely with TfL and our neighbouring boroughs.

Many of these actions are economically prudent (such as car clubs and active travel) for individuals. And TfL economic impact assessments for schemes like Mini-Holland have been shown to increase local economic activity for the benefit of the local businesses. This creates better neighbourhoods and are being practised elsewhere in the UK. But rarely all at the same time and in the same place. Furthermore, to deliver these will require a significant change in our behaviours and use of private combustion vehicles.

This does not mean that the borough cannot set itself ambitious targets of shifting to cleaner, greener mobility solutions. Under the Climate Emergency Scenario, the number of journeys made by petrol and diesel vehicles need to decrease at a much faster rate than the 2050 Scenario: the number of petrol and diesel journeys need to be halved by 2024, compared with 2032 under the 2050 Scenario. The intention of this is to decrease emissions at a faster rate, as this will reduce carbon quicker and deliver a better highways environment for all. Improving connectivity across our communities and air quality. The Council has the power to reduce these emissions through its management of CPZs, the reallocation of road space, prices of parking permits and electric vehicle charging deployment. It is therefore technically easier to mitigate these emissions than in other sectors and actions, such as retrofitting homes.

Figure 6: Chart showing transport-related emissions in 2015 and 2041. In 2015, 127,637,566 ktCO₂ was emitted; the ambition for 2041 is 3,808,360 ktCO₂.

Transport Actions

Objective T1 – Deliver a five-year sustained programme of engagement with Haringey residents to encourage mode shift towards public and active transport choices, with aim to achieve 88% of daily journeys to include walking, cycling and public transport by 2041.

This will build on existing plans and targets in the Mayor of London's Transport Strategy and Haringey's Transport Strategy. Timelines for interim review can be arranged to coincide with the next key business and transport planning horizons.

- Action owner: Transport Planning / Active Travel / Residents and Employers
- Cost: Existing posts will deliver the capital programmes and scaling up which will be expected to deliver the Mayors Transport Strategy ambition. Schemes include School Streets, segregated cycle lanes, Liveable Neighbourhoods, and pavement widening. Funding will be secured through TfL and parking charges.
- Measurable metrics: Number of active transport journeys per day; % of total car ownership in the borough.
- Potential carbon reduction: Significant as it will support air quality, noise, alongside health and wellbeing objectives. Combined with all other Transport objectives, a total of 120 ktCO₂ by 2041.
- The detailed actions for Objective T1 are listed below.
 1. Engage with residents to overcome barriers to enable switching to active and zero carbon transport, including behavioural change methods. Deadline: 2021. Owner: Active Travel. Note: The Autumn 2020 engagement period formed the basis to designing the survey.
 2. Scale up personalised bike training and highways education for safe cycling, targeting groups less represented amongst cyclists (ages, locations, socio-economic background, ethnicity, gender). Increasing from 1,500 residents a year to 2,000. Review effectiveness and opportunities to increase impact. (Ongoing). Owner: Active Travel/Cycle Confident (partner). Note: Post-training evaluation is not currently undertaken.
 3. Engage with disability groups and residents to understand the needs to make public spaces more accessible. Deadline 2021. Owner: Active Travel / Transport Planning / Highways
 4. Roll out 'Try Before You Bike' schemes and expand to additional types of bikes. Continue to promote the scheme to residents and extend it to local businesses (Ongoing). Owner: Active Travel. Note: This scheme is being run by Peddle My Wheel since June 2019 and this is increasing in scale to add electric and (e-)cargo bike elements. First aimed at residents and the plan is to be expanded to local businesses as well.
 5. Work with residents and businesses to design, implement and maintain parklets and Play Streets (Ongoing). Owner: Planning / Transport Planning / Highways. Note: There are approximately 50 Play Streets a year – aiming for 80 a year. Need to lobby the Mayor for one major road closure a year.
 6. Lobby TfL to introduce more Zero Emission Bus routes to Haringey, increase east-to-west bus routes, smaller buses with shorter routes, model the road network with greater emphasis on public transport and active travel. From 2021. Owner: Transport Planning / Highways. Note: Can enable this through local consultation.
 7. Plan future 5-year active travel engagement programmes with lessons learnt from the first major programme, from 2026. Owner: Transport Planning.

Objective T2 – Delivery of a 4-year programme to improve active and accessible transport infrastructure by 2025

The aim is to transform the borough's active transport infrastructure so that walking and cycling become the most obvious and efficient modes of transport for most people living and working in the borough, and well-integrated with public transport services for those making longer journeys. The programme should make use of the three redevelopment areas in the borough to establish new standards for active transport connectivity.

- Action Owner: Planning / Transport Planning / Highways
- Cost: Annual capital investment of £16m, £64m in total. Cost to be met by Council and/or external funding opportunities.
- Measurable metrics: Km of total dedicated cycle routes delivered; Number of additional secure and covered cycle parking spaces installed.
- Potential carbon reduction: Medium. Combined with all other Transport objectives, a total of 120 ktCO₂ by 2041.
- The detailed actions for Objective T2 are listed below.
 1. Lobby TfL to help fund the delivery of 30-60 km of dedicated cycle route infrastructure in the borough. Work with TfL to determine new strategic routes and the Council to connect to strategic routes with local routes to create a joined-up cycle network. Deadline: 2021, delivery by 2025. Owner: Transport Planning. Note: Include design standards such as clear signage and 20 mph zones. To include major roads in Haringey.
 2. There will be a presumption in favour of reallocating public highway spaces currently allocated to private and business vehicles (e.g., car parks, roads, on-street parking) to prioritise active travel (wider pavements and cycle lanes) and green space. This would include the re-prioritisation of crossings in favour of pedestrians. To increase accessibility across our neighbourhoods for all. From 2020. Owner: Highways. Note: Deliver high quality, accessible public realm and pavement areas to encourage walking, supported by quiet ways and wayfinding. Explore reducing on-street parking to one side of streets only.
 3. Scaling up safe cycle storage across the borough, in residential streets, in shopping areas and at all transport interchange points, including provision for e-bikes. Deadline 2024. Owner: Transport Planning / Highways. Note: Installed based on local demand. Funded through LIP.
 4. Develop and implement a School Streets programme to improve air quality, increase active travel, improve road safety and create pedestrian- and cycle-friendly neighbourhoods around the borough's primary schools. This will include detailed feasibility and design of the School Streets, working together with stakeholders to consider local access requirements. From: 2020. Owner: Active Travel / Highways. Note: All primary schools in the borough have been assessed for their feasibility, a School Streets plan for the implementation of the first 20 School Streets was approved at Cabinet in November 2020.
 5. Introduce a bike hire/sharing scheme to the borough including an e-bike scheme. Deadline: 2022. Owner: Transport Planning. Note: This is likely to be a dockless hires scheme. London Councils/TfL are coordinating a pan-London byelaw that will enable the managing of dockless bike schemes.
 6. To explore, design and implement Zero Emission Zones and Low Traffic Neighbourhood areas. Review and address concerns from the Liveable Neighbourhoods Crouch End project, with view to roll out. By 2023. Owner: Transport Planning / Highways. Note: Low Traffic Neighbourhoods are being proposed in the Bruce Grove, St Ann's and Bounds Green areas with further proposed in the draft Walking & Cycling Action Plan.

7. Aim to reduce emissions from road and resurfacing works, for non-road mobile machines through stronger planning policy and enforcement. From 2021. Owner: Carbon Management / Planning / Highways. Note: In line with London's 'Low Emission Zone' for Non-Road Mobile Machinery and policies to reduce idling of HGVs.
8. Consult with road safety groups and other relevant organisations to ensure highway designs are safe. From 2021. Owner: Transport Planning /
9. Highways

Objective T3 – Develop policies and projects that disincentivise private household car use and reduce vehicle trips by businesses.

This aligns with the Mayor of London's Transport Strategy, Haringey's Transport Strategy (2018) and the draft Haringey Parking Action Plan, which has aim to discourage private car use. This can be achieved through expanding CPZs both in operating hours and space; reallocating road space to prioritise active and accessible travel infrastructure (T2); and raising parking charges.

- Action Owner: Highways / Residents / Businesses / Wider stakeholders
- Cost: Funding for studies and management of the consultation. Cost to be met by Council. However, in the long term, income generation and ring-fenced for sustainable transport initiatives.
- Measurable metrics: Km2 covered in operational CPZs; Average number of hours CPZs are operational per day.
- Potential carbon reduction: Medium. Combined with all other Transport objectives, a total of 120 ktCO₂ by 2041.
- The detailed actions for Objective T3 are listed below.
 1. Lobby the government to phase out combustion engines by 2030. Deadline: 2020. Owner: Carbon Management.
 2. Investigate and deliver a borough-wide freight and last mile delivery strategy, focusing on hot spots in retail centres, with the aim to consolidate freight and delivery journeys. Deadline: 2025. Owner: Transport Planning and Wood Green Regeneration.
 3. Assess the vehicles in the borough through DVLA data to understand the vehicle make up in terms of emissions in the borough. This information will be used to determine price bandings for permit and on-street parking charges. Revise parking charging price bandings. Deadline: 2021. Owner: Highways. Note: Ensure that any income generated from parking charges is ring-fenced into sustainable transport projects.
 4. Whilst not currently viable, continue to review the delivery of a borough workplace parking levy to disincentivise employee car use and reduce impact of commuting by car, except disabled people. From 2020. Owner: Highways and Carbon Management. Note: Any income generated from a workplace levy (if implemented) should support active travel measures.
 5. To roll out a resident-led CPZ programme and review existing CPZs to ensure that they continue to meet the demands of residents and businesses to reduce car usage and manage visitors to the borough by car. While ensuring high user satisfaction, reducing fraud levels, and congestion peaks (e.g., around events). Deadline: 2023. Owner: Highways. Note: CPZs help discourage long-term parking and reduce fewer vehicle journeys into CPZ areas. Seek to extend CPZs both geographically and for longer periods of time (e.g. operating all day). The 2020/21 CPZ programme is prioritising the review of CPZs that have not been reviewed for a few years, assessing whether CPZs are effective and whether changes can be made, particularly to the 2-hour CPZs.

6. Ensure that parking charging systems used across the borough (CPZ's and P&D pays) reflect the needs of the community (residents and businesses) and wider environmental concerns – air quality, carbon, congestion and highways space. Deadline: 2021. Owner: Highways. Note: A diesel surcharge plan will be presented at Cabinet in Spring 2020. This surcharge will not only target air pollution levels (reducing NO_x and CO) but also tackle carbon emissions related to diesel usage, congestion and road safety.

Objective T4 – Programme to incentivise the move to low and zero emission vehicles by residents and businesses for people who are less able to rely on active and public transport infrastructure to move around

This aligns with the Haringey Transport Strategy (2018) and draft Ultra-Low Emission Vehicle Action Plan.

- Action Owner: Carbon Management/Highways
- Cost: £50,000 over 3 years for education and awareness raising. Supporting the switch through tracker applications, etc.
- Measurable metrics: % of vehicles registered in the borough that are low and zero emission
- Potential carbon reduction: Minor. Combined with all other Transport objectives, a total of 120 ktCO₂ by 2041.
- The detailed actions for Objective T4 are listed below.
 1. Promote EV-related regional and national grants and loan systems applicable to residents and businesses. Deadline: 2021. Owner: Carbon Management. Note: On the Council website, resident forums and business groups.
 2. Seek to overcome barriers to EV charging point infrastructure for residents without driveways. From 2022. Owner: Transport Planning / Highways / Carbon Management
 3. Give permits to car club operators to deliver greater percentages of electric fleets and promote to residents, businesses, and new drivers, by 2025. By 2030 – have 100% electric car club fleets in the borough. Owner: Carbon Management.
 4. Establish a network for local businesses to join and access EV-related initiatives. This can include EV trials, e-cargo bike trials etc. Deadline: 2021. Owner: Carbon Management. Note: TfL support and e-cargo bikes will form part of the 'Try Before You Bike' schemes.
 5. All planning applications should include EV charging points where applicable (100% active in Wood Green and the rest of the borough in line with the London Plan). All new homes should have access to charging point facilities within their area. Ongoing. Owner: Transport Planning / Planning. Note: Supported by Planning Advice Notes.

Objective T5 – Expand provision and accessibility of EV charging infrastructure, with 2,000 charging points by 2025

This aligns with the Haringey Transport Strategy (2018) and draft Ultra-Low Emission Vehicle Action Plan. This will include private and public points. TfL predicts that the demand for EV charging will require approx. 2000 points in public and private parking areas.

- Action Owner: Carbon Management/Highways
- Cost: Approx. £25m private finance. Income generating and ring-fenced for sustainable transport initiatives
- Measurable metrics: Number of EV charging points installed in the borough
- Potential carbon reduction: Medium. But the switch to EV's will deliver significant improvements in air quality, noise, and health and wellbeing objectives.

- The detailed actions for Objective T5 are listed below.
 1. Continue to monitor EV demand across the borough and install charging points in line with this. Ongoing. Owner: Carbon Management/Highways. Note: Use OLEV data to monitor number of EVs; use UKPN and TfL scenario analyses to determine how many EVCPs are needed. Use King's College study to understand EV demand.
 2. Install a variety of charging point types (e.g., lamp column, standard and rapid) in suitable locations, with a variety of charging point providers. Ongoing. Owner: Carbon Management/Highways. Note: Work with partners such as UK Power Networks and TfL to implement charging points.
 3. Facilitate regional approaches supported by TfL to support a consistent approach to EV charging across London. Ongoing. Owner: Carbon Management.

Energy

Overall Objective: Connect around 12,000 homes to low carbon heat sources and generate at least approximately 13 GW of renewable energy locally

Introduction

The carbon intensity of the national grid is falling, decarbonising the electricity supplied to homes and workplaces. The Council can further support this by developing and supporting low carbon forms of electricity generation, such as solar and wind power. This can be explored alongside local battery and other energy storage facilities – at a residential or local area level. This local generation will decarbonise the borough's energy, but it also strengthens Haringey's energy security. Renewable energy generation can be small scale (e.g., homes with solar panels) or can be large scale (e.g., large solar farms and wind turbines).

In Haringey, heating traditionally relies on the combustion of natural gas. The efficiency of heat creation can be improved through the electrification of heating using heat pumps (air, ground or water source) and adoption of low carbon decentralised energy networks (DENs).

The graph below shows the gap between demand for heat and electricity in the borough and the local supply of heat and electricity through district energy networks, solar PV and solar thermal installations. This gap is projected to narrow, with demand going down in line with the large-scale retrofit programme in homes and workplaces, and supply going up in line with the five DENs being delivered in the borough.

Figure 7: The total supply and demand for heat and electricity between 2015 and 2041. There is a downwards trend in both total heat and total electricity demand, as a result of energy efficiency improvements made to homes and workplaces. Total decentralised heat and solar thermal supply, and total decentralised heat and solar photovoltaic electricity supply increases.

The Council has limited influence in this sector, due to a significant proportion of electricity being centrally generated. Decentralised energy is growing, with smaller pockets of locally generated energy being supplied to smaller areas of homes and businesses. The National Grid predicts that decentralised energy will be more popular in the future, with residents being 'prosumers' (someone who both consumes and produces their own energy), with more peer-to-peer trading of energy of a local level.

Energy Actions

Objective E1 – Install renewable generation in our public spaces (e.g., Lee Valley) and review for wind turbines and PV solar arrays

This will contribute to the decarbonisation of the grid as well as engaging residents with renewable energy through installation of large-scale wind and/or solar power generation in the Lee Valley.

- Action Owner: Carbon Management / Energy Managers / Stakeholders
- Cost: Installation of one wind turbine at £2.7m. Queen Elizabeth II floating solar reservoir development in west London cost £6m. Funding mechanism/route to be determined. Subject to feasibility studies and financial modelling, this could offer the Council a revenue stream and could be facilitated through a community energy company or joint venture.
- Measurable metrics: kWh of renewable electricity generated annually through solar array and/or wind turbines

- Potential carbon reduction: Significant, and these actions can act as a beacon for wider actions. Two 1.5 MW wind turbines and 17 kWp of floating PV arrays would generate 21 MWh of renewable electricity a year, which totals 5.5% homes in the borough.
- The detailed actions for Objective E1 are listed below.
 1. Conduct a feasibility study to assess the viability of installing two 1.5 MW wind turbines in Lee Valley (in terms of wind speeds and biodiversity impact). Deadline: 2021. Owner: Carbon Management / Stakeholders. Note: Could undertake this with Thames Water and a potential wind turbine/solar array provider.
 2. Conduct a feasibility study to assess the viability of installing 17 kWp (160,000 m²) of floating PV array on Banbury Reservoir. Deadline: 2021. Owner: Carbon Management / Stakeholders. Note: Could undertake this with Thames Water and a potential wind turbine/solar array provider.
 3. Work with Thames Water which owns and operates reservoirs in the Lee Valley, to identify suitable locations for further renewable generation projects. Deadline: 2021. Owner: Carbon Management.

Objective E2 – Develop a programme to encourage the installation of 20,000 PV arrays by 2041

This should target businesses, residents and landowners. Existing grass-roots action in the borough already making progress should be supported (e.g., en10ergy). Leadership should be demonstrated by expanding the installation of PV arrays on Council properties.

- Action Owner: Carbon Management / Stakeholders (residents and businesses)
- Cost: £28 m total capital investment to 2041. Cost external to the Council.
- Measurable metrics: kW capacity installed through schemes facilitated by the Council
- Potential carbon reduction: Medium. Emission savings will vary according to property electricity consumption and array size, but on average PV installation will generate around a third of household consumption. Roof-mounted PV on 20,000 homes will generate around 13 GWh/year. This will raise significant awareness.
- The detailed actions for Objective E2 are listed below.
 1. Work with Planning to understand what kind of planning permission is required and/or whether it falls within permitted development rights for different types of buildings/generation capacity. Deadline: 2021. Owner: Carbon Management/Planning.
 2. Work with community energy groups and other relevant organisations/groups to establish viable financial and delivery models for individuals, businesses and community groups for energy projects. Deadline 2021. Owner: Carbon Management
 3. Conduct feasibility assessment for all roofs across Haringey to determine solar generation capacity. This should also include a financial model/economic assessment to identify payback periods for residents and businesses for solar PV. Deadline: 2022. Owner: Carbon Management. Note: Feasibility assessment can be funded through London's Community Energy Fund. London's Solar Opportunity Map can also be used as basis.
 4. Support existing grass-roots action in the borough already making progress e.g., en10ergy through S106 funding (Action Com2). Work with stakeholder groups to determine which projects are funded. Ongoing. Owner: Carbon Management. Note: Use S106 Carbon Offsetting funding to financially support community energy.
 5. Support local apprenticeships to carry out solar PV installation works. From 2021. Owner: Carbon Management / Employment & Socio-Economic Regeneration / Procurement

6. Join and promote bulk purchasing schemes such as Solar Together London to achieve economies of scale and maximise impact. Ongoing. Owner: Carbon Management.

Objective E3 – Develop policies to support installation of Decentralised Energy Networks (DENs) and connect to zero or lower carbon heat sources

Initially this will focus on three neighbourhood level heat DENs in North Tottenham, Tottenham Hale and Wood Green as identified in the existing masterplan and the Council's newly expanded DEN at Broadwater Farm estate. Low carbon waste heat generated by industrial processes (energy from waste, underground) should be captured and used to heat our homes.

- Action Owner: Carbon Management / Regeneration / Housing
- Cost: £30m in Capital programme over 15 years for all three schemes identified in the existing energy masterplan (North Tottenham, Tottenham Hale and Wood Green). Additional projects could also come forward which may increase the budget. The Council will need to fund/arrange suitable financing for the projects; the Council is likely to invest in and own the infrastructure and procure or partner with another organisation for the design, build, operation and maintenance of the DEN but may look to also bring in a third party to fund/own some or all of the network.
- Measurable metrics: Number of homes connected to DENs
- Potential carbon reduction: Significant. 8,000 tCO₂ – because this action contributes to the removal of gas boilers from around 12,000 homes connected by 2035. Almost 90% of homes will be served by heat pumps and/or low-carbon district heating by 2050.
- The detailed actions for Objective E3 are listed below.
 1. Develop and update guidance notes to clearly set out the Council's approach to heat networks and promote (Ongoing). Owner: Carbon Management / Planning Policy. Note: Setting out long-term vision and to include energy strategy and achieve planning requirements. Implement in partnership with Development Management (and Housing / Regeneration for Council-led development). Ongoing. Owner: Development Management / Housing / Regeneration. Note: To include standard design documents to future-proof buildings that intended to be connected to DENs (e.g., to allow for future lower temperature systems).
 2. Delivery of Outline Business Cases for initial set-up of Wood Green and Tottenham Hale DENs. Deadline Summer 2021. Owner: Carbon Management. Note: This will secure Council support for the proposed role in the projects (likely to include funding and owning the networks).
 3. Completion of commercialisation for set up of Wood Green and Tottenham Hale DENs. Deadline: End 2022. Owner: Carbon Management. Note: To include design development and securing planning / consents, customer acquisition and procurement of contractors to deliver infrastructure leading to a final investment decision in the projects.
 4. Completion of construction of first phases of Tottenham Hale and Wood Green DENs. Deadline: Summer 2024. Owner: Carbon Management. Note: Construction of infrastructure to allow supply of heat and initial supply of heat.
 5. Monitor opportunities for new networks / growth of existing networks / interconnection of networks. Ongoing. Owner: Carbon Management. Note: Undertaking necessary feasibility work, business case preparation, commercialisation and delivery to secure additional opportunities including any beyond scope of currently identified masterplan.

6. Lobby government to support policy around delivery of DENs. Ongoing.
Owner: Carbon Management. Note: Government is developing the market framework for DENs.

Objective E4 – Develop a programme of technical advice to encourage the adoption of heat pumps to achieve an average installation rate of 2,300 homes per year. Approx. £6k per unit.

This should target businesses, residents and landowners, and can be folded into action H3.

- Action Owner: Carbon Management / Stakeholders
- Cost: £640m external capital investment required for the installation of heat pumps. Technical advice for heat pumps would be captured in the provision of advice for privately-owned residential and commercial properties.
- Measurable metrics: Number of engagement activities per year (linked to H3); Number of home visits for tailored technical advice (linked to H3)
- Potential energy reduction: 79 GWh of heat supplied by heat pumps by 2050. 10% of homes will be supplied from gas and electric by 2050. Nearly all homes will be served by heat pumps and low carbon district heating.
- The detailed actions for Objective E4 are listed below.
 1. Deliver training sessions for businesses in local supply chains to increase knowledge on renewable energy and installation, and the importance of improving fabric efficiencies. Deadline: 2021. Owner: Carbon Management. Note: Needs retrofitting of homes before this can be deployed.
 2. Provide new planning guidance with separate infographics for residents and businesses on what type of renewable energy they can adopt, how, and associated costs. Provide advice on improving the energy efficiency of the building and reducing draughts to support the efficiency of heat pumps and prevent high running costs. Deadline: 2021. Owner: Carbon Management / Planning Policy. Note: This will include guidance on other energy efficiency improvements that should be made to buildings to ensure that heat pumps work more efficiently (such as increasing insulation, air tightness and improving the ventilation). It will also link to the DEN planning guidance work.
 3. Explore the setting up of local pop-up advice centres to help residents and businesses with retrofitting and installing renewable energy technologies. 2021-2022. Owner: Carbon Management / Regeneration / Town Centres

Community

Overall objective: to actively liaise with and support stakeholder organisations to reduce carbon emissions and promote further reduction.

Generating community support

Over 90% of all borough emissions are not within direct control of the Council. Therefore, the support and delivery of action by wider borough stakeholders is vital to ensure delivery of this Action Plan. This means that all residents need to feel ownership of this ambition and feel empowered to take action. Alongside the Council the borough hosts multiple active environment- and climate-related stakeholder groups who have successfully delivered a range of projects; we will all need to work together to deliver a Zero Carbon Borough. The borough's previous project and Action Plan ('Haringey 40:20', which helped decrease emissions by 40 per cent by 2020, compared to a 2005 baseline) gave rise to the Haringey Climate Forum. This group aims to deliver projects and review policies and projects in Haringey with regard to climate change. It includes representatives from local sustainability groups such as the Community Energy Lab, En10ergy, Friends of the Earth, and the Muswell Hill Sustainability Group.

The Council's role is to support these stakeholder groups both resource wise and financially. The Council has previously given community grants of £10,000 a year to deliver carbon reduction projects. In 2019, projects included: double-glazing for businesses; installing 450 LED light bulbs in 250 homes; providing training opportunities with access to new careers; and improving pedestrian routes for schools. More details on these are found within the Council's Annual Carbon Report. A key enabler to scaling up this support is the development of a Community Energy Fund, reflected in Action Com2 below.

The wider stakeholders' active support will be vital to deliver the Haringey Climate Change Action Plan, with a focus on engaging with groups not yet engaged with and those who are not involved in climate change action already. This support may be secured through policy changes, meeting venues, publicity on projects and wider co-ordination. It may be through direct grants, but also may involve developing and co-ordinating new funding streams such as Community Bonds which can raise awareness and increase funding for projects.

The Council will need to work with local youth, community, faith and religious groups and local businesses to facilitate the large-scale change required.

Supporting a local green economy

The latest Office of National Statistics assessment of the Green Economy in 2019 shows that the UK low carbon and renewable energy (LCRE) economy grew by 6.8% to £44.5 billion in 2017, from £41.7 billion in 2016. With the LCRE sector now growing at around four times the rate of the rest of the UK's underlying economy, this means that this sector in the UK economy is growing the fastest, and if harnessed and supported, can deliver benefits within Haringey through new jobs and industry. With increased public support and demand for a more sustainable environment, the LCRE sector is expected to continue to grow ahead of other sectors of the UK economy.

Green sector jobs provide services or goods that benefit our environment and/or conserve or restore our precious natural resources. Such jobs could increase the efficiency of our resource consumption, limit greenhouse gas emissions, minimise waste and contamination, protect, restore and enhance ecosystems, and contribute to climate change adaptation. Examples of green sector jobs may include renewable energy installers, energy auditors, retrofit assessors and project managers, retrofit builders, businesses that champion the circular economy, electric vehicle engineers, natural and low-carbon material producers and distributors, organic food producers, eco-designers, ecologists and conservationists.

Alongside this, to deliver the national government's sustainability objectives, such as Air Quality and Carbon Reduction, there is increasing taxation to reduce and improve performance through regulation. Schemes such as the Ultra-Low Emissions Zone (ULEZ) and increasing environmental taxes on energy bills impact on businesses revenue and performance. Therefore, being an efficient and environmentally aware business will increase profitability and stimulate business growth.

Protecting our ecosystems and biodiversity

A new objective, Com4 has been added to respond to feedback from the community. We depend heavily on the health of our ecosystems and biodiversity, which provide us with essential services, resources, but also support our wellbeing, health and ability to adapt to the impacts of climate change. Our ecosystems and species are also impacted by the climate emergency, so protecting our natural environment is as important as reducing our greenhouse gas emissions to fight against climate change. The Parks and Green Spaces Strategy will set out the detailed objectives and actions to protect and enhance our local ecosystems and biodiversity. Objective Com4 sets out some of the actions of the Parks and Green Spaces Strategy related to carbon reduction.

This action also aligns with the Mayor's objective for London to become the world's first National Park City and London's Environment Strategy.

Community Actions

Objective Com1 – To increase education and awareness raising across the borough to residents and businesses

Raising awareness of the impacts of climate change, and steps to mitigate, can encourage residents and businesses to engage with the issue and to enable behavioural change.

- Action Owner: Carbon Management / Residents / Businesses / Partners
- Cost: <£5k costs in delivering the actions. 1 FTE member of staff to coordinate with the stakeholders across Actions Com1 and Com2.
- Measurable metrics: Number of events supported per year
- Potential energy reduction: Small, but needed to unlock wider savings.
- The detailed actions for Objective Com1 are listed below.
 1. Use Council's communications networks to increase awareness around carbon reduction. From 2020, Quarterly. Owner: Comms / Carbon Management.
 2. Support the expansion of a community-managed web page on carbon reduction. Deadline: 2021. Owner: Residents and interest groups. Note: The webpage was delivered in 2020.
 3. Attend and support at least 10 events a year to promote carbon reduction and healthier lifestyles, from 2021, Annually. Owner: Carbon Management / Residents and partners. Note: Many of the events were held virtually since the launch of the draft Action Plan, during the COVID-10 pandemic.
 4. Publish performance annually on projects and impact on carbon reduction, from 2021, annually. Owner: Carbon Management. Note: In the Council's Constitution.
 5. Promote the Haringey Green Homes Programme across the Council and borough network, and help expand its remit and audience. From 2020, annually. Owner: Carbon Management / residents and partners. Note: The 2020 Green Homes Programme could not take place online, however, the Council did share the videos that the programme released (households gave a video tour of their retrofitted homes).

6. Set up a programme of community meetings to deliver the action plan. Deadline 2021. Owner: Carbon Management / Community
7. Review of the HCCAP to align with new legislation, policy, funding and technological advancements. Deadline 2030. Owner: Carbon Management

Objective Com2 - To empower and enable community-owned projects that deliver carbon reduction

This is with aim to give the right tools to local community groups to take ownership of carbon reduction initiatives. This objective includes actions around lobbying to unlock funding and resources for these community groups to deliver action.

- Action Owner: Carbon Management / residents / businesses / borough partners
- Cost: £300k over 5 years. Community Energy Grants can be developed to support through Planning Carbon Offsetting in the s106. As set out by other authorities.
- Measurable metrics: Amount and value of Community Grants awarded
- Potential carbon reduction: Small. But this enables the residents and borough partners to deliver the borough ambition together and increase awareness.
- The detailed actions for Objective Com2 are listed below.
 1. Lobby the GLA to retain the London Community Energy Fund for community energy projects. Deadline: 2020. Owner: Carbon Management.
 2. Lobby the government to bring back tax incentives for energy groups to unlock local investment in community energy projects. Deadline: 2020. Owner: Carbon Management. Note: Tax incentives such as Social Investment Tax Relief (SITR).
 3. For the Haringey Climate Change Forum to be supported by the Council. Frequency: Quarterly. Owner: All Services. Note: Meetings are booked by Carbon Management, services invited to attend.
 4. For Haringey Council to set up a Community Energy Fund and offer grants for the residents and partners to undertake and develop carbon reduction projects and run low-carbon project competitions. From 2021 annual award. Owner: Carbon Management / Residents / Businesses. Note: Funded through s106 monies already collected. The Community Energy Fund will be launched in 2021 following the adoption of the Action Plan.
 5. Develop a local carbon offsetting fund for the businesses and community to offset their emissions on flights or carbon emissions. 2022-2023. Owner: Carbon Management / Residents / Businesses. Note: Create an account for businesses, staff, and community to support local carbon reduction projects.
 6. Promote switching to a lower carbon energy supplier for residents and businesses. Ongoing. Owner: Carbon Management / GLA. Note: London Power is set up by the GLA <https://mylondonpower.com/>.
 7. To investigate the development of “Green Community Bonds” funded by the community to invest in carbon reduction projects. Deadline: 2021. Owner: Carbon Management / Residents / Businesses.

Objective Com3 - To support the development of a skills programme, new jobs and careers in the carbon reduction sector.

The Council has mapped the number of homes that need to be retrofitted and the measures that need to be implemented. On the back of this, the Council can determine how many jobs, and the type of skills needed to fulfil this. This will need to be supported by new training opportunities and courses. This objective will support the Employment & Skills Recovery Action Plan.

- Action Owner: Carbon Management / Economic Development

- Cost: This would be dependent on government funding to deliver a new training programme within the borough. Upskilling our residents and growing the green economy.
- Measurable metrics: Number of courses being taught in the borough that upskill people to reduce carbon emissions
- Potential carbon reduction: Small, but significant economic opportunities, and awareness outcomes.
- The detailed actions for Objective Com3 are listed below.
 1. Lobby national government to deliver an education programme for the new work force that will deliver retrofitting and new technologies. Deadline: 2021. Owner: Carbon Management / Employment & Socio-Economic Regeneration.
 2. Explore the delivery of a 'Green Hub' to accommodate retrofit installers, provide training on a large scale for young people, re-training for people entering into the green sector, and training for people who can specialise in retrofitting heritage buildings. Enabling Haringey to be at the front of the new green economy. Deadline: 2022. Owner: Carbon Management / Regeneration / Employment & Socio-Economic Regeneration. Note: The "Green Sector" is one of the most sustained growth sectors of the UK economy. Work with the Selby Centre and other local organisations to deliver this.
 3. Advertise new training opportunities and future careers in the local carbon sector. Advertise council-owned deep retrofit projects as training opportunities for local young people (paid work experience, or apprenticeships). From 2021. Owner: Carbon Management / Employment & Socio-Economic Regeneration. Note: To be embedded into tenders and contractual arrangements.
 4. Develop a low-carbon volunteer network to promote retrofitting in public and private sector, with volunteers receiving training. From 2022. Owner: Carbon Management / Regeneration / Community

Objective Com4 - Deliver carbon reduction projects that support the protection and enhancement of the borough's biodiversity and habitats

This is to increase the council's ability to mitigate and adapt to climate change and address the ecological emergency and mass extinctions of species we are seeing globally.

- Action Owner: Parks and Leisure / Highways / Carbon Management / Planning
- Cost: This would be dependent on government funding to deliver a new training programme within the borough, upskilling our residents, growing the green economy and develop community group resources.
- Measurable metrics: Number of trees planted/removed; area of publicly accessible parks and green spaces (sqm)
- Potential carbon reduction: Small, but significant environmental opportunities, health and wellbeing impacts and awareness outcomes.
- The detailed actions for Objective Com4 are listed below.

1. Increase the overall area of green spaces in new developments and through the delivery of pocket parks. From 2023. Owner: Planning / Regeneration. Note: Management and maintenance of these new spaces to be taken up privately or by volunteer groups, where possible. The introduction of the London Plan's Urban Greening Factor will enable this.
2. Increase biodiversity and habitat types in the borough's green and blue network by increasing wildlife-only areas, and supporting biodiversity-supporting infrastructure. From 2021. Owner: Parks and Leisure / Planning / Flood and Water Management / Community. Note: The management and maintenance implications will need to be explored with the relevant teams and partners. The introduction of the biodiversity net gain requirement in developments will enable this.
3. Increase the level of 'standard' or 'heavy standard' tree planting across the borough in appropriate areas. Investigate the suitability of creating new woodland areas / arboretum. From 2021. Owner: Parks and Leisure / Highways / Homes for Haringey / Community. Note: The council is undertaking a huge tree planting exercise to plant 1,000 trees in 2021 across the borough. This takes a 'right tree in the right place' approach.
4. Develop a means of estimating the potential carbon sequestration from trees in the borough. 2022-2027. Owner: Parks and Leisure / Carbon Management. Note: To be undertaken as part of an iTree Eco survey, under the Tree & Woodland Plan.
5. Increase opportunities for local food growing through community-led groups, schools, and new developments. From 2021. Owner: Planning / Community-led groups / Schools / Allotment Groups. Note: This is to reduce transport emissions related to food production and supply.
6. Reduce emissions of the borough's parks and increasing renewable energy generation through its buildings, machinery, vehicles and service delivery. By 2027. Owner: Parks and Leisure / Carbon Management / Transport Planning. Note: Machinery and vehicles will be moving to electric, where possible. To explore local solar PV on parks buildings to charge vehicles and tools.
7. Increasing the biodiversity of Homes for Haringey open spaces and road-side verges by reducing cutting regimes, identifying appropriate areas to deliver this, and delivering a pilot project. From 2022. Owner: Parks and Leisure / Homes for Haringey / Highways. Note: Consider implications for maintenance (different kit, frequency, methods).
8. Install appropriate signage for the public to be aware and educated of the purposes of the above projects. From 2022. Owner: Parks and Leisure / Highways

National and Regional Lobbying

As recognised by the Government's Climate Change Committee 6th progress report, many of the actions within this plan, and the decisions we make, depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of emissions in their local areas.

Therefore, the borough can only achieve the 2041 ambition with the help and support of the residents, businesses, partners and wider borough stakeholders, with close working alongside regional and national government to support new powers and new financial mechanisms.

Haringey's carbon emissions are inherently linked to transport systems which are strategic beyond the borough boundary. Energy generation is governed at a national and regional level. Many actions in this plan are therefore not possible to progress without implementing transformative changes at a higher level to deal with the climate emergency that the country and world are facing. This list has been developed with input from Arup, UKGBC, developers and retrofitting companies, alongside the Haringey residents, businesses, partners and wider stakeholders.

As outlined in specific actions, the Council will actively be lobbying national government and the Mayor of London (and Transport for London, TfL) to change policy and legislation, and release funding to support local governments, households and businesses in reducing their carbon emissions drastically.

To do this, the Council will write to these bodies and publicise these needs whenever it can through formal consultation and engagement, and ad-hoc opportunities.

National Lobbying Asks

National requests will be directed primarily to the Department for Business, Energy and Industrial Strategy (BEIS) and the Ministry of Housing, Communities & Local Government (MHCLG):

- a) Enforce a minimum domestic and non-domestic EPC rating required at point of sale and let to EPC B by 2035, increasing from the current EPC E and increase funding to enable homeowners to retrofit their properties to EPC B;
- b) Cut VAT for owners, residents and business groups on retrofitting and renewables from 20% to 5%;
- c) Give stronger powers and funding to the local authority to enforce Minimum Energy Efficiency Standards on private sector landlords;
- d) Require realistic and accessible carbon emission modelling software in new developments that deliver improved fabric requirements in Building Regulations Part L and implement before the Future Homes Standard is implemented in 2025;
- e) Adopt higher energy reduction standards than currently proposed in the Future Homes Standard consultations for domestic, non-domestic existing and new build properties;
- f) Support energy efficiency measures to be installed in buildings in conservation areas through the National Planning Policy Framework;
- g) Promote reuse of existing buildings in policy before demolition and provide clear planning guidance on designing for deconstruction of new buildings to reduce embodied carbon;

- h) Ring-fence funding from the Department for Education and NHS funds to retrofit all public buildings (schools and NHS buildings) to achieve EPC B;
- i) Stop the sale of conventional vehicles (diesel and petrol) by 2030;
- j) Bring back tax incentives and remove tax burdens for Community Energy Companies to unlock local investment in community energy projects;
- k) Develop a national education and skills development programme to develop a workforce that can deliver retrofitting and implement new technologies;
- l) Remove solar PV installations from business rates;
- m) Improve subsidies and/or funding for renewable energy to enable residents and businesses to resume installing renewable energy technologies, there is a particular need to tackling the current lack of subsidies for domestic properties or small-scale installations; and,
- n) Expand the Salix loan scheme for public sector retrofitting.

Regional lobbying asks to the Mayor of London/Greater London Authority and TfL:

- a) Coordinate provision of technical energy efficiency advice to private households across London;
- b) TfL to introduce more and increase the rate of deployment of Zero Emission Buses;
- c) TfL to model the road network and future transport schemes, with priority for active travel and then public transport;
- d) TfL to fund the delivery of 30-60 km of cycle route infrastructure in Haringey;
- e) Revise TfL funding process, by removing the bidding process for boroughs. Earmark a set amount of funding to deliver active travel infrastructure per borough over a longer time period to enable large schemes to be forward planned and delivered;
- f) TfL to support regional approaches to enable a consistent approach to EV charging across London;
- g) Deliver a regional education and skills development programme to develop a workforce that can deliver retrofitting and implement new technologies;
- h) For all funding from the GLA for projects and programmes to deliver the Zero Carbon ambition;
- i) Develop clearer policies around the delivery of district energy networks and community energy; and,
- j) Retain the London Community Energy Fund for community energy projects.

Delivering the Ambition

The Climate Change Action Plan is ambitious and sets out the level of commitment required from all partners in the borough – the Council, businesses, residents, the Mayor of London and the national government. It cannot be delivered by one party alone.

Financial

This Action Plan will be funded by the public sector, the private sector, and private residents. Some of this funding has already been secured, and some funding will need to be secured from the Mayor of London and Government, and other third-party organisations.

Recent Government funding announcements (in the 10 Point Plan and Energy White Paper in late 2020) should be taken up where possible.

The Council will fund its own actions through its capital programmes and additional revenue, many of which are underway. Some of the Council's costings in this Action Plan have been developed as estimates and will be worked up in detail with the relevant service areas when the Action Plan is progressed to the delivery stage. These are estimates on the amount of funding we will need to secure from the government and third parties to deliver the Climate Change Action Plan in response to the Climate Emergency.

Within the Council financial plan there are already several existing capital funding streams proposed that will support the delivery of this Action Plan for the Council to be zero carbon by 2027 and the borough by 2041, including:

- Decentralised Energy Networks (£27m over the next 5 years) – which will create low carbon heat networks in the borough's regeneration areas;
- School Streets Funding (£3m over the next 5 years) – which will improve public realm and deliver active travel options around our schools;
- Active Travel Programme (£1.68m for 2020/21) – to support residents, employees and partners to cycle and walk more through training and education alongside infrastructure measures;
- Streetspace Plan to support active travel through walking and cycling (£5.1m);
- Street lighting energy efficiency LED upgrade (£7m over the next 2 years);
- Parks and leisure facilities carbon reduction programme (£3m over the next 5 years);
- SME workplace intensification (£9.8m over next 5 years) which is improve existing and deliver new low carbon workspace units;
- Council assets and Civic Centre improvements (£23m over 5 years) to deliver improvement in these key civic building, which will include carbon reduction measures; and,
- Council housing energy efficiency programme (£101m over the next 10 years) – which will improve the energy performance of the Council's housing stock.

There is also a proposed low-carbon funding stream to facilitate existing projects to go further to deliver increased carbon reduction. This will target corporate commercial property projects, where increased revenue can be secured.

Projects that currently do not have funding streams allocated, which are proposed to be delivered in the medium to longer term, will be reviewed and business cases developed before funding can be agreed. To fully deliver the ambition in this Action Plan, all new capital funding streams will be reviewed starting from 2020. These will highlight the carbon saving, and both revenue and capital implications will be considered. It will be expected that all new funding asks to the Council and public funding streams will deliver a positive carbon reduction element. Furthermore, in our lobbying of national and regional government, the Council will call for more funding to support local authorities, residents and businesses to achieve the borough's ambition.

To deliver our ambition there needs to be significant and sustained action by a range of other stakeholders, such as private homeowners and small businesses in the borough, which is why the costs of this scenario fall predominantly outside the Council's control. Lobbying and partnership work by the Council to regional and national government will be essential in securing the action needed to deliver on climate emergency ambitions.

Many of the private investment by residents, businesses and partners will be delivered over a longer time period, with most being delivered as new technology and routine improvements take place, such as building improvements (replacement windows or heating systems), or new transport choices are considered and brought. To enable this rate of change to increase, the Council will signpost these stakeholders to new funding, or enable them to make informed choices around payback periods funded through savings that can be realised.

Governance and Future Monitoring

This Climate Change Action Plan will require robust governance to implement and monitor actions across the Council's service areas. An important aspect to the governance structure is to monitor progress and ensure relevant service areas take ownership of progress.

All Council projects will need to demonstrate they meet the carbon reduction requirements as set out in this Action Plan through key decisions and procurement requirements. This plan will require senior leadership support at all levels.

The Council will report on progress made on this Climate Change Action Plan through the Annual Carbon Report which has been published since 2008. The report has previously focused on the 40:20 commitment and will be updated in 2021 to reflect the ambitions set out in this new Climate Change Action Plan. All relevant service areas of the Council will be required to monitor progress through the metrics set out in the Action Plan.

The Council will also continue to report on the Borough Plan, which includes the zero-carbon ambition.

Timeframe for Action

It is intended that the plan is a live document and will require updating as technology, skills, and knowledge moves forward. In some instances, the groundwork for the high impact programmes will be delivered in the next three to five years. This will enable the borough to deliver significant carbon reduction once fully designed and funding is secured.

This current Action Plan is focusing on the known solutions and measures needed now. The immediate actions will focus on delivery over the next 7-8 years. In the next update of the Climate Change Action Plan the Council will review performance and continue to deliver change between 2028-2036.

Timeframe for Action - Immediate Action

In response to the climate emergency, projects that have funding in place and the Council will move to delivery immediately include:

- School Streets programme;
- Streetspace Plan;
- Homes for Haringey energy retrofit programme;
- DEN masterplan – feasibility and planning stages;
- Active Travel Projects and Healthy Streets; and,
- Delivery of a Community Energy Fund.

There are also projects that require individual action plans and policy changes to ensure that we deliver best value and meaningful outcomes, now and over the longer term. Over the short term the Council will design these with stakeholders and plan a route map to support the borough's net Zero Carbon Ambition. These include:

- Review of the Council's Asset Management Plan to embed carbon reduction in all refurbishments and new buildings;
- Delivery of new Zero Carbon development planning policies and advice for of all new developments across the borough;
- An Action Plan for the Council's Corporate Estate setting out how we will become Carbon Neutral by 2027; and,
- An Action Plan for the schools of the borough, so that they can also move towards Zero Carbon Buildings.

These actions will enable the Council to work towards becoming net zero carbon by 2027 and strengthen Haringey as a leader.

Timeframe for Action – Medium to Long Term Action

Many actions cannot be delivered by the Council. As one borough we need to ensure that all representatives – residents, businesses, partners, and other stakeholders understand and agree with our zero-carbon ambition. It will require difficult conversations as we move away from our current lifestyle to a low-carbon future. We will need to address issues such as reducing private car ownership, increasing the rate of private home energy efficiency improvements, and growing new green jobs in the borough.

Once the Action Plan is agreed, the Council can educate, support, and use its powers under local government to enable wider action. But the borough will need significant contributions and ownership from our residents, businesses, and partners to achieve our borough's ambition. These projects include:

- Reducing the level of private car ownership in the borough, and increasing safe and active travel options for residents;
- Delivering high numbers of retrofits and improved energy standards in the borough's 102,000 homes;
- Delivering high numbers of retrofits, and improved energy standards in the business building and units across the borough's commercial portfolio;
- Repurposing the highways space in the borough to prioritise walking and cycling;
- Increase the amount of renewable technologies across the borough, including options in our parks and conservation areas;
- Growing the local supply chain to deliver new low carbon jobs and skills; and
- Delivering a wide range of communications and promotions to all stakeholders to normalise low carbon lifestyles and measures, which will increase significant carbon reduction.

Glossary

[Annual Carbon Report](#) - the Annual Carbon Report provides a transparent year on year account of progress made to reduce carbon emissions from the Council's operations and Haringey as a whole.

Climate Emergency declaration – admitting that climate change exists and that the measures taken up to this point are not enough to limit the changes brought by it. The decision mandates the government to devise measures that try and stop human-induced climate change. The declaration can be made on national and local government level. The specific term 'emergency' is used to assign priority to the topic, and to generate a mind-set of urgency.

CO₂ – carbon dioxide, a greenhouse gas (see below).

DEN – Decentralised Energy Network. A DEN is a system of highly insulated pipes that move energy in the form of hot water or steam from where it is created, to where it is needed for use in space heating and hot water production. A DEN has the potential to provide energy in a more efficient (and lower carbon), cost competitive, and locally secure and environmentally beneficial manner, over conventional energy supply.

EV – Electric Vehicles.

EPC – Energy Performance Certificate. A requirement under The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 for properties to have a valid EPC (valid for 10 years) when the property is rented or sold. The EPC provides an indicative rating for the energy efficiency of the property (rating A to E, with E being the worst) and an indicative rating for retrofit improvements that could be made.

GHG – greenhouse gas. These gases contribute to climate change directly through their greenhouse effect by trapping heat in the atmosphere. Seven GHGs are listed under the Kyoto Protocol which have different impacts on global warming; carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) are naturally occurring GHGs, and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃) are human-made GHGs.

GLA – Greater London Authority (comprising the Mayor of London and London Assembly).

Green energy – additional, certified power generated by renewable sources (by the Government definition of renewable).

IPBES - Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, who published a [Global Assessment report in 2019](#).

IPCC – Intergovernmental Panel on Climate Change, who published a [special report in 2018](#) on the impacts of global warming of 1.5 degrees Celsius.

[Haringey 40:20](#) - Haringey 40:20 was inspired by the passion of local residents who convinced Haringey Council to join the Friends of the Earth 'Get Serious about CO₂' initiative and adopt an ambitious target to reduce CO₂ emissions in the borough by 40% by 2020. Haringey 40:20 brings together residents, businesses, social enterprises, charities and community groups across Haringey to help to create a better future for everyone living and working in the borough.

Liveable Neighbourhoods – A funding programme initiated by [Transport for London](#) for long-term schemes that encourage walking, cycling and the use of public transport. [Liveable Crouch End](#) is the first of such schemes in Haringey.

PV – photovoltaics, also known as solar panels. PV is a technology that converts sunlight into electricity through its solar photovoltaic cells.

Retrofitting – modifications to existing buildings to improve its energy efficiency and/or decrease energy demand.

ULEZ – Ultra Low Emission Zone. Vehicles need to pay a charge if they do not meet the ULEZ emissions standards.

Zero Carbon – A very energy efficient building or area which may have on-site renewable power generation. This will reduce carbon emissions to a minimum. Where emissions do occur, emissions can be offset through mechanisms which could include buying green power for the remaining energy demands. Developing a Power Purchase Agreement (PPA), PPA for out-of-borough renewable energy sources, and / or planting of trees each year to offset emissions (these would need to be certified independently and benefits quantified), etc.