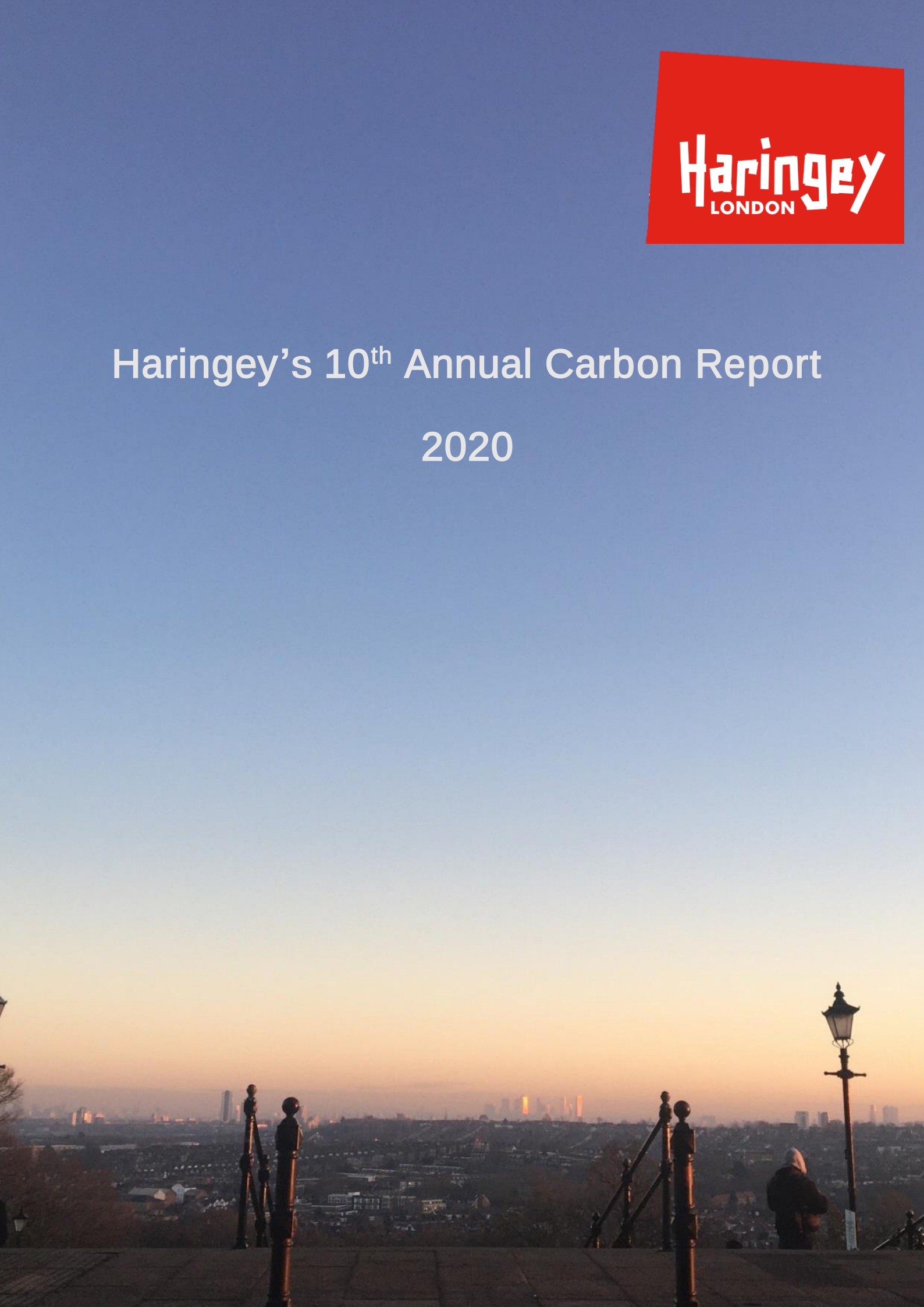
Haringey's 10th Annual Carbon Report

2020



Contents

Introduction

This is our tenth Annual Carbon Report covering the performance and projects delivered during 2020. These reports were created to monitor the borough's progress in reducing our carbon emissions and to celebrate our successes. During 2020 we have all been battling the Covid-19 pandemic. This has been a momentous and a very difficult year for our community. Everyone has been dealing with and impacted by the situation in different ways. Covid-19, like climate change, has been seen to disproportionally impact the most vulnerable groups of our borough. The pandemic has also been a salient reminder that in order to resolve the most important issues that are facing our planet, we must all strive together, as a council, city, country and a world community to reverse the causes and impacts of the climate emergency.

2020 was also officially tied with 2016 as the hottest year on record, as global warming linked to greenhouse gas emissions showed no signs of letting up. It witnessed terrifying blazes in California to Siberia and a record number of tropical cyclones in the Atlantic. Europe recorded its warmest year ever, and in South America, warming and drought resulted in wildfires burning a quarter of the vast Pantanal wetland. Millions of people around the world are facing disaster from flood, droughts, heatwaves and resulting food insecurity, but areas like Madrid have faced their coldest winter for 50 years. It is increasingly clear that international organisations are advocating strongly that more needs to be done and immediate action is needed.

In Haringey, the Climate Change Action Plan was published in March 2020 and then adopted in March 2021. This sets out a target to be a Net Zero Carbon Borough by 2041 and for the Council's corporate buildings to be Net Zero Carbon by 2027. These targets are highly ambitious, but they are based on sound scientific evidence and are deliverable. It is crucial that all stakeholders are engaged in this process, and it is highly pertinent that despite the difficulties of in person engagement that a way has been found for voices to be heard through our online external web platforms during the development of the Action Plan.

Between 2017 and 2018, we saw a 1.3% decrease in carbon emissions in Haringey. This puts us on track to achieve our 40:20 ambition. However, despite our indefatigable efforts, we need to push even harder to achieve our goal to become a net zero carbon borough at the earliest possible opportunity.

This report shows how we, as a borough community, are coming together and are working towards the delivery of a Net Zero Carbon Borough. We know that climate change impacts disproportionally on the most vulnerable groups, not just in our borough, but around the whole world. As this report highlights, action on carbon emissions can also help us create a greener, cleaner borough where there are spaces to walk, play and cycle freely.

Key policy changes – international and national

COP26 Glasgow, UK (26th Conference of the Parties to the United Nations Framework Convention on Climate Change)

Following the 2019 COP25 (25th Conference of the Parties to the United Nations Framework Convention on Climate Change) in Madrid, the UK was set to host COP26 in Glasgow in November 2020. A key objective was to complete several matters with respect to the full operationalisation of the 2015 Paris Climate Change Agreement, as talks at COP25 had not reached consensus in all areas, pushing decisions into 2020 under "Rule 16" of the UN climate process.

Due to Covid-19 this conference has been rescheduled to take place 1-12 November 2021.

The US withdrawing (and re-joining) the 2015 Paris Agreement

In November 2020, the United States of America formally withdrew from the Paris Agreement. This announcement had initially been made in June 2017, but all signatories had to wait at least three years from the date of ratification (4th November 2016) until they were able to give notice. The US President gave notice of their intention to leave in November 2019, which was formalised a year later.

Following the 2020 elections, President-Elect Biden pledged to re-join the Paris Agreement as soon as possible following his inauguration in 2021.

The CCC's Sixth Carbon Budget Report

In December 2020, the Climate Change Committee (CCC) published its recommendations for the UK's Sixth Carbon Budget, which sets out the UK's path to Net Zero by 2050 over the years 2033 to 2037.

The Sixth Carbon Budget (the legal limit for the UK net emissions of greenhouse gasses over the years 2033 to 2037) should be set at 965 $MtCO_2e$, implying a 78% reduction from 1990 to 2035 (see Figure 1 below). The budget should cover all greenhouse gas emissions, including those from international aviation and shipping, and CO_2 sequestration.

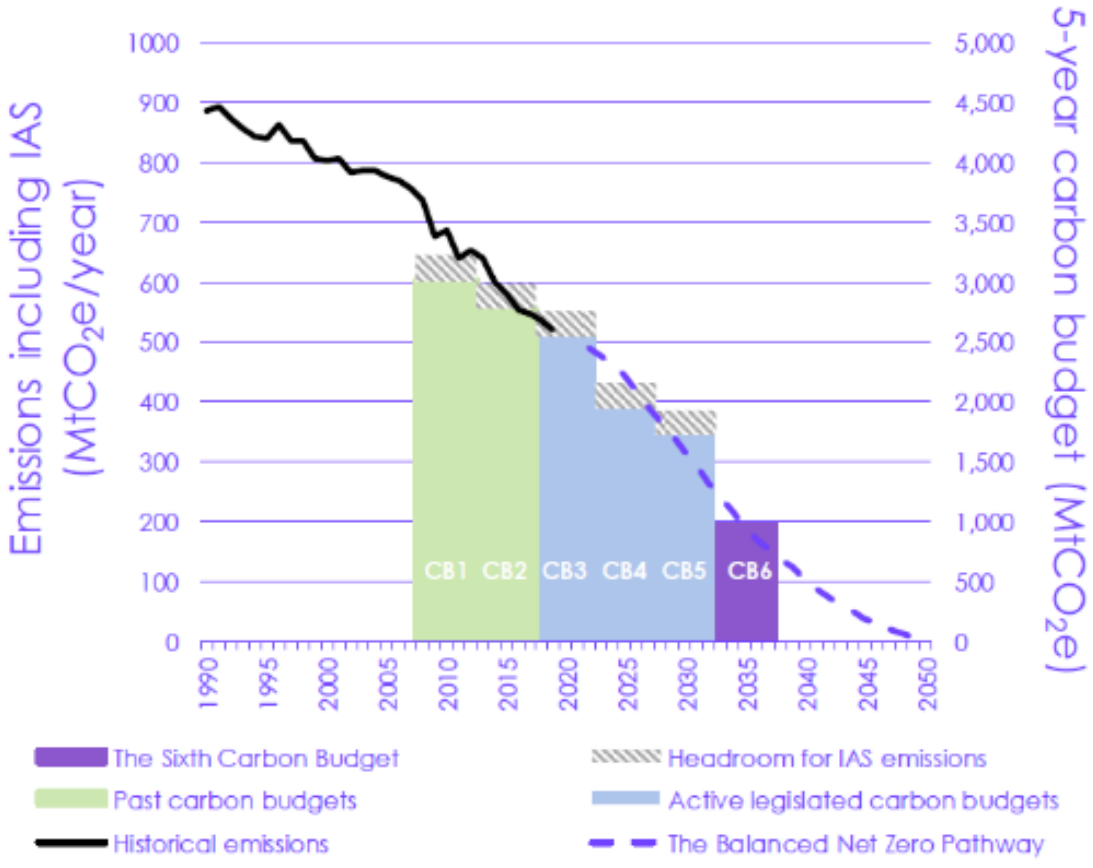


Figure 1: A timeline of each of the carbon budgets and the emissions levels they target (Source: CCC, 2020) This shows historical and projected emissions from 900 $MtCO_2e$/year in 1990 to zero emissions in 2050. The chart also plots each of the past, current and the next carbon budgets against their timeframes, the historical emissions and the Balanced Net Zero Pathway.

The Sixth Carbon Budget can be met through four key steps:

1. **Take up of low-carbon solutions.** People and businesses will choose to adopt low-carbon solutions, as high carbon options are progressively phased out. By the early 2030s all new cars and vans and all boiler replacements in homes and other buildings are low carbon – largely electric. By 2040 all new trucks are low carbon. UK industry shifts to using renewable electricity or hydrogen instead of fossil fuels, or captures its carbon emissions, storing them safely under the sea.
2. **Expansion of low-carbon energy supplies.** UK electricity production is zero carbon by 2035. Offshore wind becomes the backbone of the whole UK energy system, growing from the Prime Minister's promised 40GW in 2030 to 100GW or more by 2050. New uses for this clean electricity are found in transport, heating and industry, pushing up electricity demand by 50% over the next 15 years, and doubling or even trebling demand by 2050. Low-carbon hydrogen scales up to be almost as large, in 2050, as electricity production is today. Hydrogen is used as a shipping and transport

fuel and in industry, and potentially in some buildings, as a replacement for natural gas for heating.

3. **Reducing demand for carbon-intensive activities.** The UK wastes fewer resources and reduces its reliance on high-carbon goods. Buildings lose less energy through a national programme to improve insulation across the UK. Changing diets, reducing our consumption of high-carbon meat and dairy products by 20% by 2030, with further reductions in later years. There are fewer car miles travelled and demand for flights grows more slowly. These changes bring striking positive benefits for health and well-being.
4. **Land and greenhouse gas removals.** There is a transformation in agriculture and the use of farmland while maintaining the same levels of food per head produced today. By 2035, 460,000 hectares of new mixed woodland are planted to remove CO2 and deliver wider environmental benefits. 260,000 hectares of farmland shifts to producing energy crops. Woodland rises from 13% of UK land today to 15% by 2035 and 18% by 2050. Peatlands are widely restored and managed sustainably.

Local authorities and the Sixth Carbon Budget

The CCC also produced a report on the role of local authorities in addressing the Climate Emergency. This highlights that local authorities are increasingly ambitious in their plans to tackle climate change. As of October 2020, over 300 local authorities had declared Climate Emergencies, with many in the process of developing plans to deliver against ambitious net zero targets. The report stated that local authorities have a range of existing levers that can be used to deliver local action that reduces emissions and prepares local areas to a changing climate.

However, these levers alone are unlikely to be sufficient to deliver local authorities' Net Zero ambitions, due to gaps in powers, policy and funding barriers, and a lack of capacity and skills at a local level. Additionally, without some level of coordination from Government, the UK risks pursuing a fragmented strategy towards Net Zero.

Key recommendations for local authorities are:

- The UK Government and local authorities share a common goal to deliver Net Zero;
- The Sixth Carbon Budget can only be achieved if government, regional agencies and local authorities work seamlessly together;
- More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions – decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of emissions in their local areas;
- Top-down policies go some way to delivering change but can achieve a far greater impact if they are focused through local knowledge and networks;
- Four key things are needed to achieve this vision of collaborative delivery:

- **Framework**: An agreed framework for delivery of Net Zero incorporating local and national climate action;
- **Financing**: Appropriate long-term financing to support local authorities in delivering Net Zero;
- **Flexibility**: Local operational flexibility around how local areas address climate change;
- **Facilitation**: Coherent policy and powers for the facilitation of delivery.

UK Government's Ten Point Plan for A Green Industrial Revolution

The government announced a Ten Point Plan for a Green Industrial Revolution in November 2020. The plan set out £12 billion of government investment to create and support up to 250,000 highly skilled green jobs in the UK, and spur over three times as much private sector investment by 2030.

The blueprint covers clean energy, transport, nature and innovative technologies, and aims to forge ahead with eradicating carbon's contribution to climate change by 2050. This is particularly crucial in the run up to the COP26 climate summit in Glasgow in 2021.

The ten points outlined by the government are:

1. Offshore wind: Quadrupling production of offshore wind to 40 GW by 2030, supporting up to 60,000 jobs.
2. Hydrogen: By 2030, aiming to produce 5GW of low-carbon hydrogen and develop the first town heated entirely by hydrogen.
3. Nuclear: The electricity network could double in size by 2050 as demand for low-carbon electricity rises in sectors such as heat and transport. As a reliable source of low carbon electricity, the UK government is pursuing large scale nuclear energy production, while also looking into the future of nuclear power in the UK through further investment in modular reactors.
4. Electric vehicles: From 2030, the government intends to end the sale of new petrol and diesel vehicles, ten years earlier than planned. However, they will allow the sale of new Hybrid vehicles by 2035.
5. Public transport, cycling and walking: Making cycling and walking more attractive ways to travel and investing in zero-emission public transport of the future.
6. Jet Zero and greener maritime: Supporting difficult-to-decarbonise industries to become greener through research projects for zero-emission planes and ships.
7. Homes and public buildings: Making our homes and public buildings more energy efficient by 2030, and a target to install 600,000 heat pumps every year by 2028.
8. Carbon capture: To capture 10 Mt of carbon dioxide by 2030, equivalent to taking 4 million cars off the road. They aim to facilitate the deployment of CCS in four clusters by 2030, two of which will be operational by the mid 2020's.
9. Nature: Protecting and restoring our natural environment, planting 30,000 hectares of trees every year, whilst creating and retaining thousands of jobs.

10. Innovation and finance: Developing the cutting-edge technologies needed to reach these new energy ambitions and make the City of London the global centre of green finance.

How will this affect Haringey?

The petrol and diesel ban will mean that Haringey will need to sell its petrol vehicles and invest in a fleet of electric vehicles. The Council will also need to continue installing electric vehicle charging points in the borough as more residents transition away from petrol cars. Furthermore, Haringey will need to continue its push towards more cycling and walking in the borough by altering the infrastructure and road layout to make the roads more pedestrian and cyclist friendly. In making buildings more energy efficient, heat pumps will also play a large role in the decarbonisation of our buildings, along with building decentralised energy networks (DENs). Haringey will also most likely continue to ramp up its tree planting in order to capture some local carbon emissions, making the air in Haringey cleaner to breathe and also making the parks and streets look greener.

Energy White Paper

In December 2020, the UK Government launched its Energy White Paper. Following the publication of the Ten Point Plan, it set out plans to meet the net zero carbon target by 2050, decarbonise our energy system, support 220,000 British jobs and keep bills affordable.

Carbon Brief did some analysis to demonstrate how the UK has moved on and gone beyond the estimates set out in the 2007 Energy White Paper (Figure 2). It shows that fossil fuels have a smaller role to play than predicted, and low carbon energy sources like nuclear and renewables have a larger role to play. Renewables made up more than a third of the UK energy generation in 2020, compared to the initial target of 20%.

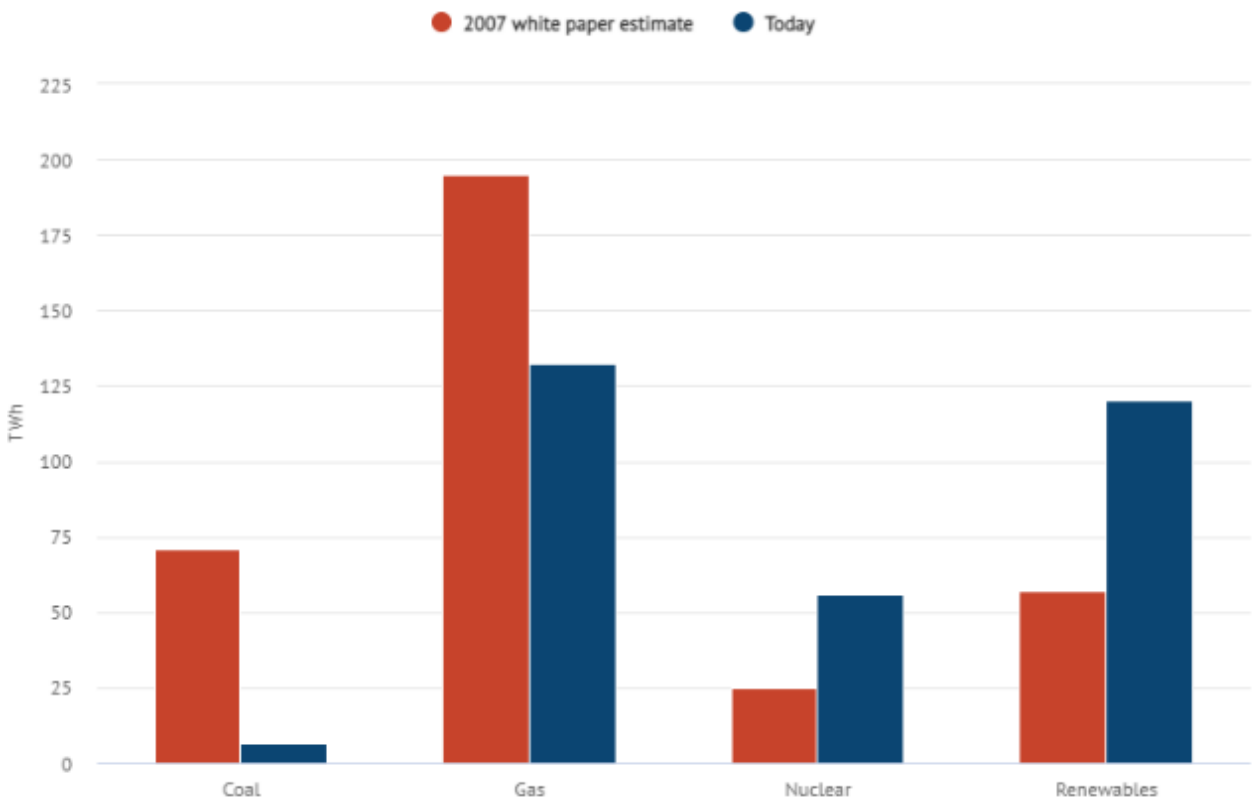


Figure 2: Comparison graph between the estimate of energy generation sources for 2020 in 2007's Energy White Paper and the reality of 2020. For coal: an estimate of 71 TWh versus 7 TWh; for gas an estimate of 195 TWh versus 132 TWh; for nuclear an estimate of 25 TWh versus 56 TWh; and for renewables 57 TWh versus 120 TWh (Source: Carbon Brief, 2020).

Most of the plans were announced in the Ten Point Plan. The Government did increase its estimate of cutting emissions by 2032 (the end of the fifth carbon budget) from 180 $MtCO_2$ to 230 $MtCO_2$ in the White Paper. This may result in the Government bringing forward additional or more ambitious policy and funding measures for local authorities to help deliver this locally.

Further plans announced include:

- A UK emissions trading scheme (UK ETS) from 1st January 2021 to replace the current EU ETS, providing continuation of emissions trading for UK businesses;
- Aims to continue to explore financial options for new nuclear including the regulated asset base (RAB) funding model which is used to incentivise private investment as well as considering the potential role of government finance during the construction.
- Investment of £1 billion in Carbon Capture Storage (CCS);
- A £1.3 billion injection to accelerate the roll out of an electric vehicle charging network as well as £1 billion into the British automotive sector;
- Support the North Sea oil and gas transition, ensuring that the expertise of the oil and gas sector is drawn upon in new green jobs.

Future Homes Standard: changes to Building Regulations Part L and F

In October 2019, the Ministry of Housing, Communities & Local Government published the consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings.

It proposed a draft version of the Building Regulations that was intended to come into force in 2022 as an interim step. This included proposals to reduce emissions by 20% or 31% compared to the 2013 Part L Building Regulations. By comparison, the London Plan has been requiring a minimum 35% reduction on site for years already. Another major proposal included stopping councils from setting local, more rigorous energy efficiency standards than those set in Part L (at the time of writing, the Government confirmed local authorities will retain the ability to set local standards in the immediate term in the Government response to the Future Homes Standard consultation responses received, published in January 2021).

The consultation also proposed the Future Homes Standard, to come into effect from 2025. It proposed that all new homes built from 2025 will reduce their emissions by 75-80% under current regulations. The government made the commitment that any homes built under this standard should not have to be retrofitted to reach zero-carbon as the grid is continuing to decarbonise. Also, no new home should be reliant on fossil fuels.

The Council will need to follow these updated building regulations and incorporate them into the plans for all new homes in the borough. Delivering higher quality, zero carbon buildings will avoid further pressure to retrofit recently built, but not very efficient buildings. The adopted standard will also influence how Haringey's Local Plan Review policies on carbon reduction and energy efficiency will be framed.

Key policy changes – regional and local

London Plan – Spatial Development Strategy for Greater London

Following the Mayor's publication of the Intend to Publish London Plan in December 2019, several letters were exchanged between the Mayor and Secretary of State. There has been approximately a year's delay to the final approval of the Plan as a result of the Secretary of State issuing directions to the Mayor to change certain policies. Some amendments were implemented, although the policies on carbon reduction and sustainability remained up to date. In December 2020, the Publication London Plan was published and issued to the Secretary of State who confirmed informally that there were no further issues. (At the time of writing, the London Plan has now been formally adopted in early 2021).

The New London Plan sets out a suite of new planning policies for London, including:

- Policy SI2 (minimising greenhouse gas emissions) sets out that major development should be net-zero carbon. It introduces a new requirement for major development proposals to 'be seen' by monitoring their emissions post-construction. In addition, development proposals that are referable to the Mayor should now calculate whole life-cycle carbon emissions and demonstrate actions taken to reduce life-cycle carbon emissions. These policy changes represent further regulation intended to reduce the carbon emitted by large developments.
- Policy SI3 (energy infrastructure) requires the development of energy masterplans for large-scale developments. Any major developments in a Heat Network Priority Area should have a communal low-temperature heating system, selecting the appropriate heat source in line with the heating hierarchy.
- Policy SI4 (managing heat risk) confirms the requirement for developments to minimise overheating and adverse impacts on the urban heating island. Designs should continue to follow the cooling hierarchy and demonstrate how they will reduce reliance on air conditioning systems.
- Policy SI7 (reducing waste and supporting the circular economy) requires GLA-referable developments to promote circular economy principles within their design and aim to be net-zero waste. They should also submit a Circular Economy Statement.

In April, the GLA published the updated Energy Assessment Guidance to be used with the New London Plan. In October, they also published draft guidance for new policy areas, such as the Be Seen requirement, Whole-Life Cycle Assessments, and Circular Economy Statements. The new guidance on whole-life carbon and circular economy will help developments, including works planned to council buildings, to fully consider reducing emissions beyond the 'in use' stage. This will include reducing emissions at construction and end of life stages, by reducing the need for using materials, reusing or recycling materials and ensuring that buildings can be disassembled for further reuse. The Be Seen policy looks to reduce the 'performance gap' between how much energy a building was modelled to use and how much energy occupants use in reality.

Haringey Local Plan – First Steps Engagement

In preparation for a New Local Plan, a consultation took place on the New Local Plan First Steps Engagement document between 16 November and 1 February 2021. The need to address the climate emergency within the Local Plan and forthcoming developments formed an integral part to the document.

As part of the outreach, three virtual engagement sessions were organised specifically about addressing the climate emergency. This included an overview of the Local Plan, existing policies and suggested policy areas that will help reduce carbon emissions in new and existing developments. Other topics areas were also included which reflect the wider, cross-cutting nature of the climate emergency in our Local Plan, including biodiversity and open spaces, and transport.

A full draft of the Local Plan is expected to be published for consultation in 2021/22. Following this, a Proposed Submission Local Plan will be prepared which will be submitted for examination by an independent Planning Inspector before it can be adopted by the Council.

Carbon offsetting contributions

London Plan Policy SI2 requires that all new major developments are net zero carbon, with a minimum 35% reduction in emissions to be delivered on site. It allows for the remaining emissions up to 100% to be offset if developments clearly demonstrate they cannot meet the zero-carbon target on site, either through a cash in lieu financial carbon offset contribution or through off-site provision.

These in-lieu cash payments are used by the Council to fund measures, projects or programmes to deliver carbon reductions in the borough. In total up to end of December, over £812,948 has been paid to the Council for carbon reduction projects. In 2020 alone, the Council has been paid £404,333 in carbon offsetting contributions. It is important to note that these are only paid if a development actually goes ahead. As of December 2020, £520,000 of contributions have been secured through S106 agreements but not yet transferred, bringing the total to £2,866,594 secured up to 31 December 2020.

Of the funds collected to date, £520,000 has been allocated to retrofit properties to reduce carbon in the private sector over a three-year period. Where possible these funds will be aligned with other external funding streams to enable the installation of a package of energy efficiency measures to a property to significantly reduce energy bills and CO_2 emissions.

In addition, a four-year programme is being prepared for a yearly allocation toward the Community Carbon Fund. This was approved by Cabinet in summer 2021.The total approved spend for carbon offset projects by community groups is £390,000 over four years, with the first amount of £90,000 to be allocated to different projects in 2022/23.

Carbon offset price per tonne of CO_2 increase

From 1st January 2020, any planning application submitted from this date has been subject to the new carbon offset price. Haringey had previously charged £65 per tonne of carbon (tCO_2), and this was raised to £95/tCO_2 from January. This price is based on the GLA's recommended price, which was tested extensively as part of the New London Plan. This aspect of the New London Plan was found sound at Examination, which enabled Haringey to charge the higher price. The new price has pushed developers to achieve more on site and increase the energy efficiency standard in new development.

However, it should be noted that the carbon emission factors play a large role in the percentage reduction in emissions. The carbon emission factor of different fuel sources has changed over time, particularly for electricity as cleaner and renewable energy sources have been installed (such as wind power, solar energy, etc). Planning applications currently need to demonstrate their percentage carbon reduction which will differ if they use the factors associated with current Building Regulations 2013 Part L (the 'SAP2012' factors), or the newer carbon factor used by the GLA (the 'SAP10' factors). These also have an impact on the carbon offsetting contribution due.

Haringey has published a report which provides evidence on how far developments could reduce their emissions, and what local carbon price could be introduced to encourage zero-carbon developments on site. This report was commissioned together with the London Boroughs of Barking & Dagenham, Ealing, Greenwich and Westminster City and undertaken by a group of consultants as part of the London Energy Transformation Initiative (LETI). The report was finalised in May 2020, named "Towards Net Zero Carbon achieving greater carbon reductions on site: The role of carbon pricing". This report was published as part of the Local Plan Review: First Steps consultation, and its recommendations will be taken forward and tested further in Haringey before adoption. The recommendations from this report are being adopted in Merton, Hammersmith and Fulham, Westminster, and Greenwich.

London Power

In January 2020, London Power was launched (with their logo shown on the right-hand side). It was founded by the Mayor of London and is powered by Octopus Energy. It is designed to provide Londoners with energy that is good for your pockets, good for the environment and good for the community.

This project aims to offer affordable green energy to all Londoners. All profits are set to be reinvested into programs which help to achieve the Mayor's social and environmental goals, helping accelerate London's transition to a zero-carbon city.

Public attitudes to the environment and climate change

Public opinion on the environment in towns and cities in the UK

The Centre for Towns published a report for the European Climate Foundation that found a growing electoral divide between towns and cities. While there are many areas of broad consensus on environmental issues, some points of difference remain within different areas of the UK. Policies will need to recognise the distinct priorities, day-to-day experiences, and values of people residing in different areas.

The report reveals that there is little difference between places in the view that measures to protect the environment have not gone far enough. Pro-environmental values and behaviours are found across city-dwellers and rural citizens. The report points to the importance of promoting understanding between towns and cities that emphasises shared environmental concerns and values, at the same time as being sensitive to the uneven ways in which some environmental measures may impact the lives of people in different areas. It further asserts that policy measures tackling climate change need to be sensitive to place. For example, rural communities are significantly more dependent on car use for travel.

This is significant for Haringey Council as it tells us that all our work on sustainability and environmental issues has the support of people inside and outside of the borough. It also further asserts that the needs of Haringey residents and workers must be carefully considered when implementing policy and changes to the borough.

Londoner's attitude to climate change

On Monday 16th November, London Councils published its inaugural survey of Londoners' attitudes to climate change. Over 1,000 London residents were asked about their level of awareness and concern regarding impacts from climate change and their motivation to take action.

The poll shows that a significant majority of Londoners across all groups are concerned about climate change and believe that everyone should be taking action to address it. Headline findings include:

- 82% of Londoners are concerned about climate change, with 40% describing themselves as very concerned;
- 57% of Londoners say their level of concern has increased in the last 12 months;
- 71% agreed with the view of all the London boroughs that: "Climate change is a significant threat to London and Londoners, and we need to act quickly and work together to reduce its severity and adapt to its impacts now and in the future", with an equal split between strongly agree and somewhat agree. This wording is taken from the Joint Statement on Climate Change;
- 52% say their day-to-day life has been impacted;
- 87% of Londoners are motivated to help prevent climate change;

- Londoners primarily find information about climate change on the national media (42%), social media (31%), and from friends and family (24%);
- The majority of respondents believe everybody is responsible for solving climate change (56%);
- 59% of Londoners said climate change affects their decision making, and almost half of Londoners (46%) consider the climate when making day-to-day purchases.

London Councils has published a member briefing setting out the key results.

This report demonstrates there is an urgency to reduce our emissions in Haringey and beyond, and that people support carbon reduction measures. These findings were also reflected in the responses received when engaging on Haringey's draft Climate Change Action Plan.

Haringey's carbon reduction performance

Source of emissions data

The majority of data within this report is recorded by the Government Department for Business, Energy and Industrial Strategy (BEIS). Other data is sourced from the Council's Carbon Management team, local community groups and the London Data Store.

The data on local authority carbon emissions is from the 2018 carbon emissions statistics published in the summer of 2020 (UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2018, BEIS). Specifically, this report has relied on the subset dataset that focuses on emissions within the scope of local government control. Due to the complexity of the data collected by the government, there is always an approximately two-year delay from actual performance to publication.

In producing the data, BEIS has previously made some improvements to the methodology and collection of data from previous years. This means that there are some differences between the data in previous annual carbon reports. However, BEIS has revised the data from previous years to make it comparable and consistent.

Emissions trend 2005-2018

Haringey has been following a long-term downward trend in carbon emissions. Since 2005, total emissions in Haringey have decreased by 36.7%. This is equal to the decrease of emissions seen in our six neighbouring boroughs of Barnet, Camden, Enfield, Hackney, Islington and Waltham Forest. This is a greater reduction than the 33.8% decrease seen in the UK as a whole. This trend has been continued between 2017 and 2018 with Haringey's overall emissions falling by 1.1% from 662 kilotonnes (kt) to 655 kt of CO_2. This is a smaller move than the 6.1% decrease seen in the previous year. This decrease is also less than our six neighbouring boroughs which saw an average decrease of 1.8% in the 2017-18 period.

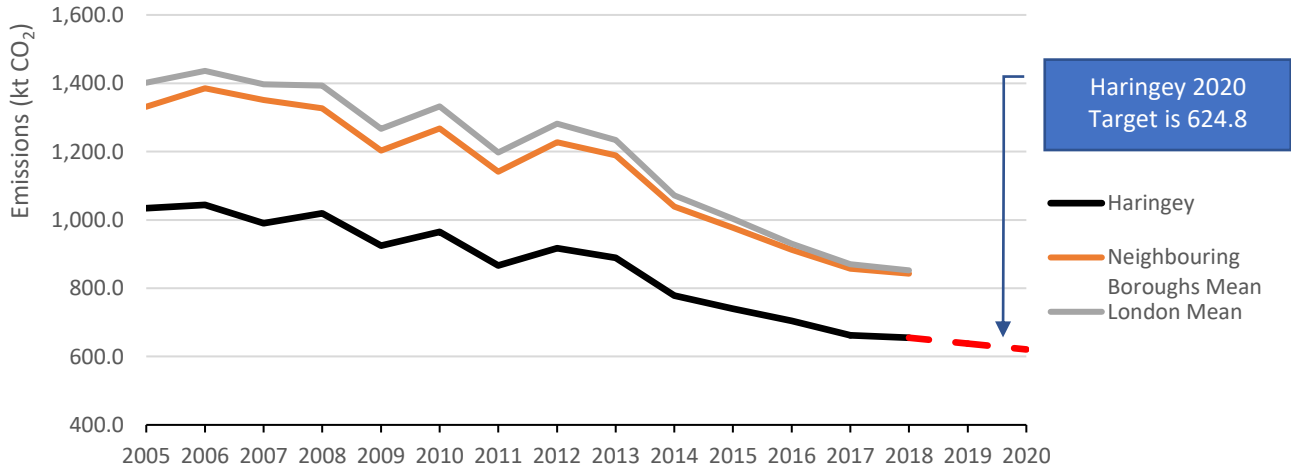


Figure 3: Graph showing the 2005 to 2018 end-user carbon dioxide emissions trend for Haringey compared to neighbouring borough's mean and the London mean. Haringey's emissions are

consistently lower than the mean emissions in neighbouring boroughs, with a generally downward trend from 1,034 $ktCO_2$ in 2005 to 655 $ktCO_2$ in 2018, working towards the 2020 target of 624.8 $ktCO_2$. Haringey's trend followed London's trend with slight year-on-year increases in emissions in 2008, 2010 and 2012, and a decrease in all other years (Source: BEIS data, 2018).

Figure 3 above illustrates this downward trend in emissions and that Haringey, its neighbouring boroughs and London as a whole all follow a similar path in emissions reduction. We can see that London as a whole has seen a slowing rate of decarbonisation in the 2017/18 period. It can be expected that reducing carbon emissions will become more challenging the closer we get to zero as the easy wins are likely to have already been made. In order to meet the 2020 target of a 40% reduction in emissions we need to see at least a 2.4% (15 $ktCO_2$) annual reduction leading up to 2020, this trajectory is plotted by the red dashed line. This is expected to be reported in the 2022 Carbon Report.

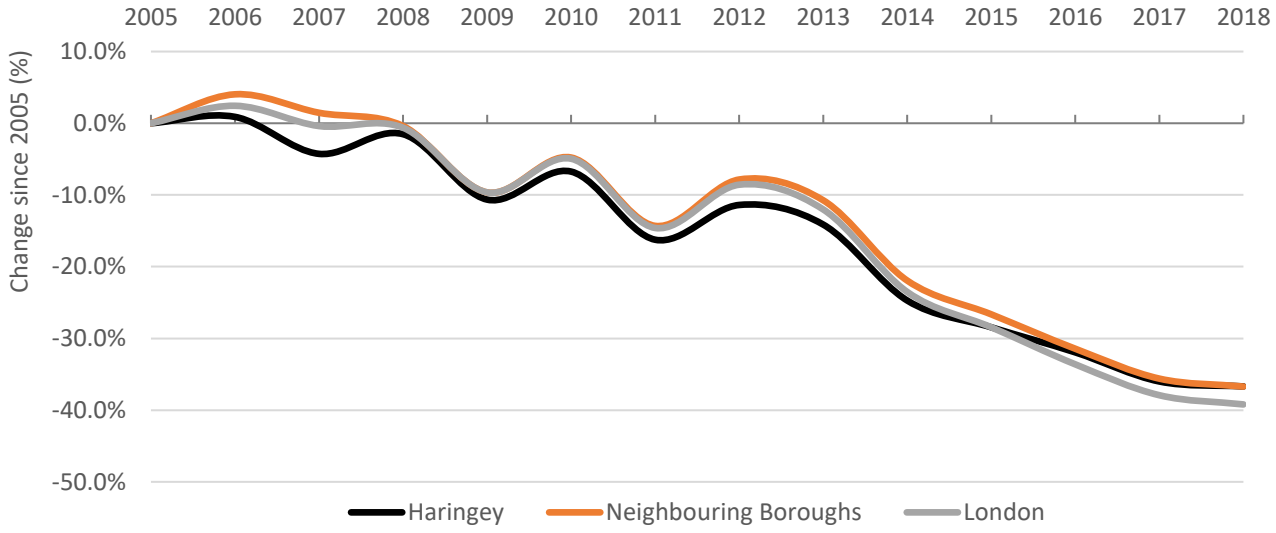


Figure 4: Graph showing percentage reduction in Haringey's CO_2 emissions since 2005, up to 2018 compared to neighbouring boroughs and London. The graph shows an initial increase of 0.9% in Haringey, compared to a London-wide increase of 2.4% and neighbouring borough mean increase of 4%. From 2007 there has only been a decrease in emissions relative to 2005, up to a 36.7% reduction in 2018. The graph also shows a year-on-year trend of increases and decreases in emissions respectively to the year before, which has been fairly consistently with the trends of neighbouring boroughs and London as a whole. (Source: BEIS data, 2018).

Figure 4 above demonstrates the percentage change since 2005 in carbon emissions. By comparing progress with neighbouring boroughs and London as a whole, it is possible to track how well we are doing relative to our neighbours. Haringey had been leading the way in reducing carbon emissions (in percentage terms) for London until 2015. Since then, Greater London has been catching up with Haringey's emissions savings. Again, we can see that the rate of decarbonisation has slowed down in the 2017-18 period.

Performance of 2018

The data shows that Haringey is continuing its downwards trend in carbon emissions and is projected to be able to achieve a 40% reduction in carbon emission by 2020 (when the data is published in 2022 due to the time lag). This would mean reaching 624.7 $ktCO_2$. In 2017, Haringey reduced its total emissions by 7.2 $ktCO_2$ to 655 $ktCO_2$. However, in order to realise the 40:20 target we need to have cut a further 15 $ktCO_2$ per year by 2020.

Haringey's next ambition, set out by the Climate Change Action Plan, is to reach net zero carbon emissions by 2041. In order to achieve this, we will need to see a 655 $ktCO_2$ reduction by 2041, averaging a reduction of 28 $ktCO_2$ per year. However, research by Arup (undertaken in support of the Climate Change Action Plan) showed that a steep decline of decarbonisation is necessary during the early stages of the decarbonisation route to 2041.

Local authority and regional emissions per capita

Since 2005, the level of per-capita emissions in Haringey has decreased by 46.7%, from 4.5 to 2.4 tCO_2 per person. This is a larger decrease than the 40.6% across the UK but is slightly lower than the Greater London average decrease of 48.4%. As demonstrated by Figure 5 Haringey has the third lowest per-capita emissions compared to our six neighbouring boroughs.

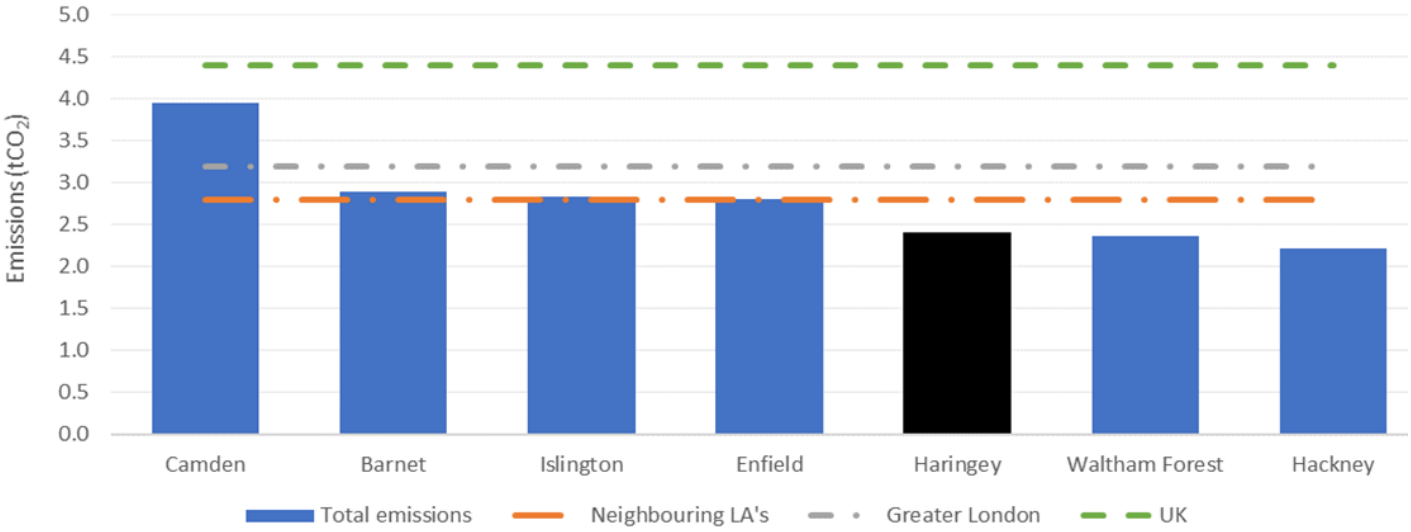


Figure 5: Graph showing carbon dioxide emissions per capita in 2018 for Haringey and neighbouring boroughs (tCO_2 per person): 3.9 tCO_2 in Camden; 2.9 tCO_2 in Barnet; 2.8 tCO_2 in Islington and Enfield; 2.4 tCO_2 in Haringey and Waltham Forest; and, 2.2 tCO_2 in Hackney. This compares to a per capita emissions figure of 3.2 tCO_2 in London and 4.4 tCO_2 in the UK (Source: BEIS data, 2018).

Between 2017 and 2018, per capita emissions in Haringey reduced by 0.8% (from 2.44 to 2.42 tCO_2). This reduction is less than the 2% recorded in the UK as a whole and the 3% decrease seen across Greater London. However, Haringey's per capita emissions are considerably lower than the London and UK average of 3.2 tCO_2 and 4.4 tCO_2, respectively.

This can be seen in Figure 5 where the green dotted line represents the UK average, and the grey dotted line represents Greater London. Crucially, achieving a higher percentage decrease from a lower base would be more difficult. Analysing per capita emissions is useful as it gives a consistent measure that is not affected by population change.

Figure 6 below shows us the total emissions of London boroughs, we can see here that Haringey is placed in the lowest category of tCO_2 per capita.

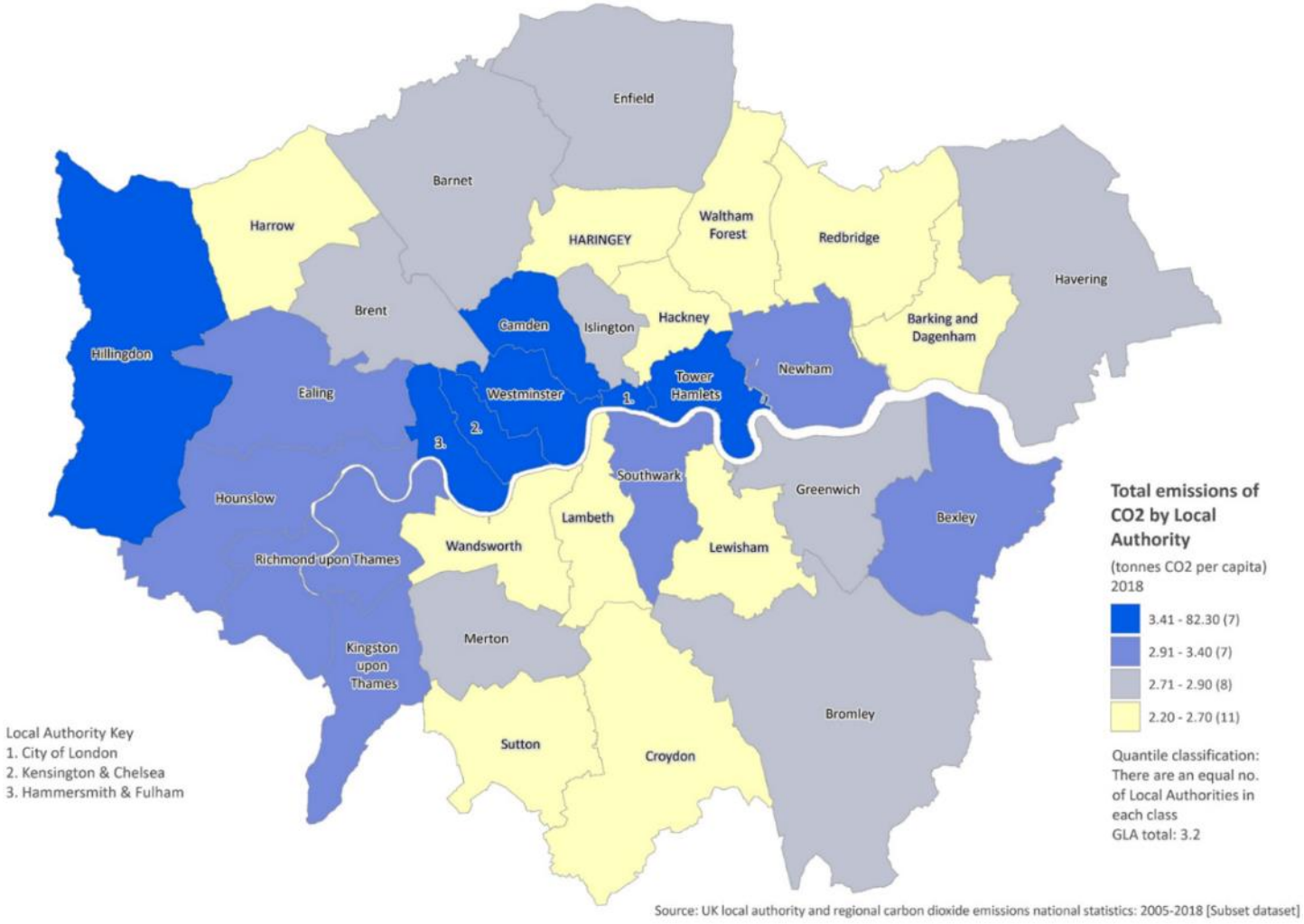


Figure 6: Map of London boroughs, demonstrating per-capita emissions by colour. Boroughs in light yellow (2.2 to 2.7 tCO_2) include Haringey, Hackney, Waltham Forest, Redbridge, Barking and Dagenham, Lewisham, Lambeth, Wandsworth, Croydon, Sutton and Harrow. Boroughs in grey (2.71 to 2.9 tCO_2) include Enfield, Barnet, Brent, Merton, Bromley, Greenwich and Havering. Boroughs in light blue (2.91 to 3.4 tCO_2) include Bexley, Newham, Southwark, Ealing, Hounslow, Richmond upon Thames and Kingston upon Thames. Boroughs in dark blue (3.41 to 82.3 tCO_2) include Hillingdon, Hammersmith and Fulham, Kensington and Chelsea, Westminster, Camden, City of London, and Tower Hamlets. City of London has, by far, the highest emissions per capita of 82.3 tCO_2, all remaining boroughs have emissions under 7.3 tCO_2 (Source: LBH).

Emissions by sector in 2018

In Haringey, the level of emissions for all three sectors (transport, industry and commercial, and residential) has decreased since 2005. The proportional contribution made by each of these sectors has not changed significantly in this time. Domestic emissions account for about half of the carbon emissions in Haringey whereas the industry and commercial sector and the transport sector account for about a quarter each (see Figure 7 below).

Sector emissions trends 2005-2017

Figure 7 below shows Haringey's emissions by sector. We can see that half of Haringey's emissions are accounted for by the domestic sector (50%), then the industry and commercial sector (27%) and transport (23%).

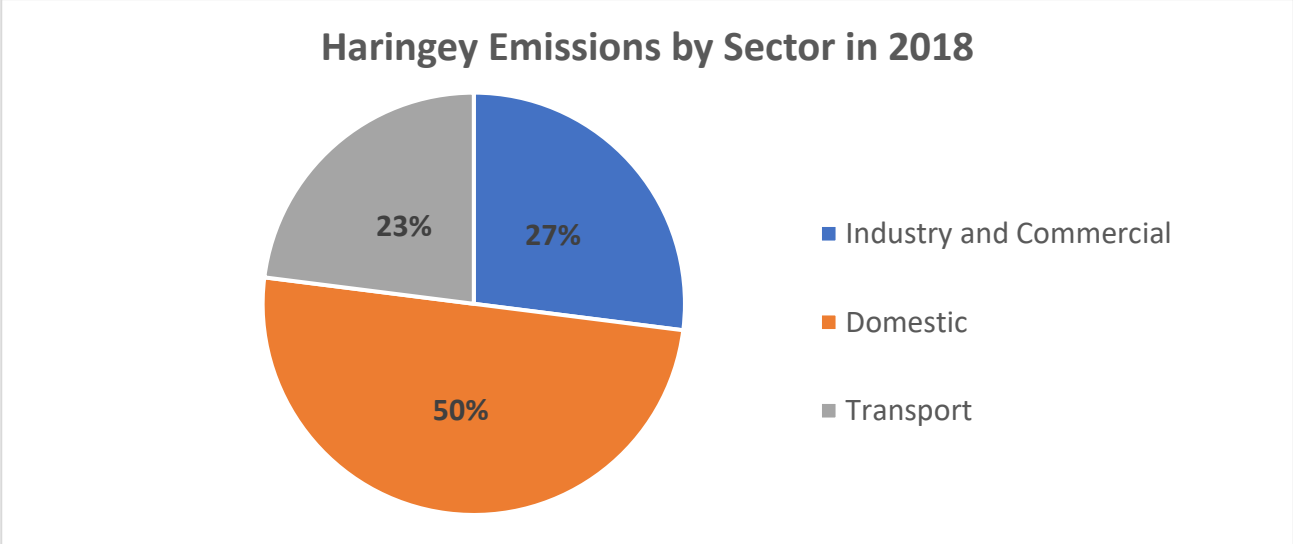


Figure 7: Pie chart showing Haringey's proportion of emissions by sector in 2018; 50% of emissions come from the domestic sector, 27% from the industry and commercial sector and 23% from the transport sector (Source: BEIS data, 2018).

Figure 8 below shows the reduction of emissions by sector in Haringey from 2005 to 2018. We can see that the domestic sector has seen the greatest reductions and the transport sector has had the smallest reduction in emissions.

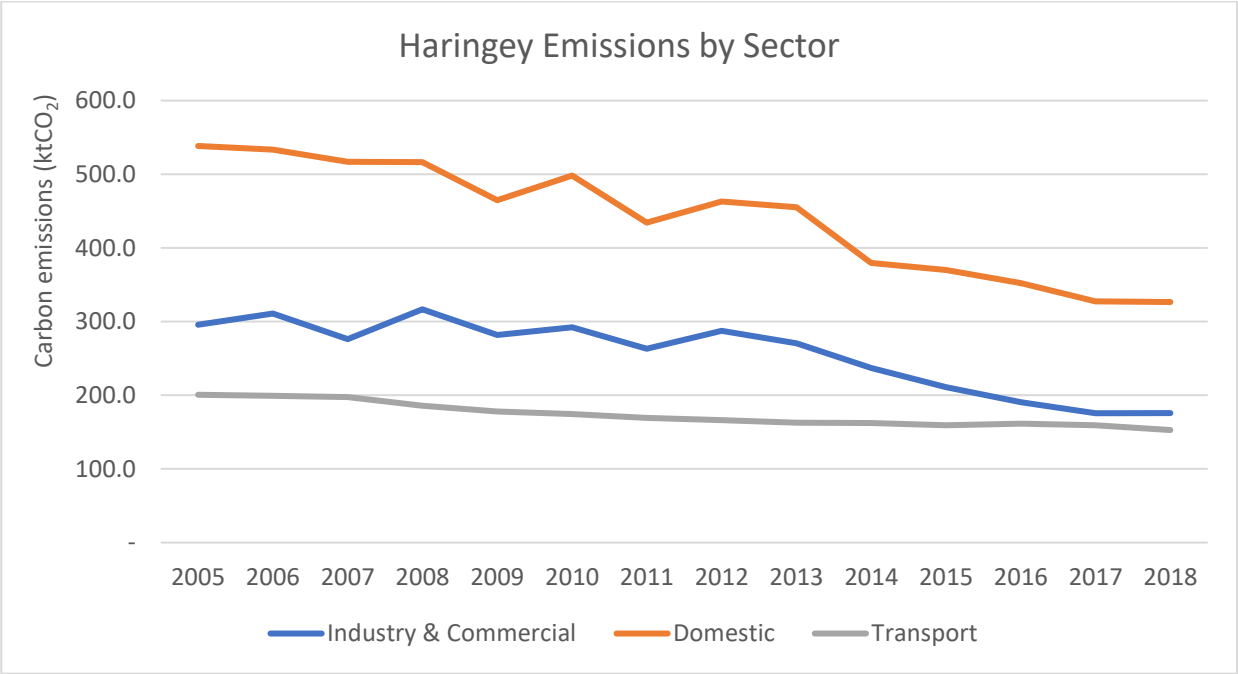


Figure 8 Graph showing the trend over time of Haringey's emissions by sector from 2005 to 2017; showing the industry and commercial, domestic, and transport sectors (Source: BEIS data, 2018). The transport sector showed a consistent, gradual decline from 200 $ktCO_2$ in 2005 to 153 $ktCO_2$ in 2018. The indudstry and commercial sector showed a more varied trend, from 296 to 176 $ktCO_2$ over the same period. The domestic sector trend also had increases and decreases, with emissions reducing overall from 538 to 327 $ktCO_2$.

Domestic sector

In 2018, Haringey's domestic sector emissions were 326.6 $ktCO_2$, which is 0.9 $ktCO_2$ less than the 2017 figure of 327.5 $ktCO_2$. This rate of decarbonisation in the domestic sector is in line with the greater London rate of decarbonisation in the domestic sector, but a smaller move than our neighbouring boroughs.

Since 2005, Haringey's domestic emissions have reduced by 39.3%. This is a greater reduction than the 36.8% move seen in Greater London and also greater than the move of 36.0% seen by our neighbouring boroughs.

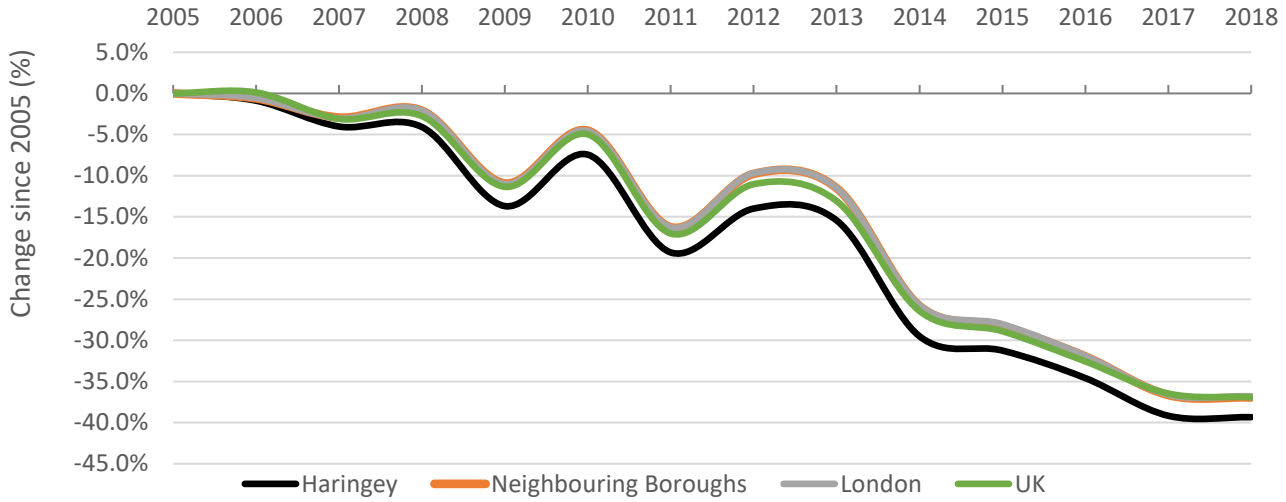


Figure 9: Graph showing the percentage reduction in domestic emissions from 2005 to 2018 in Haringey, neighbouring boroughs, London, and England, compared to 2005 emissions. Haringey's trend line consistently sits below the other trend lines, showing a larger percentage reduction in domestic emissions per year compared to neighbouring boroughs, London and the UK (Source: BEIS data, 2018).

Figure 9 above shows the downwards trend in domestic emissions from 2005 to 2018. We can see that Haringey, London and the UK are closely correlated, although Haringey has seen the greatest reduction in carbon emissions throughout this period in the domestic sector. Domestic carbon emissions have not reduced every year, in 2009 and 2011 we saw a significant rise. However, the long-term trend has continued downwards. This has been contributed towards by many factors including increasingly energy efficient homes, decreasing domestic demand with more efficient boilers, better insulation, more efficient appliances and more affordable LEDs. At the same time, the national grid has been decarbonising due to increasing supply of renewable electricity. This has reduced the average carbon footprint per unit of energy used by a home. Other influences on the changes have included the impact of the recession in 2008 and its aftermath, severe weather events and cultural changes may also play a part with more awareness of consumption habits and choices.

Industrial and commercial sector

The carbon emissions from Haringey's industrial and commercial sector did not change between 2017 and 2018, staying at 175.7 $ktCO_2$. In the same period, our neighbouring boroughs reduced emissions in the same sector by 1.4% from 1,839 $ktCO_2$ to 1,812 $ktCO_2$.

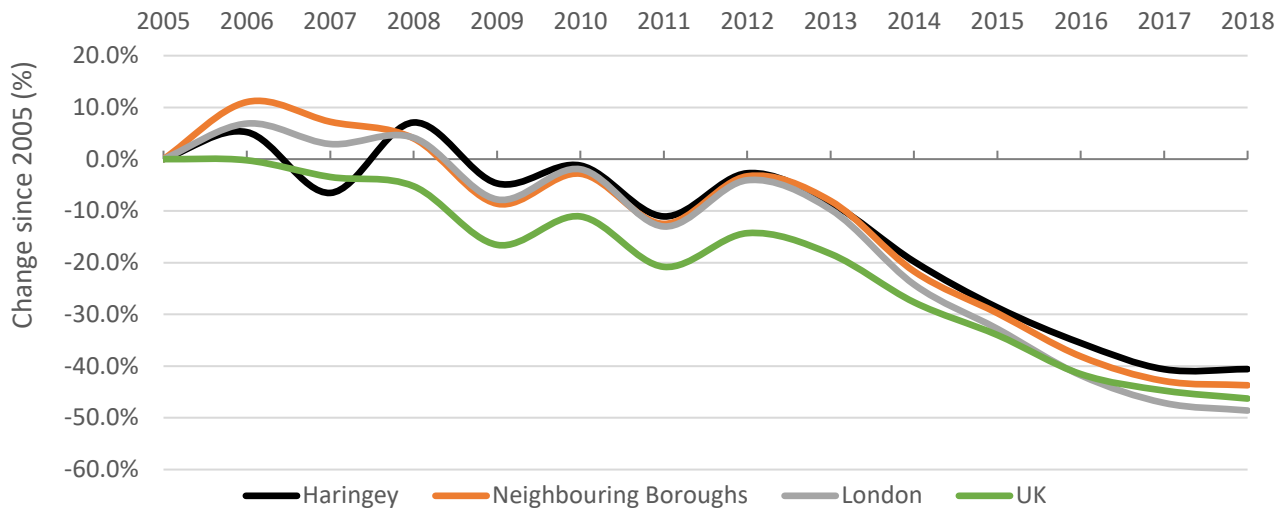


Figure 10: Graph showing the percentage reduction in industrial & commercial emissions from 2005 to 2018 in Haringey, London, UK and neighbouring boroughs, compared to 2005 emissions. While the UK saw a reduction in emissions from 2005 only, industrial and commercial emissions in London went above 2005 levels between 2005 and 2008. From 2009, emissions in London and Haringey show a similar trend of reducing emissions, although a slower reduction rate than the rest of the UK until 2016 (Source: BEIS data, 2018).

Figure 10 above shows the downwards trend in industrial & commercial emissions in the period of 2005-2018. Since 2012, Haringey, London and the UK have been on a constant downtrend. This could be due to a combination of increasing energy efficiency in industrial and commercial practices as well as the National Grid decarbonising leading to lower carbon emissions. Less reduction was noted in 2017, which could indicate that the rate of change may be slowing. This does not necessarily mean that the downwards trend in emissions is coming to an end, however it could be an indication that the easy wins have been made and perhaps the high emitting industries have already moved out the borough.

Transport sector

Emissions from transport in Haringey decreased by 3.9% between 2017 and 2018 from 159.1 $ktCO_2$ to 152.8 $ktCO_2$. This can be compared to the 4.3% reduction seen in our neighbouring boroughs and 3.6% seen in London as a whole. This is a much greater move than the 1.1% reduction seen in the UK, which can be seen rising over recent years. Furthermore, Haringey has cut 23.8% of its emissions from the transport sector since 2005 which is much greater than the 8.4% decrease seen in the UK and a slight edge over our neighbouring boroughs seeing a 21% reduction. This figure has been impacted by the London Emission Zone and the electrification of public transport.

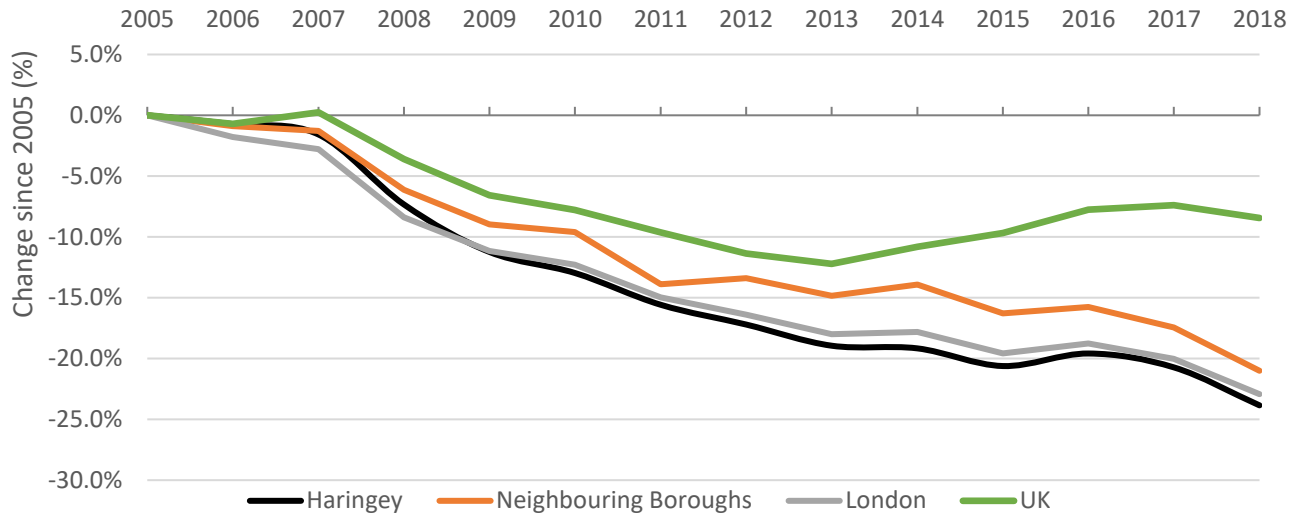
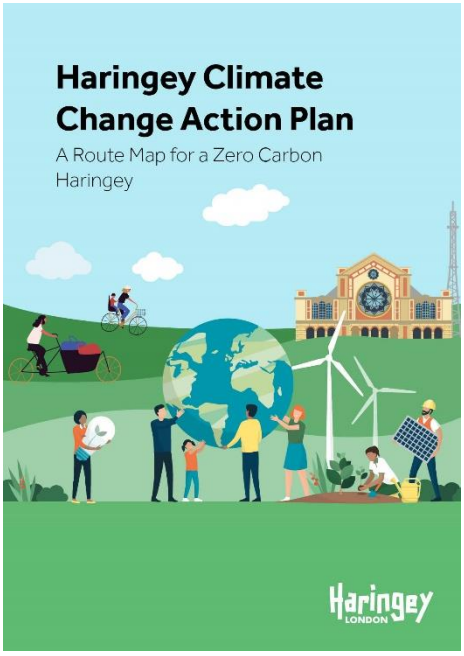


Figure 11: Graph showing the percentage reduction in transport emissions 2005-2018 in Haringey, London, UK and neighbouring boroughs. It shows Haringey's reduction transport emissions is closely aligned with emissions across London, although with a slightly higher reduction, and the trend line is consistently showing a stronger reduction than neighbouring boroughs. UK's transport emissions increased 2005 to 2007, after which it decreased but at a slower rate than London and started increasing again from 2013 to 2017 (Source: BEIS data, 2018).

Figure 11 above shows the downwards trend in transport emissions in the period of 2005 to 2018. This shows that the areas of Haringey and London as a whole have seen a steady decrease in transport emissions. This is in contrast to the transport emissions in the UK which have been steadily rising since 2013. This trend is most likely accelerated by the electrification of trains, cars and buses in the city, in combination with the decarbonisation of the National Grid. With the improvement of active travel infrastructure across London, there has also been an increase in walking and cycling in the city. A potential reduction in general car ownership and moderate increase in the use of private, commercial and shared electric vehicles may have also contributed to the reduction in London.

Climate Change Action Plan



Publication of the Draft Climate Change Action Plan

Following the declaration of a Climate Emergency in March 2019, the Council published the draft Climate Change Action Plan (CCAP) in March 2020 (the report cover image is shown on the right). The draft CCAP revised the borough's ambition for a Net Zero Carbon Borough from 2050 down to 2041. It also proposed the target to become a Net Zero Carbon Council by 2027. It is an ambitious plan that will require large-scale change to occur at the local and national level.

The CCAP is based on scientific evidence undertaken by energy consultants at Arup who helped revise the overall target and set out the trajectory and key measures to get to net zero carbon. The key reports include: the 2050 Carbon Route Map Report (June 2019) and the addendum report Climate Emergency Map to 2041 (November 2019). The evidence reports show that Haringey needs to implement *all* of the actions to achieve our carbon reduction goals to mitigate climate change.

The CCAP was developed together with key service areas in the Council, and along with key community groups such as the Haringey Climate Forum. We recognise that the majority of carbon emissions are not within our control, and we rely on big changes at regional and national level. The plan, therefore, sets out the key lobbying asks to the Mayor of London and the UK Government.

As a 2021 update, the CCAP was adopted in March 2021 at Cabinet.

Key objectives of Climate Change Action Plan

The Action Plan proposes to reduce emissions in six key areas, with an overall objective for each of the six areas and several sub-objectives and actions to achieve the sub-objectives and overall targets. The key objectives by area are (adopted version):

- Council emissions: objective to reduce the operative carbon footprint of the Council to net zero by 2027;
- Housing emissions: objective to achieve Energy Performance Certificate (EPC) B on average in all domestic buildings by 2041;
- Business/workplace emissions: objective to achieve an EPC B on average in all in non-domestic buildings by 2041 and reduce business-related carbon emissions;
- Transport emissions: objective to reduce 50% of transport-related emissions by 2025, growing public and active travel options, low-carbon transport and infrastructure;

- Energy generation: objective to connect around 12,000 homes to low-carbon heat sources and generate 13 GW of renewable energy locally;
- Community emissions: objective to actively liaise with and support stakeholder organisations to reduce carbon emissions and promote further reduction.

Community engagement

In October 2020, the engagement period for the CCAP was launched with an external web platform designed to be user friendly and address COVID-19 restrictions. The engagement period took place over two and a half months, until 4 January 2021. People were encouraged to provide feedback about the CCAP different sections that feature in the plan: housing, workplaces, transport, energy, community and the Council. Information was provided about sustainability community groups, and why aspects such as biodiversity, and waste and consumption has not been included in the draft Action Plan. A borough map was also made available for people to pinpoint any existing or forthcoming low-carbon projects, to understand what resources may be required to support these.

In November, the Carbon Reduction Priority Tool was launched to supplement the webpages. This interactive simulator was designed to give people a set budget of 450-500 points and ask people to spend their points on a range of carbon reduction projects as set out in the CCAP. This would help plan for short- and medium-term priorities for reducing emissions.

Further engagement took place with community groups and during virtual engagement sessions organised for the Local Plan First Steps engagement period. Two surveys were also set up for the Haringey Citizen's Panel and with the Youth Advisory Board (with the same or similar questions to the external web platform questions).

Key projects delivered in 2020

Ultra-Low Emission Vehicle Action Plan

The final Ultra-Low Emission Vehicle Action Plan is now available online, after going out for consultation in early 2019 and changes being made following this consultation. The Action Plan sets the vision and objectives to deliver Haringey's ultra-low emission vehicle network for the next 10 years. The plan is aimed to facilitate the transition towards an ultra-low emission Haringey through providing infrastructure, education and advice to improve local air quality and deliver our climate change ambitions. This will be achieved by the following actions:

- Increasing public awareness of ultra-low emission vehicles, their benefits and charging technologies;
- Leading by example and moving the council fleet to an all-ultra-low emission fleet by 2030;
- Collaborating to ensure that all commercial fleets operating in the borough use only ultra-low emissions vehicles by 2040;
- Developing an electric vehicle charging network in line with expected demand;
- Leading in innovation for carbon-friendly and cost-efficient charging technology.

Buying green electricity for the Council

After being agreed by Cabinet in November 2019, on 1 April 2020 Haringey Council entered into new energy contracts led by the London Energy Project through a framework provided by LASER, a public sector buying organisation. The Council now has a 100% renewable energy contract with Npower meaning that all the electricity purchased for council buildings and schools that purchase through the Council's contract is backed by Renewable Energy Guarantees Origin (REGO) certification.

Automatic Meters (AMR) upgrades

Haringey Council's new electricity supplier Npower was originally expected to upgrade all of the Council's manually read electricity meters with automatic meters (AMR) by the end of 2020. However, due to lockdown restrictions in the summer of 2020, this date has been pushed back to 30 June 2021. Approximately 1,000 electricity meters across the Council's corporate, housing and schools portfolio are expected to be upgraded from manual to automatic meters. AMR send actual readings automatically to the supplier, ensuring accurate billing each month. One of the advantages of AMR is much more accurate data that will better enable the Council to identify areas and buildings for energy efficiency improvements. It also allows much easier measurement and verification of any energy efficiency measures put in place.

Solar PV generation

Haringey Council manages 38 photovoltaic (PV) solar systems operating in the borough, mounted on the roofs of schools, housing and corporate buildings. In 2019/20 these arrays generated 381,953 kWh of electricity, saving our schools, housing and cooperate sites £45k on electricity bills and generating Feed in Tariff income to be spent on maintenance and further energy efficiency projects.

Street lighting

The Council continues to upgrade its street lights to LEDs. In 2019/20, 715 streetlights were upgraded to LEDs. This has resulted in a reduction in demand for electricity as LED lights are more energy efficient. As a result, the Council's unmetered supply (which covers passive and dynamic street lighting, CCTV and pedestrian lighting) has seen an energy reduction of 58% since 2014/15, from 6,839,800 kWh to 2,879,881 kWh in 2020/21. This has translated into the equivalent reduction of 80% in carbon emissions over the same period, from 3.65 $ktCO_2$ to 0.72 $ktCO_2$.

LED lights give off less heat than the old metal halide and high-pressure sodium light bulbs. They also last longer, requiring less maintenance. This saves money in electricity and maintenance costs. The lights are also whiter which lights up the streets better than the old, warm lights. Furthermore, as the national grid becomes less carbon intensive, the carbon emissions factor of our streetlighting is decreasing significantly. Haringey Council plans to continue upgrading street lights until they are all LEDs.

Tree Planting

Every winter, between November and April, the Council undertakes a tree planting programme. The number of planted trees and their location is dependent on the funding secured and any criteria attached to it. In 2020/21, we have planted 163 new street trees, 26 in parks sites and 89 in housing estates, which gives a total of 278.

Our priorities are to ensure replacement trees are planted for those that we remove from streets, parks and housing estates. We are also aiming to plant trees in new locations especially in wards with low existing tree canopy cover and in areas where there are high levels of air pollution.

Figure 12: Haringey's Mayor, Cllr Jogee, helping plant a new street tree in Rathcoole Gardens, N8. This photo shows Cllr Jogee planting one of the 163 new street trees in the 2020/21 planting season.

A new Tree & Woodland Plan for Haringey is currently being drafted which will include more details of the tree planting policy for the next 15 years.

Haringey Affordable Energy Strategy

After public consultation, Haringey's Affordable Energy Strategy was approved by Cabinet in July 2020. The strategy sets a vision:

To reduce the number of households struggling to afford to adequately power their homes and improve the health and wellbeing of residents by:

1) Improving the energy efficiency of housing and reducing overheating risks;
2) Connecting residents to support services and initiatives to overcome the many causes of energy vulnerability, such as energy prices, low incomes and unemployment.

This vision will be delivered by the following objectives:

1) Increase the number of struggling households receiving energy advice and expand the support available to create a people-centred solution;
2) Improve housing energy performance to reduce fuel poverty, cold homes and overheating;
3) Maximise the funding and resources secured within Haringey to alleviate energy vulnerability.

The strategy recognises fuel poverty or 'energy vulnerability' goes beyond cold homes and related health effects. We are seeing stronger evidence that the ability to adequately power household appliances, lighting and communication equipment can impact academic attainment, digital inclusion, access to employment opportunities and increase social isolation. It also recognises that in a changing climate, there is a need to keep homes cool during periods of high temperatures as well as warm in winter.

To support this work, the Council agreed to use £520,000 to deliver these measures and use this funding to match fund with government and energy company grants.

Ecofurb

Haringey partnered with Parity Projects and Lewisham Council in a project to encourage the uptake of energy efficiency measures in the able-to-pay market. This project is funded by BEIS. The scheme "Ecofurb London" was launched in August 2020.

Ecofurb aims to take the uncertainty and hassle away from homeowners planning an energy efficiency renovation through an end-to-end service, to:

1) Advise on which improvements will have the biggest impact on the energy efficiency;
2) Help plan these together with any other works being carrying out;
3) Get quotes from vetted local contractors;

4) And provide specification, quality assurance and sign off.

This approach meets government standards, and recommendations are based on each home rather than being generic advice. Residents are able to apply for the government's Green Homes Grant and can use Ecofurb for impartial advice on how to achieve the biggest carbon and fuel savings. Ecofurb London allows residents to use their Plan Builder facility free of charge to map out the effect and cost of installing energy efficiency measures in the home. If users would then like to carry out the works Ecofurb London can help plan the project and receive quotes from three vetted local installers.

Visit the Ecofurb website to find out more or to use Plan Builder.

Council emissions

Haringey Council is the borough's largest employer, and with many buildings, a large vehicle fleet and wide array of services being provided, it is a significant source of non-domestic emissions. Haringey Council has continued to successfully decrease its total corporate footprint, seeing a reduction of 512 tCO_2 between 2018-19 and 2019-20. This is a further 8% reduction since the previous year. From the baseline level of 12,840 tCO_2 in 2014-15, there has been a 55% reduction in annual emissions, totalling 5,742 tCO_2 in 2019-20. These figures represent the Council's total consumption across all the Council's corporate and non-domestic properties within the housing portfolio.

The Council wishes to lead by example in Haringey's efforts to tackle climate change and being the largest employer in the borough means that we are well placed to make a significant impact.

Pension investment in the Low Carbon Emerging Equity Fund

The London Borough of Haringey Pension Fund is the 'seed investor' in a MSCI Emerging Markets Low Carbon Target Index Fund managed by Legal & General Investment Management (LGIM). This was taken following a review and investment advice from Mercer. This low carbon fund aims to reduce exposure to carbon emissions of these investments by an estimated 73% compared to the fund's previous emerging market investments.

Haringey Pension Fund has around £1.4bn in assets under management, £0.1bn of which was previously invested in an emerging market equity fund. This entire amount will transfer into the low carbon fund. The decision to invest in the low carbon fund was made after the committee held several strategic meetings throughout 2019 to consider the best options to continue to invest in Emerging Markets Equity but reduce exposure to carbon emissions and fossil fuels.

This decision was driven by the belief that climate change and significant investments in fossil fuels present a long-term financial risk to the pension fund. This investment, in combination with the fund's existing holding in the MSCI World Low Carbon Target Index, represents approximately 26% of the fund's investments (with the remainder invested in a wide range of assets).

The pension fund's allocation to funds which focus on reducing exposure to carbon emissions is not the only strand to the fund's environmental social and corporate governance (ESG) policy. The fund has previously committed to invest around 5% of the fund (£70m), in renewable energy infrastructure, which the fund believes will deliver the required returns for the fund, and also make a meaningful and impactful contribution to positive environmental practices.

Energy efficiency in council homes

Homes for Haringey and Haringey's Carbon Management Team have been developing a detailed retrofit strategy and plan to deliver the challenging ambition within the Climate Change Action Plan to retrofit the Council's housing stock to an average SAP B by 2035. In recognition of this target and having declared a Climate Emergency, the Housing Revenue Account (HRA) Business Plan (2020/21-2025), approved by Cabinet on 11 February 2020, included provision for £101m to deliver carbon reduction in the housing stock over 10 years.

The Council and Homes for Haringey have been working with Parity Project's housing stock assessment tool, Portfolio. This tool and database helps with the design and implementation of strategic retrofit programmes on the Council's housing stock. The tool integrates information from Energy Performance Certificates, HfH property information and maintenance programmes, which has made the information more reliable. Portfolio helps develop retrofit strategies at different scales, e.g., at borough, neighbourhood or building scale. Different targets can be modelled based on energy demand or emissions levels, generating information on what retrofit measures would be required to meet a target.

Energiesprong pilot project

As part of the retrofit strategy, the Council is investigating the possibility of piloting an Energiesprong project in 2021. The aim of an Energiesprong retrofit is to deliver a home that is net zero energy, meaning it generates the total amount of energy required for its heating, hot water and electrical appliances. It takes a whole-house retrofit approach and provides superior indoor comfort. This can be achieved by using new technologies such as prefabricated facades, insulated rooftops with integrated solar panels, smart heating, and ventilation and cooling installations. A refurbishment comes with a long-year performance warranty on both the indoor climate and the energy performance.

Council housebuilding

The Council has stated an ambition to be on site to deliver a thousand new Council homes at council rents by May 2022. These are high-quality homes in communities where residents are proud to live. The Council wants these homes to be truly affordable – affordable not only to rent – but, by ensuring the homes are affordable to run. The Climate Change Action Plan's objective is for this portfolio to be net zero carbon on average.

Schemes delivered by the Council will be built to the highest standard possible within site and budget constraints, with a target of achieving zero carbon on site. For example, some individual schemes will aim to design to Passive House standards – which are some of the most exacting energy efficiency standards in the world.

Zero carbon council housing – Edith Road project

Planning permission was granted in July 2020 for eight new zero carbon homes at a former car park/garage site on Edith Road, Bounds Green (reference: HGY/2020/0589; Figures 13 and 14). Haringey Council will provide 100% affordable homes for rent at the proposed site. Taking a fabric-first approach to reducing energy demand, all remaining regulated operational energy will be produced at the proposed site with air source heat pumps and rooftop solar PV panels. The development will be 'carbon positive', achieving a 104% reduction in regulated emissions from a Building Regulations compliant notional building. This is a first for Haringey. The Edith Road scheme represents a collaboration between a local authority, architect and sustainability consultancy to deliver zero carbon affordable homes on small infill sites in urban locations.

Figure 13: A computer generated image (CGI) of the proposed scheme from Springfield Community Park. This is an image of the proposed new residential building of three to four storeys to show it in its environment on the corner of Park Road and Edith Road (Source: NLA).

The scheme has also been thoroughly tested to reduce overheating risk both now and in the future, improving its resilience. The rollout of this model across London has the potential to meet housing need, improve access to housing and reduce climate impacts. A thorough monitoring of the overheating has assessed the risk and provided for mitigation approach for current weather conditions and predicted climate change.

Figure 14: A CGI of the proposed roof plan of the Edith Road development. This is a top town view of the development, showing solar panels on top of the living roofs, as well as a garden and food growing area at the ground floor (Source: planning application ref. HGY/2020/0589).

Decentralised Energy Networks (DEN)

District Energy Networks (DENs) facilitate greener, more affordable and more reliable heat than conventional heating systems. DENs use a system of buried pipes to connect buildings' heating systems. The resulting large heating systems cover a wide area and have a large heat load. DENs enable consumers to use heat technologies which only work at scale.

Amongst the many potential benefits are:

1) More affordable and more secure locally produced energy for Haringey residents which is also greener, making a significant contribution to the Council's carbon budget;
2) Investing in infrastructure to support jobs, local apprentices and skills development and future place-making in Tottenham;
3) Delivering wider social benefits as the Council can set energy tariffs for residents which can reduce exposure to high and volatile fossil fuel prices, while also managing debt with understanding and access to wider support networks;
4) Making a contribution to the Council's revenue budget. The Affordable Energy Strategy proposes that this revenue is ringfenced for environmental initiatives and improvements.

Existing DENs

The largest DEN is currently at the Broadwater Farm Estate and supplies around 850 residents and a school with heating and hot water. The boiler room is shown in Figure 15. The estate is subject to a large regeneration project which has included the installation of new central plant, Heat Interface Units (HIUs) and metering systems within apartments. The site's refurbishment has included the installation of an additional 1MW of boiler capacity and

a full overhaul of the site's existing boilers. Further development is planned for the estate taking the number of connected dwellings to circa 1,200 homes.

Figure 15: Broadwater Farm boiler location – new and refurbished boilers and pipework. This photo shows the red boilers and their pipework in the newly referbished boiler house.

DENs under development

The wider DEN programme has continued to gain pace with the business case and grant funding submissions. The DEN programme plans to deliver heat to more than 10,000 homes across three Heat Network Hubs and the existing scheme at Broadwater Farm. These hubs will eventually connect to an Energy from Waste Plant (EfW) in Edmonton via a primary interconnector pipe. The route is shown in Figure 16 below.

The three hubs include:

- **Tottenham Hale** – New build scheme with back up and top up boiler house connecting around 12 development sites with a (circa 2,000 dwellings) full build out by 2024;
- **Wood Green** – New build scheme with back up and top up boiler house connecting around 6 development sites (circa 2,000 dwellings) full build out by 2025;
- **North Tottenham** – Core scheme is a new build single site with 2,500 homes. Expected start on site in 2021 with completion by 2027.

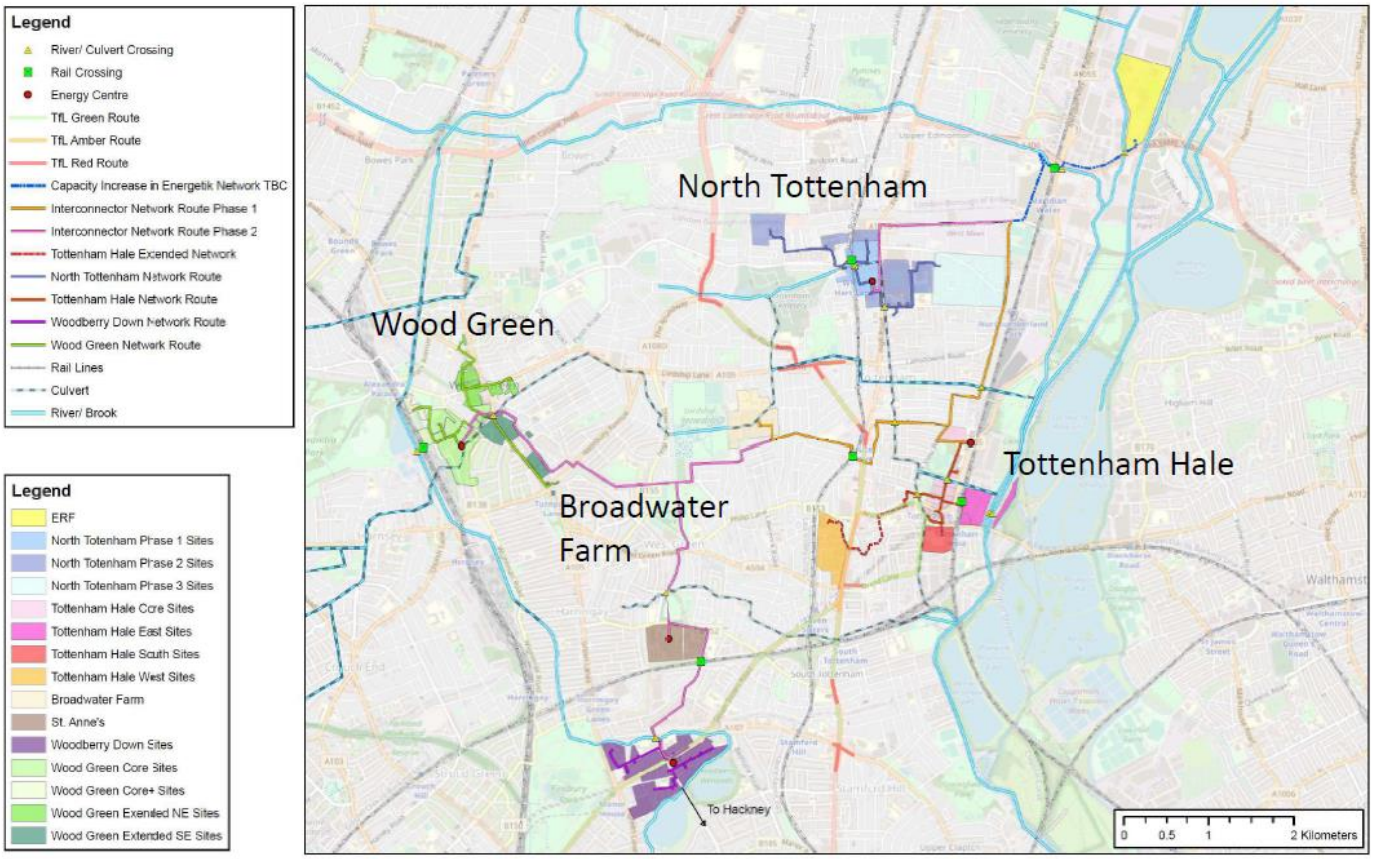


Figure 16: Haringey's proposed indicative decentralised energy network map. This image shows the proposed decentralised heat network on a map of Haringey, with a legend to show the different used colours for pipework routes, crossings, Energy from Waste plant location, and energy centres in each DEN area and an indication of which sites are expected to connect to the four DEN areas of North Tottenham, Tottenham Hale, Wood Green, Broadwater Farm and the Hackney Woodberry Down area.

The planned new Heat Network Hubs are being progressed through planning, and some blocks have started on site. These hubs will be delivered through a mix of council-built (HRA) and private developer-led development sites, which will then be adopted by the Council.

As these Heat Network Hubs expand, the wider DEN programme seeks to connect them to a centralised heat source supplied by Edmonton EfW. This will establish a long-term supply of low-carbon heat for the borough and also provide further opportunity for connection to the St Ann's and the Hackney Woodberry Down development.

Current work

The Carbon Management Team currently manages the DEN programme with the long-term vision being the establishment of a council-owned District Energy Provider which was approved by Cabinet in January 2017.

At present the team are working to procure a long-term operations and maintenance (O&M) contractor for the DEN programme by Q1 2022. The team is also working with multiple departments and stakeholders, including Procurement, Legal, Housing Management, HfH, etc., to drive the project deliverables.

Public Sector Decarbonisation Scheme

In September 2020, the Government, along with Salix finance, announced the Public Sector Decarbonisation Scheme. This offered a total of £1bn worth of grants to the public sector to fund decarbonisation of heat projects. Haringey Council applied for the bid and was able to secure £2.45 million to go towards refurbishment works on eight schools in the borough: Bruce Grove, Campsbourne, Chestnuts, Highgate & Blanche Neville, Lordship Lane, Seven Sisters, Stroud Green, West Green. The retrofit measures will mainly include glazing and building fabric upgrades. Five schools (Hornsey School for Girls, Crowland Primary school, Coleridge Primary school, Welbourne Primary School, Lea Valley School) were also successful in a bid for LED lighting upgrades which will be carried out by Energies Group with oversight from the Corporate Landlord Team.

Waste

The Council continues to provide comprehensive recycling services to all households, that meet the requirements of the Mayor of London's Environment Strategy, as set out in our Reduction and Recycling Plan.

In 2019/20 we reused, recycled or composted 25,072 tonnes of waste, up from 24,258 tonnes in the previous year, and delivering a household recycling rate of 30.14%. Of the waste that is not recycled (the 'residual' waste left over), the average annual amount per household was 528 kg.

During the past year, the Council and our waste contractor, Veolia, have partnered with the Mayor of London's advisory body, Resource London, and national campaigning body, *Keep Britain Tidy,* to test different ways of improving the amount and quality of recycling collected from homes. Through these and other workstreams we reduced the level of 'contamination' of recycling (when the wrong items are deposited in recycling bins) by around 12% (over 400 tonnes) on the previous year.

North London Waste Authority (NLWA) is the statutory body responsible for disposal or treatment of waste from Haringey and six other constituent north London boroughs. As part of NLWA, we have reduced waste to landfill to around 5% of total residual waste, down from 8% the previous year. Furthermore, we know that Haringey's waste to landfill is lower than the north London average as we deliver directly to the NLWA's Edmonton EcoPark Energy from Waste facility rather than regional transfer stations. By using energy from waste for the majority of our residual waste, we are saving the equivalent of 140,000 tCO_2 every year across north London, compared with disposing to landfill. This is equivalent to taking 60,000 cars off the road each year and is in addition to the carbon savings from recycling and reuse.

In partnership with the NLWA, the second year of the North London Waste Prevention Plan 2018-20 was delivered, with an estimated 10,000 tonnes of waste avoided per year across the north London area. The plan consists of direct engagement with residents and businesses, social media campaigns and the promotion of schemes such as Low Plastic

Zones, Love Food Hate Waste and Real Nappies for London. The NLWA's full annual report is available on the NLWA website.

The Council, together with both NLWA and Veolia, provide grants to community projects that support sustainable use of resources, including waste minimisation, reuse and composting.

Haringey Veolia's Recycling Fund for Communities awards up to £2,000 to successful projects. Three projects have recently received funding including Beautiful Bruce Grove group, for dog mess signs designed by local schoolchildren and made using plastic waste found on local streets; the annual Green Chestnuts Eco Urban Life Festival; and for a Go Green Schools and Green Spaces event with schools in Tottenham and Wood Green.

Plastic Free Policy

In September 2020, Haringey Council passed its Single Use Plastics Policy and Action Plan which sets out how the Council intends to reduce the consumption of single use plastics (SUPs) both within the organisation and across the borough. The policy set out the reasons for this decision and the supporting evidence, such as the fact that 8m tonnes of plastic ends up in the world's oceans on an annual basis. The main objectives of the policy include a focus on the Council's operations, a desire to work with partners such as schools and the NLWA, and using the Council's position in the local economy and community to impact change. To make sure that these objectives were backed up with strong action, the Council also developed two action plans: one focussing on SUPs at the Council and one focussing on SUPs across the borough. These action plans set out time-limited and specific interventions that will enable the objectives of the policy to be achieved. Action to be implemented includes changes to procurement activity with a focus on sustainability, no longer providing SUP cups in council offices, and replacing the use of SUPs in Penalty Charge Notices.

Energy efficiency

Local Energy Advice Programme (LEAP): an energy and money saving service

LEAP provides a free service for Homes for Haringey residents that can help residents save money and keep their homes warm. In the past year LEAP has continued to work with residents in Haringey, although fewer works have gone ahead and many site visits have been cancelled due to coronavirus restrictions.

Figure 19 shows that Haringey has seen the highest number of referrals compared to Brent and Enfield. Advice calls and home visits to Haringey residents were made between September and December 2020; between three and nine calls took place per month and between one and three visits took place during this period as well.

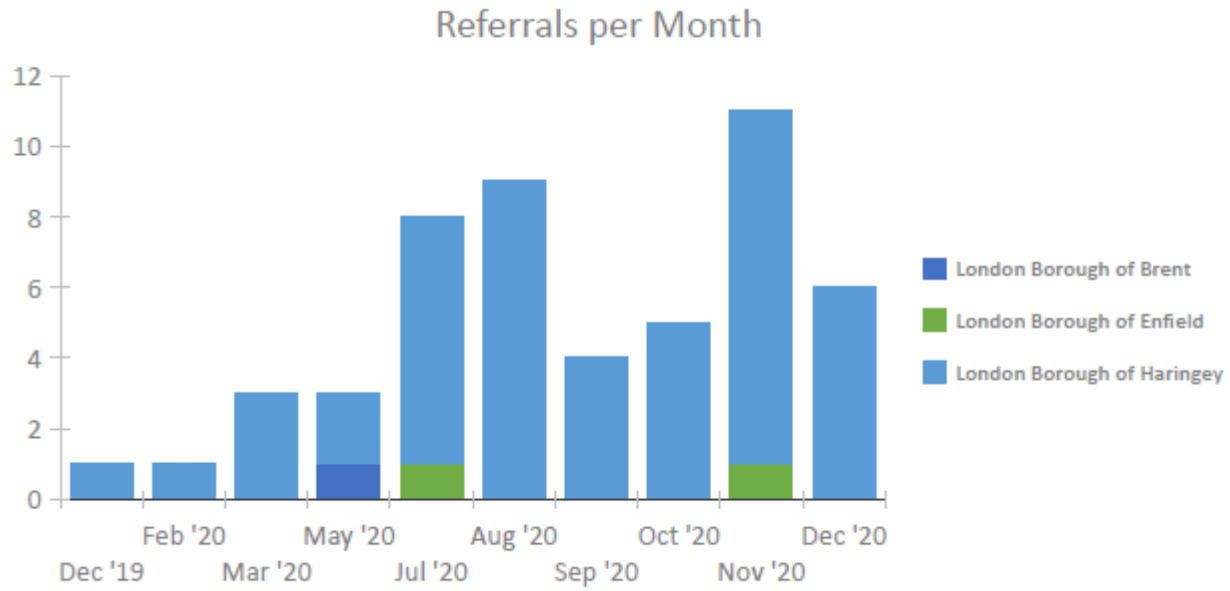


Figure 19: Bar chart showing the number of LEAP referrals per month for London Boroughs of Haringey (light blue), Enfield (green) and Brent (dark blue) in 2020. The number of referrals per month in Haringey were: one in December 2019 and February, three in March, two in May, seven in July, nine in August, four in September, five in October, 10 in November and six in December 2020 (Source: LEAP Summary Management Report, 2020).

As a result of easy energy saving measures installed, residents have saved an estimated total to date of £18,760.44 in energy bills. Such measures have included fitting of door brushes, draughtproofing of doors and windows, LED light bulbs, letterbox brush, and reflectors fitted behind radiators.

SHINE London

Haringey's partner Seasonal Health Intervention Network (SHINE London) provide struggling homeowners, private-renting tenants and residents with free energy advice. They offer a dedicated helpline to ensure households get the help they need to reduce utility bills, tackle

energy debt and ultimately stay well and warm. SHINE is a single point of referral bringing together dozens of schemes to support residents who are struggling to heat their home. The Council has been working to increase the visibility of this service by engaging with local community groups to create a referral network. There has been a 200% increase in the number of residents accessing the service this year. Over the last year, 303 residents were supported, and of these:

- 147 were included on the priority services register;
- 99 were put forward for the Warm Homes discount, amounting to total savings of £13,860;
- 113 received an Energy Doctor visit to their home Energy Doctors focus on physical and behavioural changes which can reduce energy usage and costs.

The Energy Doctor can review energy bills, check heating controls, and fit energy efficient measures. The measures which may be provided as part of the home visit are as follows:

- Draught proofing doors and windows;
- Reflective radiator panels;
- LED light bulbs;
- Standby saver devices;
- Secondary glazing film;
- Hot water tank jackets;
- Electricity use monitors;
- Thermometer cards;
- Chimney balloons;
- Water saving pack.

In total these visits were calculated to save residents £16,385 and 110.590 tCO_2.

Shine can be contacted by telephone (0300 555 0195), email (contact@shine-london.org.uk), or online.

Public Voice

Public Voice won a bid from Power Partners in Autumn 2019 to build energy resilience among Haringey residents by providing energy advice, practical support, signposting and outreach services. The focus is to reach people who are living in fuel poverty, vulnerable clients, those on low incomes, seldom heard/hard to reach groups and people living in high levels of deprivation. The Public Voice team consists of:

- **Reach and Connect** – Eight Community Connectors based in all 19 Haringey wards providing brief interventions, home visits, energy advice, income and benefit maximisation and encouraging behavioural change on energy usage;
- **Social Prescribers** – Nine Social Prescribers based in GP surgeries across Haringey who provide signposting on energy advice and benefits maximisation;

- Haringey Advice Partnership - Run energy advice workshops and provide energy advice.

In March 2020, Public Voice held its annual Advice Day with the Information, Advice and Guidance Network. Energy advice was a key theme, with Green Doctors and Shine and members of the IAG Network. A total 76 Haringey residents attended the day. Numbers were lower than expected due to the pandemic.

Between August and September 2020, four energy advice and savings workshops were held online, which were attended by 28 Haringey residents.

Community Connectors and Social Prescribers have worked with Haringey residents through brief intervention support, assisting with benefit applications, referrals to energy advice services, grant applications for emergency aid, to achieve energy efficiency savings, behavioural change and health and wellbeing improvement. The Community Connectors team provide energy advice themselves, refer clients to LEAP and SHINE and place clients on the Fuel Poverty Register when required. We have been working to inform people who are in fuel poverty to be aware of the savings that can be made.

Air pollution and Transport

Haringey Air Quality Action Plan 2019-2024

The full version of Haringey's Air Quality Action Plan 2019-24 is now available on the Council's website. The final version was published in January 2020, after it was agreed by Cabinet in November 2019. The plan aims to improve air quality in the borough to make the borough a better place to live and work. The report recognises that air quality affects everyone living and working in the borough. The plan outlines 25 specific actions to be taken, their expected timescale and estimated price range.

The seven broad topics that the report focuses on are:

1) Monitoring and other core statutory duties;
2) Emissions from developments and buildings;
3) Public health and awareness raising;
4) Delivery servicing and freight;
5) Borough fleet actions;
6) Localised solutions which seek to improve the environment of neighbourhoods through a combination of measures;
7) Leaner transport.

The Borough's Annual Air Quality performance and pollution levels are set out here.

Haringey School Streets programme

After a successful launch of the Lordship Lane School Street in 2019, the Council has committed to an action plan to deliver a programme of 20 additional School Streets in 2021. In 2020, the first new school street was launched at Chestnuts Primary School.

A school street is where the street outside of a school is closed to motor traffic during the drop-off and pick-up times. The goal is to improve road safety, accessibility and air quality in the area and promote more sustainable forms of travel to and from school. School streets also provide more space outside the school for people to follow social distancing guidelines. Since November 2020, the selected schools have been working with the Council to finalise the plans.

Clean Air Villages Project

Clean Air Villages 3 (CAV3) is a one-year, Defra-funded project led by the City of Westminster in collaboration with 12 London boroughs and four Business Improvement Districts, running from April 2020 to March 2021. The aim is to improve the air quality in 16 different London 'villages', where both air pollution and population density levels are high. The targets of the project included finding a local solution to air pollution, run eight meetings

with local businesses, hold interactive online LiveShare events (cross-borough), develop tools, monitor air quality, develop a Clean Air Route, and promote electric vehicles.

The Seven Sisters Junction was chosen as the Air Quality Focus Area for Haringey, with a focus on businesses located on West Green Road and Bruce Grove. The area was expanded to include Bruce Grove during the project due to initial low take up in the original area.

Market research was undertaken to understand the types of businesses in the area, footfall into the area and expand the business directory with businesses that use low- or zero-emission delivery methods. A business survey was then prepared to start engagement from July, with a focus on 20 businesses. From this, 11 businesses responded and attended eight one-to-one meetings. Reaching out to businesses took longer than expected due to reduced staff working during the pandemic and by not being able to engage face to face.

The targets achieved so far on the project are:

- Completed eight one-to-one meetings with local businesses;
- Completed 13 out of 16 LiveShares and developing of toolkits;
- Expansion of the CAV directory for Haringey.

Five businesses successfully signed up to the cargo bike trial with Zedify. Feedback noted during conversations with other businesses included a hesitation to set up an independent delivery system using cargo bikes because of their lack of capacity at present to process orders themselves and therefore rely on third parties to do this.

Short-term impact of lockdown on emissions

In July 2020, following the March 2020 Covid-19 Lockdown, air pollution was significantly and noticeably lower in the United Kingdom. In London, road traffic was approximately 75% lower during this period and nitrogen dioxide levels reduced by around 35% relative to January 2020 (Source: GLA). As the vast majority of vehicles are powered by fossil fuels, it is expected this will be visible in the transport-related emissions for 2020 when this is published in 2022. A change in work pattern for many residents across Haringey may also show higher levels of domestic emissions compared to industrial and commercial emissions.

Figure 18: The Air Traffic above Europe on 7th March 2020 compared to 7th April 2020; the images on the top (previous page) and bottom show a map of Europe with yellow dots representing a snapshot of the location of flights that were taken. This shows a densely populated map of yellow dots on the top (March 2020) compared to the map on the bottom (April 2020), showing a difference in air traffic over Europe before and during the first lockdown in 2020 (Source: Flighttracker24).

Figure 18 shows the significant reduction in air traffic following Covid-19 restrictions. The reduction in air pollution was noticable on the ground.

Coroner ruling on air pollution

In December 2020, Philip Barlow, the inner South London coroner, ruled that Ella Kissi-Debrah's death in February 2013 was caused by acute respiratory failure, severe asthma and air pollution exposure. The coroner said the failure to reduce pollution levels to legal limits contributed to her death. This is the first time that air pollution has been ruled as a cause of death. The Mayor of London, Sadiq Khan, said the coroner's conclusion was a "landmark moment" and called pollution a "public health crisis".

This case will likely impact future designs of roads and neighbourhoods within London with the aim to significantly reduce air pollution through a reduction in vehicle traffic. Depending on how holistically such road re-designs may be, this reduction in vehicle use may translate into lower vehicle trips overall, lower car ownership and an increase in active travel via and across air pollution hot spots in Haringey and beyond.

Haringey Streetspace Plan

Haringey has been working in partnership with residents, stakeholders, the Mayor of London, Transport for London (TfL) and the Department for Transport (DfT) on a transport and highways response to the COVID-19 crisis to enable social distancing in our town centres and outside our schools, providing new cycleways and introducing low traffic

neighbourhoods. This has helped encourage active and safe travel at a time when public transport was not operating at full capacity.

The Council was awarded funding from TfL as part of the London Streetspace Plan fund and £100k for every borough from DfT in June 2020 for projects in a range of categories across the borough (Figure 17):

1. Pavement Widening – to enable social distancing in town centres, on approaches to stations, outside schools etc.;
2. Temporary Cycleways – to improve the cycle network;
3. Low Traffic Neighbourhoods – to protect neighbourhoods from rat running, traffic, air pollution and road danger;
4. School Streets – to enable social distancing, tackling air pollution and providing safer walking and cycling routes to schools.

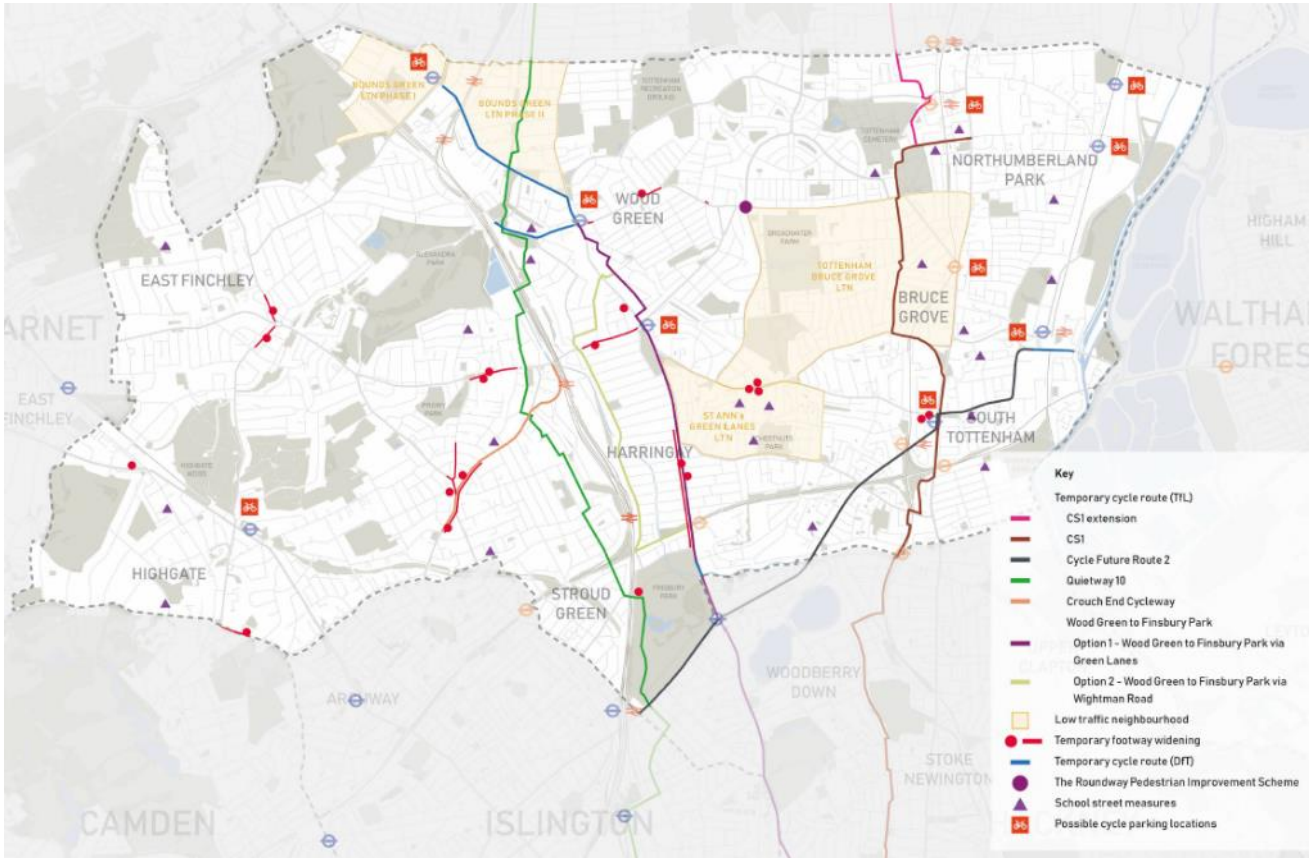


Figure 17 Map of Streetspace Plan for Haringey Council; this Map shows the proposed locations of the projects. These include: temporary footway widening for social distancing, temporary cycle routes, new cycleways, pedestrian improvement schemes, cycle parking locations, low traffic neighbourhoods, and School Streets (Source: Haringey, 2020).

Further information is available on Haringey's Streetspace Plan webpage.

Wood Green Neighbourhood of the Future

The Wood Green Neighbourhood of the Future project aims to increase the uptake of electric vehicles. This is achieved through the installation of EV infrastructure, development of policy and engagement activities. Despite the impact of Covid-19, different engagement initiatives have taken place.

A total of 611 residents and businesses have downloaded the Clean Car app. The app has been available to download for free until February 2021. By using this app, users can record car/van journeys for two to four weeks. The system then creates a tailored report, which sets out whether you are suitable for a switch from a petrol/diesel vehicle to an electric vehicle and how much money could be saved. With more people turning to their car rather than using public transport due to the pandemic, it provides timely and bespoke information about switching to an electric vehicle, particularly ahead of the extension of the ULEZ charge to include Haringey from October 2021.

A webinar was held in conjunction with the Energy Saving Trust which offered an introduction to low emission vehicles. Following this event, the Energy Saving Trust has developed a series of information sheets which are available on the Council's website.

A suite of planning guidance documents are now available on the Council's website to aid the delivery of electric vehicle charging points. The notes cover aspects such as what the right technology for you could be, the associated costs, best practice design and ongoing maintenance. There are specific documents for businesses, developments, highways engineers and residents.

Due to Covid-19, electric vehicle trials had to be suspended. However, the vehicles were put to good use delivering food parcels as part of the Council's emergency response during the first lockdown in 2020 (Figure 20).

Figure 20: Temporary food hub in Tottenham Hotspur Stadium, using electric vans to deliver food parcels for households in need; the photograph shows crates of vegetables in the foreground and volunteers standing of the Food Hub in front of one of Haringey's electric vans.

Electric vehicle charging points

So far, we have a total of 54 public EV points in operation in the borough. This year we have been in the process of installing 25 lamp columns and consulted on a possible introduction of additional 37 EV points to be operated by Blue point London. The aim is to increase the number of EV points to increase to 116 by the end of 2021.

Figure 21: Photograph showing the new 7KW electric vehicle charging point on Landlock Road, Hornsey, with the charging point located between parking bays on a residential street.

The installation of six standard 7kW charging points, with dual socket for charging 12 EVs, was postponed from the 2019/2020 implementation programme due to Covid-19 and instead implemented in July 2020. These are also part of the Polar network and managed by BP Chargemaster. The points are located in:

- Down Hills Park Road, N17 – Two standard 7kW points with dual sockets and 4 bays;
- Ewart Grove, N22 – One standard 7kW points with dual sockets and 2 bays;
- Henningham Road, N17 – One standard 7kW point with dual sockets and 2 bays;
- Landrock Road, N8 – One standard 7kW point with dual sockets and 2 bays;
- Princes Avenue, N10 – One standard 7kW with dual sockets and 2 bays.

A further standard 7kW lamp column charging points were postponed. At present we are in the process of installing these.

Consultation took place on the introduction of a further 19 standard 7kW chargers for 38 electric vehicles at 11 locations in the borough. These will be managed by BluePoint London. We are in the process of preparing a report on the outcome of the consultation. If approved, we expect to introduce them in the summer of 2021.

Marsh Lane facility

The Marsh Lane waste management vehicle facility was approved in 2019 and is being delivered. The planning approval reference for this application is HGY/2019/1278. The facility will include a battery storage section, eight ultra-fast electric vehicle charging stations (50 kW), and 12 fast electric vehicle charging stations (22 kW).

Controlled Parking Zones (CPZs)

So far this year the Council has introduced one new CPZ, along with two extensions of existing CPZs. Currently we are in the initial stages of delivering an amalgamation of two small CPZ areas to provide better community-based parking opportunities along with increased resections to protect residents on event days. Alongside this work, we are in the final approval stage to deliver two further CPZs which will be completed and live by the end of the financial year 2020/21. An initial consultation on the introduction of CPZ controls into an existing event day CPZ area has been completed, and the Council will be initiating two further consultations for new CPZ's, and two review consultations for existing CPZs in early 2021.

These zones reduce commuter parking and vehicles traveling into the borough by creating a financial disincentive against driving. The aim is to encourage lower vehicle ownership and the use of sustainable forms of transport.

Parking permits and charges

An increase of £10 will apply to the cost of parking permits all annual parking permit charge bands following the review of parking charges and in line with the associated statutory consultation. This may discourage some drivers to keep their car or change their travel behaviour, with a potential reduction in transport-related emissions as a result.

Smarter travel

Five/Ten-Minute Walk Zones

Where schools highlight a problem with parents parking near their schools, want to improve air pollution levels, and improve the health and wellbeing of pupils and families, the Council has been working with these schools to create a five- and ten-minute walk zone. By working with a group of pupils to map a suitable area around the school, the Smarter Travel Team produce and distribute this map to every family. This makes it easy for people to see how quickly they can walk to the school from nearby areas and helps to discourage people driving short distances or driving up to the entrance of schools. So far, the Council has worked with 30 schools to develop their five- and ten-minute walk zones and then promote the map, its purpose and key messages to parents and carers (an example shown in Figure 22 below).

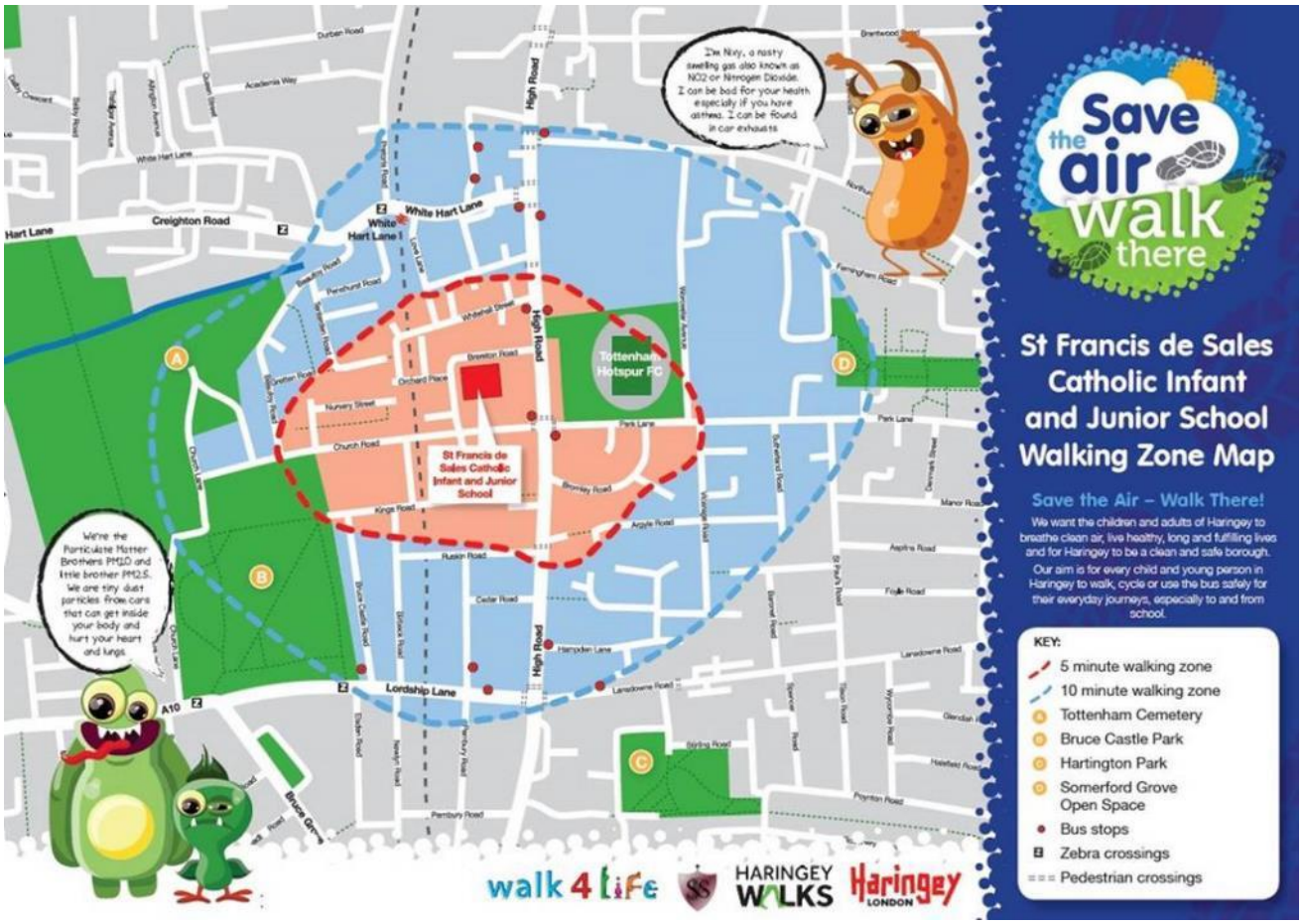


Figure 22: Example of a five/ten-minute walk zone for St Francis de Sales Catholic Infant and Junior School. The image shows a map of the Tottenham Hotspur and Tottenham High Road area, branding of the 'Save the air walk there' campaign, a key on the bottom right, and annotations on the map to highlight the 5-minute walking zone (red area with a red dotted line), 10-minute walking zone (blue area with a blue dotted line), the school location and key landmarks.

STARS (Sustainable Travel: Active, Responsible, Safe)

STARS is TfL's accredited travel planning scheme for London schools and nurseries. It encourages modal shift to more sustainable transport. Schools monitor active travel through surveys and evidence of activities relating to Road Safety and active travel. Accreditation is graded on a gold, silver and bronze scale based on the level of engagement and the number of road safety, walking, scooting and cycling activities undertaken. Schools are encouraged to list their travel issues, which aids Transportation Planning and Highways Teams with the future plans and adds evidence to support bids for funding.

There are 65 Haringey Schools with STARS travel plans: 40 gold, 10 silver and 15 bronze awards. The Smarter Travel Team offers free support to all engaged borough schools, to encourage behaviour change and achieve modal shift away from motorised vehicles.

During the period of 2019 to 2021, TfL rolled over the achievements of 2019 to 2020, so no changes in achievements can be reported for 2020. Schools have continued engaging with the STARS programme, although the programme was challenging for schools due to the pandemic. It is estimated around ten schools may not keep their accreditation, but this is due to be confirmed at the end of the school year in 2021. Despite the challenges, the programme was continued in 2020. This included:

- Woodside High: continuing cycle training, maintenance lessons, route planning
- Ferry Lane Primary: parents learning to ride (particularly in the ethnic minority community), introduction of cycling at break times to encourage confidence in non-cyclists.

Community projects

Yes Outdoors

Yes Outdoors is a charity that delivers a series of bicycle maintenance projects to 60 disadvantaged young people. During the workshops, the young people learn to restore an abandoned bicycle that has been donated by the Metropolitan Police which becomes theirs to keep upon successful completion. Participants learn skills to keep the bicycle well maintained, including replacing wheels and chains, mending punctures and replacing brakes and gears.

Participants are either homeless, in supported housing in Haringey, or they are referred from various organisations, including the Metropolitan Police Youth Offending Teams, Social Services, Youth Outreach Workers or the Behaviour Managers from local secondary schools in Islington and Camden. There are places available for young people who are not in education, employment or training (NEET) as well as young people who have been identified as being at risk of criminality or joining a gang.

The project is delivered by volunteer mentors who are trained bicycle mechanics. There is a mentoring element to the project to prevent young people becoming involved in criminality and joining a gang. The Bicycle Maintenance Project also aims to promote a love of cycling in the young people, which will help to keep them physically fit and active as part of a healthy lifestyle.

Case study

A male participant of the Bicycle Maintenance project shared with us that the bicycle he has renovated has enabled him to visit family members who live further afield. In the past, the cost of rail fares had prevented him from visiting some of his relatives. He has now made several visits to Brixton on his cycle. He also said that he is feeling much fitter as a result.

Haringey Play Association

The Haringey Play Association (HarPA) aims to support children from low-income families. HarPA is based in the Somerford Grove Adventure Playground. The Somerford Grovers Bike project supports young people and their families who can use cycling as a cheap form of transport and leisure while helping increase cycle safety and maintenance skills.

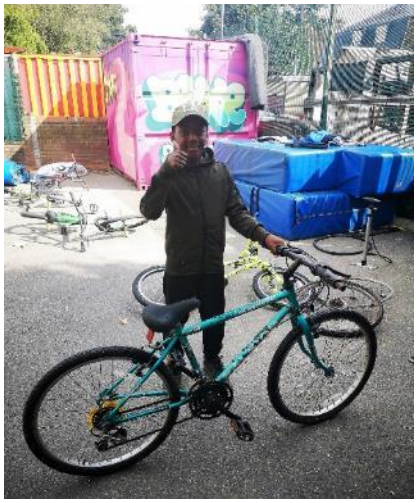


Figure 23: Photograph showing LB, a boy, smiling with his bike and with his thumb up, in the playground.

Case study

LB is a ten-year-old boy (Figure 23 above) who has wished he had a bike since coming to the playground. He has helped fix other children's bikes and has a keen interest in bike

maintenance. HarPA were able to provide him with a bike frame and parts so that he built his own bike with under supervision of the project's volunteers and staff. LB presents with challenging behaviour that often leads him into conflicts on the playground. He's from a single parent family with financial restrictions that making owning a bike impossible. Working with the bike club has helped him keep focus and now owns a bike so he rides to school saving bus fares for the family.

Living Under One Sun

The Tottenham-based community organisation and charity, Living Under One Sun, was set up recently in Down Lane Park (logo shown on the right). LUOS has access to a refurbished community hub, community garden and allotments. The organisation has been supporting the community by reducing waste recycling and upcycling, hosting discussion forums, creating local paid jobs, supporting training and qualifications, and volunteering. LUOS is very supportive of Haringey's initiatives, particularly on collective switching, behaviour change and walking and cycling. They have done outreach research, set up cycling and walking clubs and groups for the past years, and run local food growing and biodiversity campaigns and programmes with schools and the community. Many of LUOS' activities have also had to take place online or with social distancing restrictions during the pandemic. The LUOS Cycling Club has continued to be organised on Saturdays at the hub.

Haringey Climate Forum

The Haringey Climate Forum (logo shown on the right) has been focused on the development of the Haringey Climate Change Action Plan, holding a number of meetings looking at climate issues around the Council's council homes building programme, the Homes for Haringey retrofit programme, and transport.

HCF encouraged the Council to raise its zero-carbon offset levy. It encouraged responses to the government's consultation on planning policy. Proposed increases in parking charges for more polluting vehicles were also discussed. HCF encouraged the Council to keep up its climate action during lockdown and subsequent restrictions and welcomed the use of electric vehicles for emergency food distribution.

HCF has been particularly keen to see the roll-out of walking and cycling measures, as short-term needs during the pandemic but wish to see longer term measures, to minimise the return to car use and consequent congestion and pollution.

In September 2020 HCF launched a new website, transferring the content from the Haringey 40:20 website but adding more news and events, and aspects of the revised Climate Change Action Plan to encourage responses during the engagement period.

Markfield Project

Markfield is a community centre for disabled and autistic people and their families, based in Markfield Park (logo shown on the right). Markfield have been funded to provide travel training walks and tube orienteering sessions.

There are children, adult, and youth sessions at Markfield, and their active travel funding provides travel training for three people, who are learning to come to Markfield using buses and walking, rather than being dropped off by parents of using the minibus. This is a great combination of learning independence skills while cutting carbon emissions. It also provides a level of discussion about why this is greener and healthier for those who come to Markfield.

As an example, a group planned a shopping trip to buy materials for an activity. The whole group, some of whom have physical as well as learning difficulties, planned a journey, researching which buses to take and where to cross the road. Using public transport for many of Markfield's service users is quite new, many only travel to the day centre and other social groups using minibuses so it opens up a whole new world of interaction, awareness and opportunity. It's a very important part of what Markfield does and staff are very committed to a greener future for us all.

Muswell Hill Sustainability Group

Muswell Hill Sustainability Group's (MHSG, logo shown on the right) annual 'Green Open Homes' event in autumn could not take place in 2020 due to the pandemic. The eight eco-furbished properties showcased across Haringey in November 2019 was the last opportunity for 'live' inspiration before moving to mainly virtual communication during Covid-19. A YouTube channel was set up to upload two video tours of retrofitted homes, an Edwardian three-storey house and a 1980s eco house. Videos of MHSG's online events that took place in 2020 were also uploaded, on green homes technologies and the Green Homes Grant.

Work with local schools developed, with MHSG's two-hour workshop on 'Taking climate action in your school' for Highgate, Muswell Hill and Crouch End heads and senior leaders was attended by 14 schools. MHSG supplied a series of five climate change lessons for parents to share with their children during lockdown. MHSG also organised an Earth Day poster competition and a 'green' Christmas assembly.

MHSG responded to consultation on the Haringey Climate Action Plan, helping to encourage further responses. The Group is an active member of Haringey Climate Forum.

EN10ergy

This year, MHSG's sister community energy company En10ergy (logo shown on the right) generated 94,000 kWh of electricity from solar installations at three Muswell Hill sites: Marks & Spencer, the Methodist Church and Fortismere School, plus Woodside School in Tottenham. The four sites together saved around 30 tCO_2 during the year.

EN10ergy has been awarded a grant of £15,000 from the GLA's London Community Energy Fund to examine the feasibility of two projects for Muswell Hill: a combined solar energy and rainwater harvesting installation in the car park behind Marks & Spencer's Muswell Hill shop, and a solar powered battery-charging, water-refill and information point in Saint James's Square.

Wolves Lane

The Wolves Lane Consortium, made up of the Ubele Initiative, Crop Drop and OrganicLea community organisations, have a vision for the site to develop a thriving community food and nature connection project with opportunities for community collaboration and involvement in education, enterprise and health and wellbeing activities.

Figure 24: Photograph showing a view of the sun shining onto the glasshouses at the Wolves Lane Centre, framed by trees on either side of the photograph.

The project's aims are to:

- grow and distribute sustainably produced food to local residents and businesses
- promote healthy eating and sustainable lifestyles
- engage a wide range of people in learning and skills activities
- deliver health and wellbeing benefits to the local community
- offer space and support for community groups and social enterprises to run activities that benefit the community

In 2020, funding has been secured bring the greenhouse space back into use, green the site, establish a wildflower and fruit tree nursery, support skills development of seed saving and propagating. The funding is also supporting the Black Rootz, BAME-led growers initiative to run volunteering and community activities for local people to get involved in gardening. The GLA Good Growth Fund allocated around £500,000 in March to deliver the first phase of the masterplan (see below).

The planning application for Wolves Lane has been developed during the year, with the aim to bring forward a sustainable development. The masterplan seeks to phase the works (Figure 25):

- Phase 1 community hall – to deliver a flexible public events/community building which connects people with the outdoor and indoor growing spaces, allowing reallocation of glasshouses currently used for this purpose.
- Phase 2 multi-use buildings – to replace current highly dilapidated portacabins and sheds with insulated and fit-for-purpose new classroom, office and education facilities and a new warehouse and production facility. These buildings will facilitate community learning, community hires and operational activities.
- Phase 3 refurbishment and infrastructure – to refurbish the existing building, develop additional infrastructure, extend the solar PV array, introduce rainwater storage and enhance landscaping.

During the pandemic, Wolves Lane has also set up the COVID-19 meal project and increased food production at the centre to donate additional produce to the meal project. The Food for All project has helped deliver to locally grown food to schools, senior homes, local elderly and vulnerable residents.

Figure 25: CGI of an aerial view of the Wolves Lane masterplan proposal, showing vegetation around the outline of the site with the road running along the top of the image, rows of differently coloured glasshouses, and on the right, three smaller buildings and a larger building intended to accommodate the new uses with landscaping in between (Source: Wolves Lane Centre).