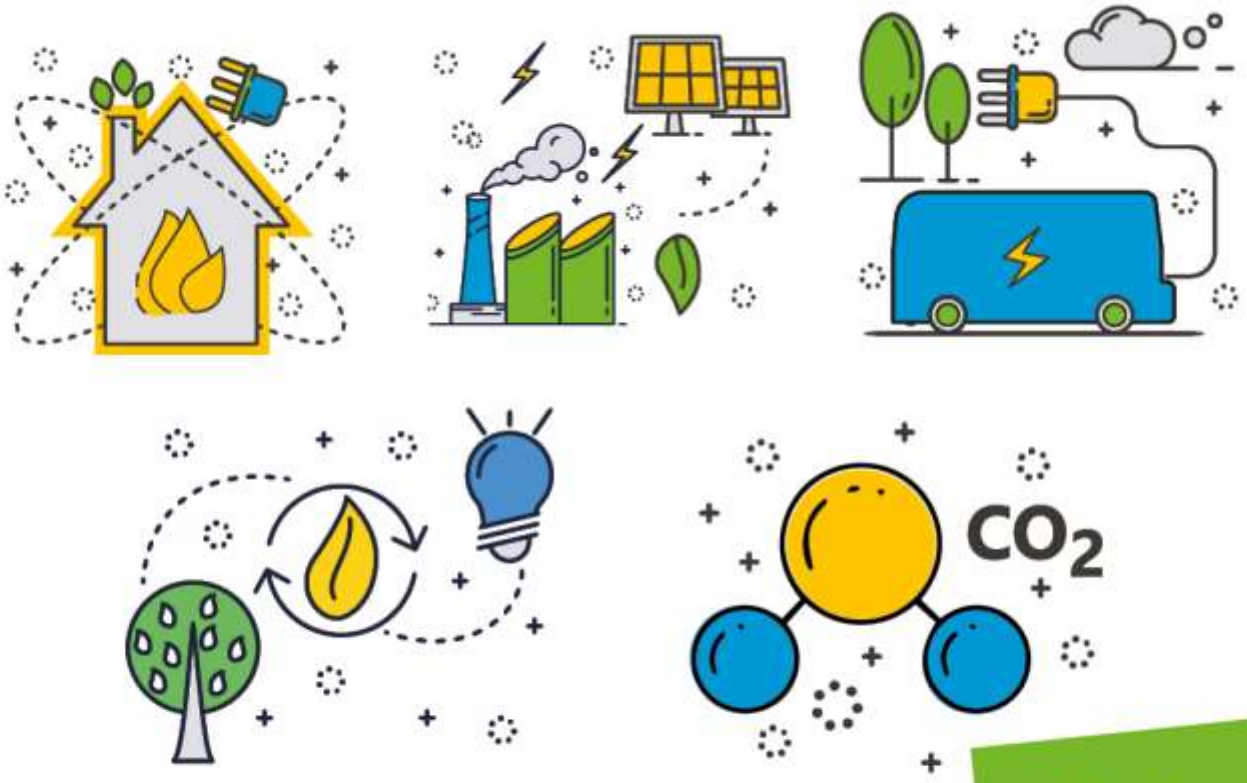
NETZEROHARINGEY 2041

ANNUAL CARBON REPORT

2021



Haringey LONDON

1. Foreword

There is no Planet B. By declaring a Climate Emergency we were stating clearly the critical importance and urgency of the actions we need to take to tackle the looming environmental catastrophe. In publishing the Climate Change Action Plan we were outlining the projects we would be initiating and supporting in order to turn that declaration into a strategic game plan that would deliver a net zero borough by 2041.

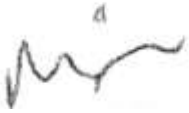
The monumental challenge that faces us cannot be tackled in silos. The sharing of data and information, as well as the setbacks and progress, is essential if we are to overcome the many hurdles before us. This report stands as testament to the incredible hard work of Haringey's Carbon Management team as well as the borough's residents. It is underlines how from a council point-of-view this involves the entire organisation, with all the service areas working in tandem to achieve our net-zero goals. The report reveals the progress being made in reducing the emissions we directly control, in our council buildings, housing stock and fleet to name three of the main contributors. However, we can also use our influence over the city's infrastructure to affect positive change – such as in our school streets and Streets for People programs, revealing how reducing carbon does not only impact climate change but health and wellbeing, economic justice, and social cohesion. The report also outlines the joined-up of work of the council and local organisations in reaching out to the wider community, sharing insights, knowledge, and best practice, expanding energy efficiency solutions and access to renewables.

As the borough's largest employer, the council must take a leadership role. It can leverage its statutory and regulatory powers as well as its ability to design policy to create real material environmental change. The council must act as a transformational role-model, taking bold steps and making rapid changes. Since 2015, council emissions it directly controls have reduced by 62%. Haringey has invested millions in the energy efficiency of its maintained schools, the switch to LED lighting boroughwide, the decarbonisation of its fleet, the adoption of renewable energy production and delivery and the retrofitting of its council homes. We are closing in on the total decarbonisation of our pension fund and are embedding zero carbon practices in our housebuilding program as well as incentivising the same approach in private sector developments.

The launch of our Community Carbon Fund underlines our co-production approach going forward, further entrenching collaboration between council and community. Over the course of the next year we will explore more ways in which we can empower the community whilst deepening the co-production approach.

We must continue to implement bold and far-reaching policy initiatives, constantly review our progress and be courageous in self-reflection. We must redouble our efforts, engage further, strengthen our collaboration, inform, educate, and inspire.

Ultimately, in order to tackle Climate Change effectively we need to work together as one, across all council service areas and with organisations, campaigns and residents across the borough. Finally, we need to take the approach that in overcoming environmental disaster we are also building a better borough and society which is prosperous in all meanings of the word.



Cllr Mike Hakata

Cabinet Member for Environment, Transport, and the Climate Emergency and Deputy Leader of the Council

2. Contents

3. Introduction

This is our eleventh Annual Carbon Report covering the performance and projects delivered during 2021. The Annual Carbon Reports monitor the borough's progress in reducing our carbon emissions and celebrate our successes. 2021 has been an important year, as we continue to face the challenges of the Covid-19 pandemic while ensuring we see a fairer and greener recovery. Covid-19, like climate change, disproportionally impacts the most vulnerable groups in our borough, creating further challenges for our residents and council services. As a council, we are striving together with the Haringey community to deliver progress against these important issues and deliver a greener, fairer, Haringey.

2021 year saw the continuation of extreme weather events linked to climate change, with heavy rainfall in July causing two flash flooding events in Haringey. To support London's response, the GLA published its London Climate Risk Map which highlights the communities and areas likely to impacted by climate change. The ongoing damage caused by climate change underlines the urgency of action to reduce carbon emissions globally.

The Haringey Climate Change Action Plan (HCCAP) was adopted in March 2021, setting out our target to be a net zero carbon borough by 2041 and for the council's corporate buildings to be net zero carbon by 2027. As the first Annual Carbon Report reporting on progress against the HCCAP, this report departs from the structure of previous carbon reports.

The first chapters of this report deal with the wider context of climate change, including key policy changes, news stories, and public attitudes towards climate action.

The second part of the report sets out the overall carbon emissions of the borough. Data from the Government Department of Business, Energy, & Industrial Strategy (BEIS) is used to consistently measure our 40:20 progress alongside data from the London Energy and Greenhouse Gas Inventory (LEGGI) to align with the monitoring process recommended by the GLA. The data from BEIS shows a 3.2% reduction in carbon emissions between 2018 and 2019 (the latest year that data is available for), with a total reduction of 36.8% since 2005, keeping us on track to achieve our 40:20 ambition next year.

The latter half of the report mirrors the six areas identified in the HCCAP to reduce carbon emissions: Council, Housing, Workplace, Transport, Energy, and Community. These summarise the key carbon reduction projects and achievements delivered in 2021, including the launch of the Community Carbon Fund, the continuing work of retrofitting council houses, and updates on our new and existing school streets.

4. Key policy changes – international and national

4.1. COP26 in Glasgow (26th Conference of the Parties to the United Nations Framework Convention on Climate Change)

In November 2021, delegates from almost 200 countries gathered in Glasgow for COP26, which saw the unanimous agreement of the Glasgow Climate Pact, alongside a bilateral US-China agreement and a commitment from global financial capital to prioritise climate in their investments. Key agreements were made on phasing down coal power, phasing out fossil fuel subsidies, and providing greater financial support to poorer countries.

4.2. Intergovernmental Panel on Climate Change (IPCC) Report

Working Group I of the IPCC published Climate Change 2021: The Physical Science Basis, its contribution to the Sixth Assessment Report, in August. The report argues that even severe cuts in carbon emissions would be unlikely to prevent global warming of 1°C to 1.8°C, with even optimistic projections showing continued rises in sea levels and increased frequency of extreme weather events. This underlines the urgent need to limit greenhouse gas emissions to prevent a rise of 2.1°C to 3.5°C or above by the end of the century.

4.3. Committee on Climate Change 2021 Progress Report

In June, the Committee on Climate Change (CCC) published a double report to Parliament on the UK's Progress in reducing emissions and Progress in adapting to climate change. These reports commended the Government's 2021 climate promises, criticised the speed of delivery, requested clarity on future policies and urgent measures to adapt the UK to climate change, and offered over 200 policy recommendations for additional action.

4.4. UK Government's Response to the CCC Progress Report – UK's Net Zero Strategy: Build Back Greener

The Government's response to the CCC progress report was published in October alongside the new Net Zero Strategy. It welcomed the CCC report, responded to recommendations, and detailed actions in the UK's Net Zero Strategy. It is the UK's second Long-Term Low Greenhouse Gas Emission Development Strategy under the Paris Agreement, setting out the delivery pathway to achieving net zero carbon by 2050.

4.5. UK net zero carbon sector strategies

After the Ten Point Plan and the Energy White Paper publications in 2020, the Government published three further sector strategies in delivering the net zero carbon ambition.

4.5.1. Industrial Decarbonisation Strategy (March 2021)

The Industrial Decarbonisation Strategy sets out how manufacturing processes of national industry will be transformed by sector and facilitate the reduction in carbon emissions by at least two-thirds by 2035 and by at least 90% by 2050 (from the 2018 baseline).

4.5.2. Transport Decarbonisation Plan (July 2021)

The Transport Decarbonisation Plan sets out how the sector will be decarbonised by 2050. Policies focus on increasing cycling and walking, decarbonising public transport, delivering zero emission vehicles, and accelerating decarbonisation of shipping and aviation.

4.5.3. UK Hydrogen Strategy (August 2021)

The UK Hydrogen Strategy sets out the Government's commitment to hydrogen as part of the UK's transition to net zero carbon with a set of projects and actions that will enable hydrogen to become a major part of the UK economy by the 2030s.

4.6. The Environment Act 2021 (November 2021)

The Environment Act contains new legally binding environmental targets on air and water quality, biodiversity, and resource efficiency and waste reduction. The Act sets out policies around five Environmental Principles: integration, prevention, rectification at source, polluter pays and precautionary.

4.7. Green Homes Grant (GHG) cancellation

In March, the UK Government announced the early and immediate closure of the Green Homes Grant. The £1.5 billion programme had initially offered grants of £5,000 to £10,000 to households for the installation of insulation or low-carbon heating.

4.8. Energy and fuel prices

In November, the price of petrol and wholesale gas reached a record high, with further hikes in fuel bills anticipated in April 2022 projected to increase costs for households and businesses and push more people into fuel poverty. This emphasises the need to retrofit to reduce energy demand, both to reduce carbon emissions and safeguard living standards and social justice. The increased price of cars and fuel also offer an opportunity to promote lower-carbon transport options.

5. Key policy changes – regional and local

5.1. Ultra-Low Emission Zone (ULEZ) expansion

In October, Transport for London (TfL) expanded the ULEZ from central London to the boundaries of the North and South Circular roads, including all of Haringey. Designed to reduce air pollution and carbon emissions by discouraging high-emission vehicles, ULEZ places a £12.50 daily charge on vehicles driven inside the zone which fail to meet exhaust emissions standards.

5.2. Transport for London finances

Reduced passenger numbers due to the Covid-19 pandemic have impacted TfL's finances, with a reported £1.9 billion funding gap. While the Government extended TfL's bailout, questions remain over the transport network's long-term financial stability. Potential funding cuts could affect Haringey residents by reducing public transport options and reducing council projects that rely on TfL funding, likely encouraging more people to drive and thus increasing transport emissions. The Council has set aside some funding to mitigate this impact.

5.3. London Plan

In March 2021, the new London Plan was adopted, setting out new planning policies on carbon reduction in new development. Full details of the London Plan 2021 are discussed in the 2020 Annual Carbon Report.

5.4. Haringey Climate Change Action Plan

The Haringey Climate Change Action Plan (HCCAP) was adopted at Cabinet in March 2021, revising the borough's targets 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. The Action Plan proposes to reduce emissions in six key areas, with the following objective:

1. Council: reduce the operative carbon footprint of the council to net zero by 2027;
2. Housing: achieve Energy Performance Certificate (EPC) B on average in all domestic buildings by 2041;
3. Workplace: achieve an EPC B on average in all in non-domestic buildings by 2041 and reduce business-related carbon emissions;
4. Transport: reduce 50% of transport-related emissions by 2025, growing public and active travel options, low-carbon transport and infrastructure;
5. Energy: connect around 12,000 homes to low-carbon heat sources and generate 13 GW of renewable energy locally;

6. Community: actively liaise with and support stakeholder organisations to reduce carbon emissions and promote further reduction in the community, the Green Economy sector and by protecting and enhancing the borough's biodiversity and habitats.

5.5. Local Plan

Haringey Council has begun work on a new Local Plan to run from 2022-2037, which will shape how the borough develops over the next two decades. The New Local Plan: First Steps Engagement consultation ran from November 2020 until February 2021, with over 1,000 responses. Consultation on the revised Draft Local Plan (Regulation 18) is expected in 2022, prior to consulting on a Proposed Submission Local Plan (Regulation 19). The new Local Plan will include higher standards to tackle climate change and enhance sustainability.

6. Public attitudes to the environment and climate change

6.1. Londoner's attitude to climate change

In October, London Councils published its second annual survey of Londoners' attitudes to climate change, surveying over 1,000 London residents. Headline findings include:

- 82% of Londoners are concerned about climate change, with concern high across all age groups. 66% of Londoners say their level of concern has increased in the last 12 months, with 28% saying their level of concern has increased a lot. These are significant increases from 2020, which had respective figures of 57% and 20% in the responses.
- 55% say their day-to-day life has been impacted, with 20% saying that their life has been greatly affected – an increase from 15% in 2020.
- 89% of Londoners are motivated to help prevent climate change and 56% of respondents believe everybody is responsible for solving climate change. However, 50% of Londoners think Covid-19 has made it financially more difficult for them to take action to help prevent climate change.

This report demonstrates that there is a growing urgency to reduce our emissions in London, and that people support carbon reduction measures.

6.2. Haringey Residents Survey

In 2021, a new Resident Survey was undertaken, with results from 1,903 Haringey residents. The initial topline summary of these surveys shows percentage answers weighted by ward, age, and gender; more in-depth analysis will be published later in 2022.

Respondents reported that they often/always did the following environmentally-positive behaviours: 87% reduce, reuse, or recycle plastic; 74% switch off lights, heating, and appliances to save energy; 69% walk, cycle, or take public transport rather than driving short distances; 65% of respondents compost food and/or green waste or put food waste out for collection; 53% reduce their water usage; 40% avoid running a vehicle's engine while it's not moving (44% said this was not applicable); and 35% eat a vegetarian or plant-based diet. Many respondents also reported that they insulate their home (26%); drive a less polluting vehicle (20%); use green energy suppliers (20%); and generate renewable energy at home (3%). 55% of respondents said they had not done any of these things to reduce impact on the environment, which was greatest in St Ann's, Seven Sisters, Tottenham Green, Tottenham Hale, and Woodside.

7. Haringey's carbon reduction performance

7.1. Summary

This report, for the first time, reports on two emissions goals using two datasets. This is discussed in greater detail in the following section. The key takeaways on our progress in reducing carbon emissions are:

7.1.1. Progress against our 40:20 target:

- Haringey has seen a 36.8% total reduction in carbon emissions from 2005 to 2019.
- In the latest year measured for this dataset (2018-2019), emissions reduced by 3.2%.
- To meet the borough's 40:20 target, we need to see a further 3.2% reduction in emissions from the 2005 baseline between 2019 and 2020.

7.1.2. Progress against our 2041 net zero carbon target:

- There was a 12% reduction in carbon emissions from 2015 to 2018.
- In the latest year measured for this dataset (2017-2018), emissions reduced by 2.4%.
- Haringey's emissions per capita remain well below the London average and average of our neighbouring boroughs.
- Despite this, we are currently behind our carbon reduction target to meet our ambition to be a net zero borough by 2041.

7.2. Sources of emissions data

Previous carbon reports have relied on data recorded by the Government Department for Business, Energy, and Industrial Strategy (BEIS) to measure Haringey's carbon emissions. This data was used to report against our 40:20 carbon reduction target (40% reduction in emissions by 2020, from a 2005 baseline). The BEIS data is published with a two-year delay, so we will know whether we've met the 40:20 target in the 2022 Annual Carbon Report.

To provide continuity, this report uses BEIS data to measure Haringey's performance against the previous 40:20 carbon reduction target. Meanwhile, the London Energy and Greenhouse Gas Inventory (LEGGI) data is used to report on the council's performance against HCCAP targets and to compare our performance with other London boroughs during and after this time. However, following the final report on the 40:20 programme (expected in the 12th Annual Carbon Report) we will stop using the BEIS data, and then only report using the LEGGI data.

The BEIS data on local authority carbon emissions is from the 2019 carbon emissions statistics published in the summer of 2021 (UK local authority and regional carbon dioxide

emissions national statistics: 2005 to 2019, BEIS). Specifically, this report has relied on the subset dataset that focuses on emissions within the scope of local government control. It should be noted that BEIS makes annual improvements to the methodology and collection of data from previous years and revises their estimates based on this. This means that there are differences between the data in previous annual carbon reports, including an update to Haringey's emissions performance in 2017-2018.

The LEGGI data on local authority carbon emissions is measured by individual years, with each dataset available on the GLA website. Data for years 2015-2018 were downloaded and combined for the purpose of analysis, while population figures for 2018 were taken from the GLA demography projections and targets taken from the Arup analysis. Due to the complexity of the data collected by the GLA, there is typically three-year delay from actual performance to publication.

The GLA is now recommending that councils use LEGGI data to measure emissions. This is to ensure a standardised approach for monitoring across London. This data was used to model our HCCAP targets and action plan, and this would be the first year we are reporting against our 2041 net zero carbon target (against a baseline of 2015).

7.3. 40:20 target

Using the BEIS data this shows that Haringey has been following a long-term downward trend in carbon emissions. Since 2005, total emissions in Haringey have decreased by 36.8%. This is slightly below the 37.3% average decrease in emissions seen in our six neighbouring boroughs of Barnet, Camden, Enfield, Hackney, Islington, and Waltham Forest during the same period. However, it is a greater reduction than the 36.2% decrease seen in the UK as a whole.

Figure 1 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 Greater London has seen a slowing rate of decarbonisation in the 2017-2019 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.

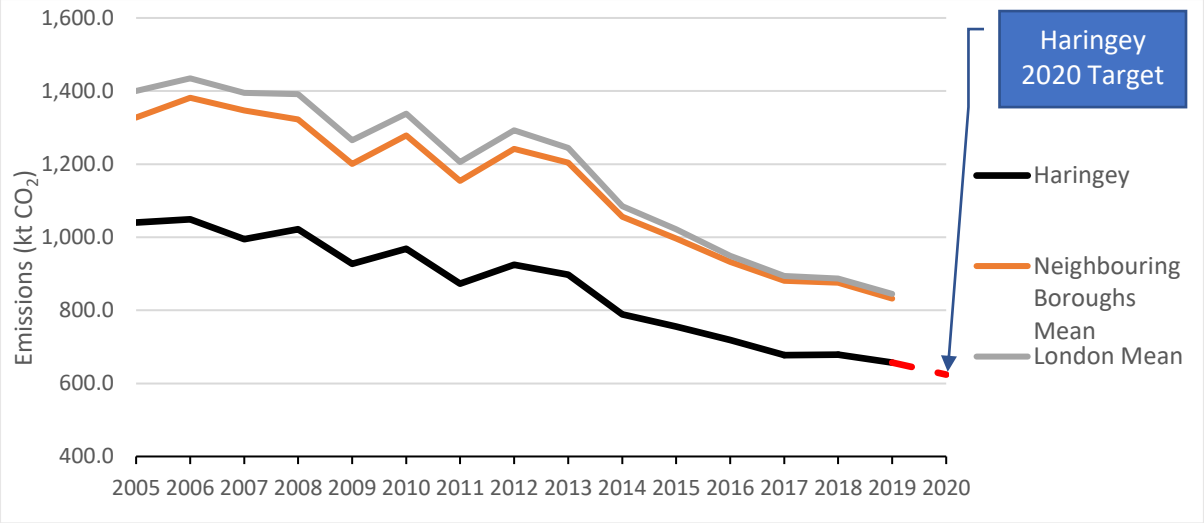


Figure 1: Graph showing the end-user CO_2 emissions trend from 2005 to 2019 in Haringey (black) compared to neighbouring boroughs' mean (orange) and London mean (grey). Haringey's emissions are consistently below the mean emissions in neighbouring boroughs, with a generally downward trend from 1,040 ktCO_2 in 2005 to 657 ktCO_2 in 2019, working towards the 2020 target of 623 ktCO_2 (Source: BEIS data, 2019).

The year-on-year downward trend has continued between 2018 and 2019 with overall emissions falling by 3.2% from 679 kilo tonnes (kt) to 657 kt of CO_2. This is better than the performance of the previous year, which saw a 0.2% increase in emissions[1].

To meet the 2020 target of a 40% reduction in emissions we need a further 3.2% decrease from the 2005 baseline in the 2019-2020 period (a reduction of 34 ktCO_2). This trajectory is plotted by the red dashed line in Figure 1. The final year of data under the 40:20 target will be reported in the Annual Carbon Report 2022.

7.4. Haringey Climate Change Action Plan target

7.4.1. Emissions trend 2015-2018

This year is the first reporting under the HCCAP's overall objective to reach a Net Zero Carbon Borough by 2041. Haringey's emissions show a downward trend under the LEGGI dataset. So far, a 12.3% reduction has been achieved in Haringey's total emissions from 2015 to 2018. Figure 2 below demonstrates the trend in emissions from 2015-2018. Once again, the data shows Haringey's emissions being well below the average for London (14.7% reduction) and our neighbouring boroughs (13.6% reduction), despite having a lower percentage reduction in emissions from 2015 to 2018.

[1] The 10th Annual Carbon Report for 2020 reported this as a 1.1% decrease in emissions between 2018 and 2019. In this year's dataset, BEIS revised the historic carbon emissions figures which has resulted in an increase in emissions for this period rather than a decrease.

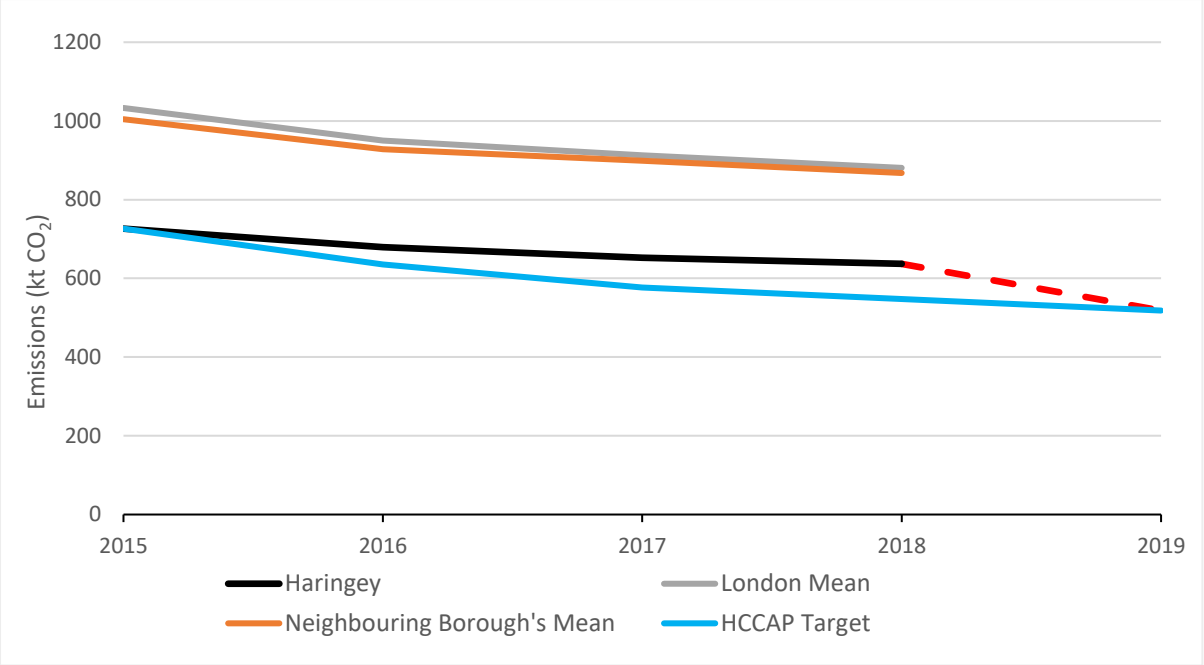


Figure 2: Graph showing the 2015 to 2018 end-user CO_2 emissions trend in Haringey (black), compared to neighbouring boroughs' mean (orange), London mean (grey), and our HCCAP target (blue). Haringey's emissions are consistently below the mean in neighbouring boroughs, but higher than the 2041 target. The red dashed line shows the performance required in 2018-2019 to return to our target trajectory. (Source: LEGGI data, 2015-2018; ARUP Analysis for the HCCAP).

Currently, we are not achieving the rate of reduction needed to achieve our goal of being net zero carbon by 2041, which had required a 24.6% reduction in emissions from 2015-2018. Further efforts are needed to ensure we will be reaching this target.

The LEGGI data shows Haringey's overall emissions falling from 652.8 $ktCO_2$ in 2017 to 636.8 $ktCO_2$ in 2018, a 2.4% reduction. This was smaller than our previous annual reduction of 3.9% and below the 3.5% average reduction of our neighbouring boroughs. While the proportionate reduction in domestic emissions increased from 0.7% in 2016/17 to 6.7% in 2017/18, small increases in transport (1.6%) and industrial (0.04%) emissions between 2017 and 2018 undercut our carbon reduction goals.

7.4.2. Performance in 2018

Haringey produced 636.8 $ktCO_2$ in 2018, or 2.4 tCO_2 per capita. As shown in Figure 3 below, Haringey produces less CO_2 per capita than most of our neighbouring boroughs and significantly less than the London average of 3.3 tCO_2 per capita. Of our neighbours, only Hackney and Waltham Forest had lower per capita emissions in 2018.

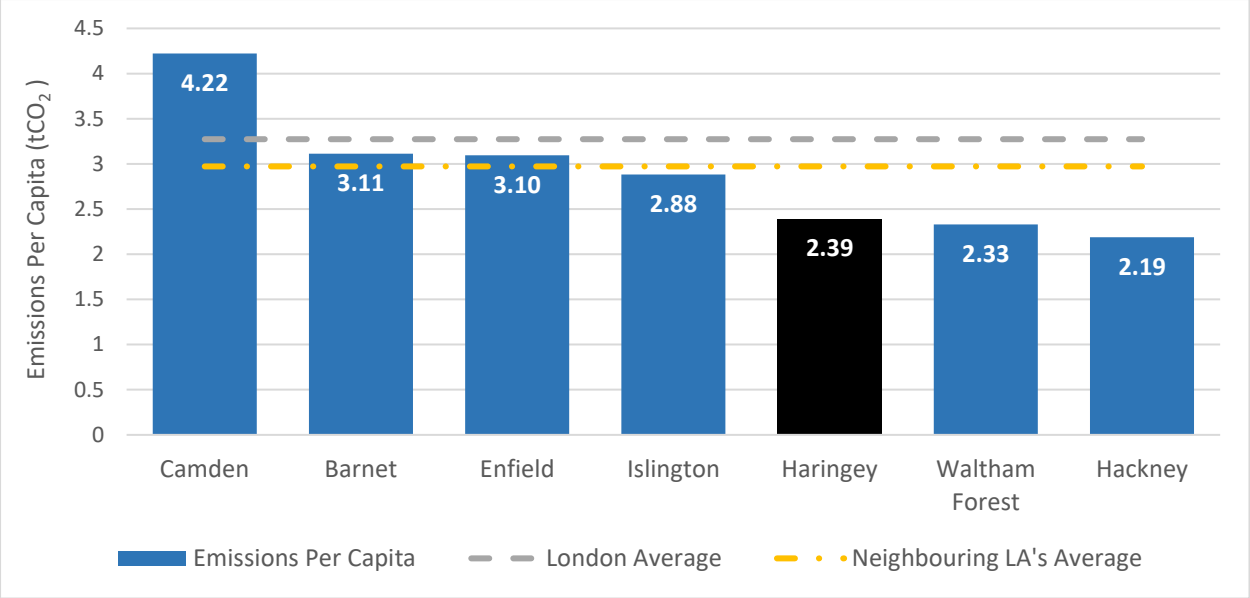


Figure 3: Graph showing the 2018 end-user CO_2 emissions per capita for Haringey compared to neighbouring boroughs. Haringey's per-capita emissions are below those of most of our neighbours and the London mean. (Sources: LEGGI data, 2018; GLA Population Projections).

When examining Haringey's 2018 performance by sector, we see that domestic emissions accounted for half of the borough's emissions, with approximately a quarter coming each from industrial and commercial sources (26%) and transport (23%) and the remainder (1%) coming from non-road mobile machinery (NRMM), as shown below in Figure 4. Despite moving from LEGGI to BEIS data, this proportional makeup of emissions is remarkably consistent with those from previous reports.

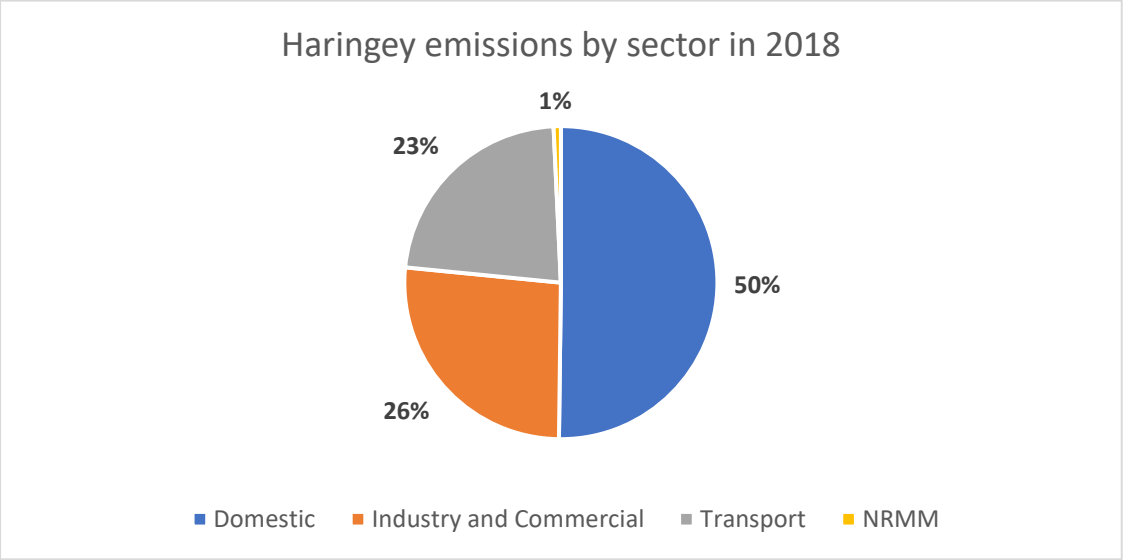


Figure 4: Pie chart showing the breakdown of Haringey's 2018 CO_2 emissions by sector. 50% 0f emissions came from the domestic sector, 26% from industry and commercial sector, 23% from the transport sector, and 1% from non-road mobile machinery (NRMM). (Source: LEGGI data, 2018).

A more granular analysis of Haringey's 2018 emissions shows that gas and electricity usage represent a combined 99% of domestic emissions and 92% of industrial and commercial emissions. This means that non-transport gas and electricity usage made up approximately 73% of all emissions in 2018, demonstrating the continued need to reduce energy consumption in the borough. 87% of transport emissions came from fossil-fuel based road transport, indicating that greater efforts are needed to encourage our residents, workers, and visitors to take active travel options where possible and utilise public transport and electric vehicles when active travel remains impractical.

7.4.3. Factors influencing differences between boroughs

The exact causes of differences in emissions trends between the London boroughs are not known. However, a range of factors could influence emissions data, including level of deprivation, old housing stock, and access to public and active transport options. A strong correlation exists between economic wealth and carbon emissions, influencing people's ability to heat buildings (domestic and non-domestic emissions), the number and type of private vehicle they might own or use regularly (transport emissions), or consumption of goods or food (not included in Local Authority data). As Haringey regenerates and building stock is retrofitted, it is important that people's spending power is not reallocated to more carbon intensive activities. Lastly, travel programmes may take longer to reflect in transport emissions data.

8. Council emissions

Haringey Council is the borough's largest employer, with multiple buildings, a large vehicle fleet, and a wide array of services being provided. As such, it remains a significant source of non-domestic emissions. We recognise that we have a responsibility to take positive action and provide strong leadership on averting the dangerous effects of climate change.

For this reason, Haringey has committed to being a net zero-carbon council by 2027. This covers core council operational buildings and transport-related activities undertaken by the council in the delivery of essential services. Other buildings that the council supports but may not manage directly (such as leisure centres, libraries, and schools) will be net zero carbon as soon as it is possible.

8.1. Corporate emissions

Haringey Council has continued to successfully decrease its total corporate footprint, seeing a reduction of 914 tCO_2 between 2019/20 and 2020/21 to 4,828 tCO_2, representing a 16% reduction. From the baseline level of 12,840 tCO_2 in 2014/15 there has been a 62% total reduction in annual emissions These figures represent the council's total consumption across all council corporate and operational buildings.

8.1.1. Corporate energy contract

The council has been on a 100% renewable energy contract with Npower since 1 April 2020, 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. Haringey is also a member of both the steering group and the working group for 'Renewable Power for London', a group of London boroughs led by the London Borough of Islington whose aim is to secure 100% renewable energy for London's public sector. Current options being explored include direct investment in renewable technologies for the council's energy needs.

8.1.2. Automatic meter upgrades

The council's electricity supplier Npower is in the process of upgrading all council non-half-hourly electricity meters with automatic meters (AMR). Around 57% of the council's portfolio, including corporate buildings, housing, and schools, has now been upgraded to AMR meters. Due to the lockdown restrictions resulting from the Covid-19 pandemic, the completion date for the rollout was extended by Ofgem, with 375 meters left to exchange, some of which have technical issues to resolve. AMRs send actual readings automatically to the supplier. It ensures accurate billing each month, will better enable the council to identify areas and

buildings for energy efficiency improvements and will allow easier measurement and verification of any energy efficiency measures after these have been put in place.

8.2. Solar PV generation

Haringey Council manages 38 photovoltaic (PV) solar systems operating in the council's building portfolio, mounted on the roofs of schools, housing, and corporate buildings. In 2020/21 these arrays generated over 337,000 kWh of electricity, saving our schools, housing, and corporate properties £40.5k on electricity bills.

8.3. Street lighting

The council continues to upgrade its streetlights to LEDs. In 2020/21, 780 streetlights were upgraded to more energy-efficient LEDs. This has delivered a 58% energy reduction 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 $ktCO_2$.

A central management system is now also in place, which allows for the control of streetlighting remotely. The system can create dimming profiles that could reduce lighting output without adversely affecting security, and aesthetic purposes of streetlighting. This presents a significant opportunity to further reduce carbon emissions.

8.4. Council vehicle fleet

As of November 2021, there are 66 vehicles in the council fleet, of which 12 (18%) are zero emitting. This represents a slight proportional improvement compared to 2020, when we had 52 vehicles with 9 zero emitting (17%). These figures are in addition to the electric cargo (e-cargo) bikes purchased in 2021 (see Section 9.3.).

8.4.1. Homes for Haringey fleet

Homes for Haringey currently has a fleet of 176 vehicles, which were acquired between June 2020 and October 2021. A total of 143 previously used vehicles have been returned to the former fleet provider. While the new fleet has just one zero emitting vehicle, the average emissions of vehicles in the new fleet are 12.9% lower than those of the previous fleet, dropping from an average of 170.5 gCO_2/km to an average 148.5 gCO_2/km.

8.4.2. Veolia waste fleet

Haringey Council currently outsources waste fleet to Veolia. This fleet is made up of 100 vehicles, of which one is electric, eight are diesel hybrids, and the remaining 91 are diesel. 93

of the vehicles achieve a Euro Standard 6 emissions rating, with the other seven vehicles rated Euro 5.

8.4.3. Electrification of park fleet vehicles

An evaluation of the 19 fleet parks vehicles was undertaken based on vehicle use, average mileages, and purchase costs. Out of the four vehicle types, the evaluation concluded that vehicle Type 3 (high roof panel van with internal racking) and Type 4 (3.5 tonne caged tipper) would be most suitable as electric vehicles (EV) as an alternative to diesel vehicles.

The EV option for Type 4 vehicles was favoured after establishing rounds with consistent, relatively low mileages. Type 4 vehicles are used by the Parks Hygiene Teams (for emptying litter bins, litter picking, etc.). After comparing prices, a demonstration of the new alternative EV option (Goupil G6) was provided to the Parks teams for a week to fully test the capabilities of this vehicle. Following favourable reports, the Parks team decided to purchase four of these electric vehicles. The three previously owned Type 4 diesel vehicles will be returned to Veolia.

8.5. Council pension fund

Haringey Pension Fund is part of the Local Government Pension Scheme (LGPS) which is a statutory scheme for local authority employees. Haringey Council is the administering authority for the LGPS in the London Borough of Haringey, and as such has a statutory responsibility for the investment of the Pension Fund's assets.

Haringey Pension Fund manages approximately £1.7 billion in assets, as of September 2021. The primary investment objective for the pension fund is to achieve a financial return on investments to meet its pension obligations to its members. However, the council recognises that climate change and investment in fossil fuels represent both a significant threat to the planet and a long-term financial risk to the pension fund.

As such, a proportion of investments has been allocated across three indices aimed at reducing exposure to companies with the highest carbon footprints and towards firms associated with transition to a low-carbon economy. In total, around £900 million of the pension fund is invested across the MSCI[2] World Low Carbon Target Index (20.2%), the Emerging Markets Low Carbon Index (7.1%), and the Research Affiliates Fundamental Indexation Multi-Factor Climate Transition Index (20.2%). A further 5% of the fund has been committed to investments in renewable energy infrastructure. The remaining 41.5% of the pension fund's assets is invested across a diversified range of assets.

[2] MSCI is the company name; its acronym originally stood for Morgan Stanley Capital International.

8.6. Staff and teacher parking

In 2021, Haringey issued 329 teacher parking permits and 227 essential service staff parking permits. Additionally, 1,750 ‘scratch card’ parking vouchers were issued to staff in 2021. These are single use daily parking permits which are valid for one entire day.

8.7. Waste

Haringey Council is part of the North London Waste Authority (NLWA) alongside six other north London councils. In general, recyclables collected from households in Haringey are sorted at a recycling facility in Edmonton, Enfield, and then sent to be reprocessed and recycled into something new. Full details for the destinations of recycled items can be found on the NLWA website.

In 2020/21, the final household recycling rate in Haringey was 31.2%, an increase from the 30.1% in 2019/20. This means almost 2,200 tonnes more mixed dry recycling was collected and almost 2,500 tonnes more was processed, with the rejection rate of recycling dropping from 18.6% in 2019/20 to 15% in 2020/21. There was also a 775 tonne increase in all domestic organic waste collected in 2020/21 compared to 2019/20. Unfortunately, residual waste per household also increased by 0.5% from 2019/20, rising to was 528 kg per household in 2020/21. Of the residual waste processed at the energy recovery facility, 4.5% of North London waste was found to be unsuitable for energy generation and had to be sent to landfill, according to the NLWA Annual Report.

8.1. Staff engagement

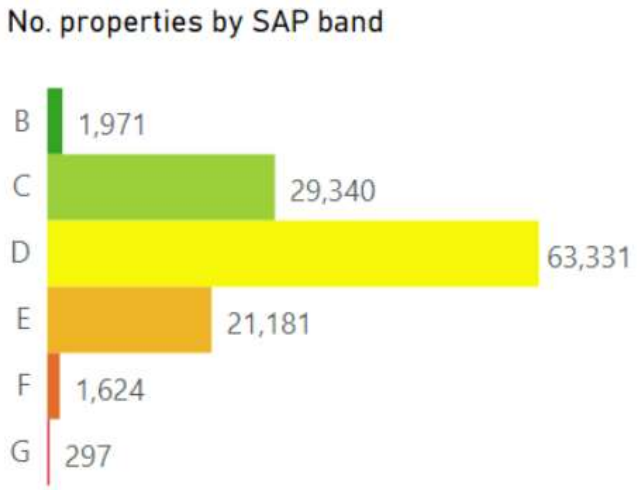
In 2021, the council held training sessions on reducing carbon emissions for staff in the Development Management, Planning Policy, Housing, and Regeneration teams (including some sessions as part of the new Local Plan). Additionally, 33 items were reviewed by the council’s Climate Change and Sustainability Officer Group (CCASOG) as the council strives to have more key decisions that consider carbon reduction.

9. Housing emissions

The borough's homes make up 50% of our total carbon emissions, through electricity demand and heating requirements. This is by far the biggest sector we need to target if we are to deliver our borough Net Zero Carbon ambition. According to the LEGGI data, domestic emissions in Haringey decreased by 6.7% from 2017 to 2018, with a total 12.6% reduction between 2015 and 2018. The council owns approximately 17% of the borough's housing stock, which is currently managed by Homes for Haringey. These homes amount to approximately 7-8% of the borough's total emissions. So, when new homes are built, it is an opportunity to adopt best practice, high standards and minimise emissions.

9.1. Performance of existing housing stock

According to the June 2021 Pathways Report by Parity Projects, flats are the most common property type in the borough, followed by terraced houses. Standard Assessment Procedure (SAP) measures the annual energy use of a building, from 1-100+, with 100 representing zero energy costs. Haringey's housing stock has a mean average SAP rating of 62, slightly below the 63 average SAP rating across north London as a whole. SAP bandings are set out in the caption of Figure 6 below, the lower the SAP score, the higher the energy costs for the property. Only 1.6% of properties in Haringey are rated F or G, compared to 1.9% across London and 2.1% across north London. The full breakdown of Haringey's properties by SAP band is shown in Figure 6.



Band	Range	%
B	81-91	1.7%
C	69-80	24.9%
D	55-68	53.8%
E	39-54	18.0%
F	21-38	1.4%
G	0-20	0.3%

Figure 5: Haringey properties by SAP band. 1.7% of properties are in band B, 24.9% in band C, 53.8% in band D, 18% in band E, 1.4% in band F, and 0.3% in band G. SAP scores are allocated into the following bandings: Band G score 0-20; Band F score 21-38; Band E score 39-54; Band D score 55-68; Band C score 69-80, Band B score 81-91 and Band A with scores above 92. (Source: June 2021 Pathways Report, Parity Projects)

9.1.1. Council housing stock

According to the Pathways data, council properties in Haringey have a mean average SAP score of 69, which is above the 62 SAP average for all Haringey properties. Approximately 57% of Haringey's council housing is in SAP band C, with 3.1% of council properties in bands A or B and 0.2% are in bands F or G. This demonstrates that, while more work is required to bring the rest of Haringey's council housing stock to band B or above, council housing still has significantly lower average energy costs than private domestic properties in the borough.

9.2. Planning applications

9.2.1. New build performance

Policy SP4 of the Local Plan Strategic Policies, requires all new development to be zero carbon (i.e. a 100% improvement beyond Building Regulations Part L (2013)). The London Plan (2021) further confirms this in Policy SI2. There were 39 residential planning applications (minor and major applications, excluding householders) submitted in 2021 with an energy strategy that included a specified percentage in carbon reduction. These showed an average predicted improvement of 53% in site-wide carbon emissions. It included one zero carbon council housing scheme. Looking at only the major applications, the average reduction in emissions was 65%, which is beyond the 35% on-site minimum that the London Plan requires.

9.2.2. New build council housing

The HCCAP sets an overall net zero carbon target across the entire 1,000 new build homes portfolio at council rent. New build schemes developed by the council in the last two years have an average 79% reduction in carbon emissions from Building Regulations 2013 (weighted by the size of the development). This figure does not include the carbon emission performance of the new build affordable housing acquisitions.

Within the house building programme, several council housing schemes will be achieving or exceeding the 'zero carbon' target, with more schemes in the pipeline. This includes the scheme at Edith Road/Park Road (N11) which was approved in 2020 and two planning applications submitted end 2021/start 2022: Watts Close (N15) and Ramsey Court (N8). There will be further schemes to be submitted in 2022 that will meet or exceed this target, including Barbara Hucklesbury Close (N22) and Woodridings Court (N22).

9.3. Retrofitting

9.3.1. Ecofurb

Ecofurb aims to take the uncertainty and hassle away from homeowners planning an energy efficiency renovation through an impartial, end-to-end service. Residents can use its Plan Builder facility free of charge to map out the effect and cost of installing energy efficiency measures. If users would then like to carry out the works, Ecofurb can help plan the project and receive quotes from three vetted local installers. Attached to this service is a co-operative of local retrofit coordinators which people can use.

Haringey Council supports Ecofurb through marketing and other assistance. So far, 14 properties in Haringey are using Ecofurb to plan the retrofit of their homes, with greater numbers expected in future years.

9.3.2. Energiesprong retrofit

As part of the council's retrofit strategy, Cabinet approved the investigation of an Energiesprong pilot project. 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 uses new technologies such as prefabricated facades, insulated rooftops with integrated solar panels, smart heating, and ventilation and cooling installations. A refurbishment comes with a performance warranty on both the indoor climate and the energy performance.

The pilot project is progressing in partnership with Energiesprong, the Greater London Authority (GLA), and six other councils. It is using £1.6 million in Government grant funding to retrofit 51 houses on Rivulet Road. Currently, consultation with residents has been completed and the procurement process has been approved with Equans utility company. If the design meets Energiesprong and council requirements, then the decision to implement the pilot is expected to be made by March 2022 and installation is expected to commence in summer 2022.

9.3.3. Future Fit Homes

In 2021, Muswell Hill Sustainability Group (MHSG) teamed up with South London community enterprise Future Fit Homes to offer a retrofit advice service. The service starts with a free half hour of advice to help residents assess whether their project is big enough to require a qualified Retrofit Co-ordinator and Whole House Plan; some virtual professional Retrofit advice; on-site Retrofit advice; or to arrange to have a thermal imaging survey. Thermal

imaging surveys can only be undertaken during colder winter months but can be booked in advance.

9.4. Haringey Affordable Energy Strategy

Haringey's Affordable Energy Strategy aims to reduce the number of households struggling to afford to adequately power their homes and improve the health and wellbeing of residents. It aims to do this through directly improving the energy efficiency of housing and by creating a referral network around fuel poverty. Working with multiple council services and community groups, the network seeks to support those in fuel poverty in a variety of ways.

9.4.1. Local Energy Advice Programme (LEAP)

LEAP provides a free service for Homes for Haringey residents that can help residents save money and keep their homes warm, including through advice calls and home visits. In total, LEAP completed 23 advice calls with Haringey residents in 2021. Across all councils supported, LEAP provided energy advice to 40 clients, with expected lifetime savings of 27 tCO_2 and £6,840 and installed 134 energy saving measures with total expected savings of 46.9 tCO_2 and £10,130.

9.4.2. Seasonal Health Intervention Network (SHINE) London

Haringey's partner Seasonal Health Intervention Network (SHINE London) provides struggling homeowners, private-renting tenants, and residents with free energy advice. So far in 2021/22, SHINE has supported 154 Haringey residents, including 57 home visits and 6 debt cases. This is an increase in last year showing that demand for energy advice is increasing. In total these visits were calculated to save residents £10,354.

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

9.4.3. Public Voice

Public Voice works to build energy resilience among Haringey residents by providing energy advice, practical support, signposting, and outreach services. In 2021, Public Voice held a variety of events, including energy awareness sessions for frontline professionals and a series of workshops on energy management. Additionally, Community Connectors and Social Prescribers have worked with Haringey residents through brief intervention support, assisting with benefit applications, referrals to energy advice services, and grant applications for emergency aid to achieve energy efficiency savings, behavioural change, and health and wellbeing improvement.

Public Voice can be contacted by telephone (020 3196 1900), email (info@publicvoice.london) or online.

9.5. Green Homes Grant

The Government's Green Homes Grant Local Authority Delivery (LAD) schemes, launched in August 2020, aim to upgrade the homes of low-income households (a household income of less than £30k per annum) living in properties with EPC ratings of E, F or G (a limited number of D rated homes can also benefit).

Low-income owner-occupiers can qualify for a package of energy efficiency measures amounting to £10,000 with no contribution required. Where a household is low-income and renting their home, the property owner must contribute at least a third of the total cost of upgrading the property and the maximum grant is £5,000.

Additionally, the Mayor of London's Warmer Homes Scheme offers a maximum of £5,500 per home for energy efficiency improvement, subject to eligibility and availability of funding. For Houses in Multiple Occupation (HMOs), the funding is limited to £2,000 per dwelling, and £10,000 per building, on the basis that these homes are usually smaller. The funding can cover gas boiler repairs and replacements, measures not covered under LAD which are, nevertheless, important for our transition to a net zero carbon borough.

As of December 2021, 105 Haringey residents have applied for the scheme with more expected to apply in 2022. Please contact CarbonMangementTeam@haringey.gov.uk for more information.

10. Workplace emissions

While Haringey does not have notable heavy industry in the borough, industrial and commercial activities are nevertheless responsible for 26% of the borough's carbon emissions, according to the 2018 LEGGI data. This proportion is likely higher when considering the emissions from non-commercial workplaces such as schools, healthcare, leisure, and community buildings. Emissions from industry and commerce have fallen by 16.1% between 2015 and 2018 but saw a fractional increase of 0.04% from 2017 to 2018.

The council can directly influence emissions in some workplaces, particularly in properties we own. We are working with the largest emitters in the borough to encourage them to mitigate their emissions. As most of Haringey's businesses are micro and small businesses, they often have limited resources to deliver action. The council is aiming to work with local businesses around supply chains and logistics to capture social value and increase carbon reduction.

The HCCAP sets out actions to encourage the refurbishment of existing buildings, smarter energy supply choices, the use of low and zero emission transport, behavioural changes within the workforce, and high standard new buildings.

10.1. Public Sector Decarbonisation Scheme

The Public Sector Decarbonisation Scheme is a collaboration between the Government and Salix Finance, providing grants to the public sector to fund decarbonisation of heat projects. Haringey Council secured £2.45 million in grants to support 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, which mainly include glazing and building fabric upgrades, are all in progress on site and are mostly expected to be completed by March 2022. These improvements should save an estimated total of 226.8 tCO_2e per year and save the schools an average of approximately £9,000 per year each.

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.

10.2. Wood Green Neighbourhood of the Future

The Wood Green Neighbourhood of the Future (NoF) project was completed in March 2021, and the final workstream delivered in November. The four-year programme was funded to deliver a mixture of policy, engagement, and infrastructure interventions to increase the uptake of electric vehicles in the area, which was split across nine workstreams.

Overall, our NoF programme engaged with over 1,300 residents and nearly 200 local businesses. A long-term legacy of Haringey's NoF will be the ultra-low emission vehicle education pages, and planning advice guidance documents displayed on the council website which will provide an ongoing source of information for businesses and residents on electric vehicles, and a template for other London boroughs who wish to share similar information with their residents and businesses.

10.3. Clean Air Village 3

Clean Air Villages 3 (CAV3) was a one-year, Defra-funded project aiming to improve air quality in 16 different London 'villages' with high air pollution and population density. The Seven Sisters Junction was chosen as Haringey's Air Quality Focus Area, concentrating on businesses located on West Green Road and Bruce Grove. Bruce Grove was added during the project due to initial low take up in the original area. The project ran from April 2020 to March 2021, with eight one-to-one meetings with local businesses, 13 interactive online LiveShare events, and an expansion of the CAV directory for Haringey.

Five local businesses successfully signed up to the cargo bike trial with Zedify, which offered 80 hours of free deliveries within a 3-mile radius of Seven Sisters tube station from March-July 2021. Due to the Covid-19 pandemic, bike hours were also promoted to various local food banks, charities, and the council's community outreach efforts to assist in deliveries to vulnerable groups.

Following the trial, Homes for Haringey has continued with Zedify for their deliveries. Estimates of emissions savings using CRP's Clean Air Tool show that Homes for Haringey using a cargo bike rather than a diesel van should save 205 kgCO_2, 696 g of NOx, and 25 g of $PM_{2.5}$ annually. The remaining businesses stated that they do not have sufficient means to afford regular deliveries to customers using a cargo courier company despite their positive feedback and willingness to continue zero-emissions delivery mode.

10.4. Planning applications

Policy SP4 of the Local Plan Strategic Policies, requires all new development to be zero carbon (i.e., a 100% improvement beyond Part L (2013)). The London Plan (2021) further confirms this in Policy SI2. There were 11 non-residential planning applications submitted in 2021 with an energy strategy that included a specified percentage in carbon reduction. These showed an average predicted improvement of 50% in site-wide carbon emissions. This included one zero-carbon community scheme at Wolves Lane.

11. Transport emissions

Transport is the third largest source of emissions in Haringey, representing 23% of the borough's emissions in 2018 according to LEGGI figures. Furthermore, private transport is associated with poor air quality, noise, road injuries/deaths, and health issues within the borough. In the HCCAP, we set the target to reduce emissions related to road transportation by 50% by 2025 through growing active travel options, public transport, and low-carbon transport infrastructure. So far, transport emissions have fallen by 10% between 2015 and 2018 but increased by 1.6% between 2017 and 2018. In 2021, the council delivered a range of projects designed to make Haringey's streets greener, cleaner, and safer.

11.1. School streets

A school street is where the street outside of a school limits traffic and creates a walking and cycling zone 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. Our current Schools Street programme was approved in the November 2020 School Street Action Plan.

In total, 15 school streets were implemented across Haringey in 2021, with plans to deliver another 8 early in 2022 and more later that year. Consultation feedback on our school streets shows overall support for the program, with 56% of the surveyed public, over 70% of parents, pupils, and school staff, and all 10 headteachers expressing support.

11.2. Low Traffic Neighbourhoods (LTNs)

Low Traffic Neighbourhoods are area-based traffic management schemes that aim to reduce or remove non-residential motor traffic from residential areas, as well as reduce the number of short trips made by vehicles which could be walked or cycled. LTNs are normally introduced to support walking and cycling but can also bring a wide range of co-benefits for everyone especially those who live, work or study in them. There is already a small LTN in place in the Gardens area of St Ann's.

As part of TfL's London Streetspace Plan, Haringey Council has received funding for three proposed LTNs within the borough in St Ann's, Bruce Grove West Green, and Bounds Green. Following extensive engagement with local residents, workers, students, and businesses, the proposed LTNs were approved by Cabinet on 7th December and are expected to be implemented in 2022.

11.3. Active travel

Haringey continues to promote active travel both within the council and to the wider borough. 2021 achievements include:

- Holding six community engagement events with Haringey residents to inform and encourage them about switching to active travel options. Each event had an attendance of 100-150 people, including residents with disabilities and other accessibility requirements.
- Installing 47 Bikehangars across Haringey in 2020/21, providing 282 more secure and covered cycle parking spaces for residents and visitors to the borough.
- Offering free cycle training to all those who live, work, or study in the borough, courtesy of Cycle Confident to a total of 1,171 children and 262 adults.
- Providing 19 Dr Bike sessions to offer free bike check-ups and basic repairs to staff and residents across local parks, schools, and community spaces in Haringey. A total of 280 bikes were serviced for our residents, students, and workers. Additional monthly sessions are offered to council staff.
- Delivering a Bike Club project at Woodside High Secondary school in partnership with Sustrans. A Sustrans Behaviour Change Officer worked closely with the school to run 12 eight-week bike clubs with students from each year group. In total, 79 students completed the bike club and three staff were trained as champions to deliver further bike clubs, ensuring the clubs can continue to be sustainably run without further council support.
- Purchasing seven E-cargo bikes and accessories for the council's Parks team and staff pool bike scheme. This equipment is expected to improve the air quality within our parks and around our buildings. A photo of these bikes is shown in Figure 6.
- Supporting six additional schools to achieve gold awards in TfL's STARS (Sustainable Travel: Active, Responsible, Safe) travel planning scheme for schools and nurseries. There are now 60 Haringey schools with STARS travel plans: 46 gold, 4 silver, and 10 bronze awards.
- Providing the try before you bike scheme by Peddle My Wheels, allowing the delivery of 77 bikes to residents, with 19% of users purchasing their bikes and another approx. 25% leaving the scheme because they have bought another bike.
- Implementing walk zones for schools to reduce traffic trips and air pollution. So far, the council has helped 60 primary schools and 11 secondary schools to develop their walk zones and promote the map and key messages to parents and carers. An example map is shown in Figure 7.

Figure 6: Photo of the newly purchased electric cargo bikes.

Figure 7: Example of a five/ten-minute walk zone for Our Lady of Muswell Hill Catholic Primary School. The image shows a map of the area, with 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.

11.4. Walking and Cycling Action Plan

Haringey's Draft Walking and Cycling Action Plan for 2021-2031 was launched on November 8th, setting out how the council will enable more walking and cycling in the borough, in line with our wider transport strategy and commitment to active travel. The plan was out for consultation until January 10th, 2022. Following this engagement with the community, amendments will be made based on the consultation results and it is expected to be taken back to Cabinet for approval in 2022.

11.5. Electric vehicle charging

So far, 103 EV charging points have been installed in the borough, a mixture of standard 7 and 22 kW charging points, 5.5 kW lamp column points, and rapid 43/50 kW points . 22 new standard 7 kW points were installed in October 2021, 18 of which went live in December 2021. There are a further eight standard 7 kW points to be installed in the coming months. A statutory consultation for an additional 32 standard 7 kW and 6 standard 22 kW points finished in December 2021 and are aimed to be installed by March 2022, bringing us to a total of 149 EV charging points by the end of 2022. The densest clusters of charging points are located in Crouch End, Tottenham Green, Highgate, Alexandra, and the Muswell Hill/Fortis Green boundary.

11.6. Controlled Parking Zones (CPZs)

Approximately three quarters of Haringey is currently covered by CPZs. In 2021, consultations were carried out on further CPZs in Muswell Hill West and Fortis Green Extension CPZ, which are due to be implemented in January 2022. There is an additional CPZ to be introduced in 2022 in Northumberland Park West and informal consultations underway for a proposed Muswell Hill Extension.

11.7. Parking permits

Haringey's parking policy reflects our commitment to reduce carbon emissions, with residential permit pricing structure based on vehicle CO_2 emission bands. Updates to parking permits in August 2021 include the introduction of new paperless virtual permits, a £50 annual surcharge for second and subsequent permits per household and an £80 annual surcharge on diesel vehicles.

11.8. Vision Zero approach

In July 2018, the Mayor of London adopted a Vision Zero approach, aiming to ensure that nobody is killed by London buses by 2030 and to end all deaths and serious injuries on

London's roads by 2041. As such, we have built our own Vision Zero Action Plan around three of TfL's 'key actions', delivering the following workstreams: Safe speeds, Safe streets and Safe behaviours. According to TfL figures, there were 3 deaths and 107 serious injuries on Haringey's roads in 2019, the latest year data is available.

11.8.1. Safe speeds

TfL's Vision Zero Action Plan states that 20 mph is a safer speed limit on roads when a vulnerable road user is involved in vehicle conflict. Haringey Council has already taken action to reduce speed limits to 20 mph on all borough roads, educate the public on the importance of reduced speed limits, and raise awareness of speeding outside schools.

11.8.2. Safe streets

When delivering significant highways schemes, the council undertakes Road Safety Audits and also uses TfL traffic accident location maps and research from the Vision Zero Action Plan to review highways and junctions to make them safer for walking and cycling. In 2021, this data was used to deliver four new zebra crossings and improve two existing crossings, alongside the introduction of new speed bumps and pavement build outs.

11.8.3. Safe behaviours

The council undertakes a range of behavioural and educational programmes, working with schools, communities, and residents to deliver safer behaviours on our highways. In addition to the programmes already discussed in this chapter, the Active Travel team has developed a variety of programmes to promote safer travel across the borough.

11.1. Impact of traffic on air quality monitoring performance

In May 2021, Haringey's Annual Air Quality Status Report 2020 was published, providing a detailed overview of the borough's air quality. In 2020, Haringey's two automatic monitoring stations showed decreases in the average concentration of nitrogen dioxide (NO_2) particles: from 37 $\mu g/m^3$ to 33 $\mu g/m^3$ of NO_2 at High Road (Tottenham) and from 22 $\mu g/m^3$ to 16 $\mu g/m^3$ of NO_2 Priory Park (Hornsey) between 2019 and 2020. The European limit is 40 $\mu g/m^3$ over a year.

The sixteen diffusion tubes spread across the borough saw an average reduction of 5 $\mu g/m^3$ from 2019 to 2020 (an average of 15.4% reduction). The reduction in traffic during the Covid-19 pandemic likely contributed to the improvement in air quality in Haringey and associated transport carbon emissions. Further work is needed to ensure that these gains are maintained and improved on.

12. Energy

The carbon intensity of the national grid is falling, decarbonising the electricity supplied to homes and workplaces. The council can further support this by developing and supporting low carbon forms of electricity generation and energy storage at a residential or neighbourhood level. This local generation will decarbonise the borough's energy, in addition to strengthening Haringey's energy security.

In Haringey, heating traditionally relies on the combustion of natural gas. The efficiency of heat creation can be improved through the electrification of heating using heat pumps (air, ground, or water source) and adoption of low-carbon decentralised energy networks (DENs). DENs are a major plank of the HCCAP and are expected to deliver significant carbon savings over coming decades.

12.1. Decentralised Energy Networks (DENs)

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, enabling customers to use heat technologies at scale and facilitating greener and more affordable heat.

12.1.1. Existing DENs

The council is already a heat supplier in the Housing Revenue Account (HRA) to around 1,500 homes (850 at Broadwater Farm and 600 elsewhere), with an additional 800 new homes in the pipeline over the next 4 years. The council is committed to setting up a heat supply company for High Road West (2,500 homes) and the long-term ambition is for 20,000 connections (including the Tottenham Hale and Wood Green DENs).

12.1.2. DENs under development

The wider DEN programme has gained pace with the adoption of the outline business case and success in securing grant funding by Cabinet in December 2021. The DEN programme plans to deliver heat to more than 10,000 homes across three Heat Network Hubs and linking into the existing scheme at Broadwater Farm. The three hubs are:

- Tottenham Hale – New build scheme with back-up and top-up boiler house connecting around 12 development sites with phase 1 (circa 2,000 dwellings) built out by 2024/25. Further developments are expected to connect to the DEN over the following 10 years increasing the size to approximately 6,000 homes.
- Wood Green – New build scheme with back-up and top-up boiler house connecting around 6 development sites with phase 1 (circa 2,000 dwellings) built out by 2024/25.

Further developments are expected to connect to the DEN over the following 10 years increasing the size to approximately 6,000 homes.

- North Tottenham – Core scheme is a new build single site with 2,500 homes. Expected start on site in 2022 with completion by 2030. The DEN is expected to expand to neighbouring sites including 1,000 extra homes in addition to schools and the Tottenham Hotspur Stadium.

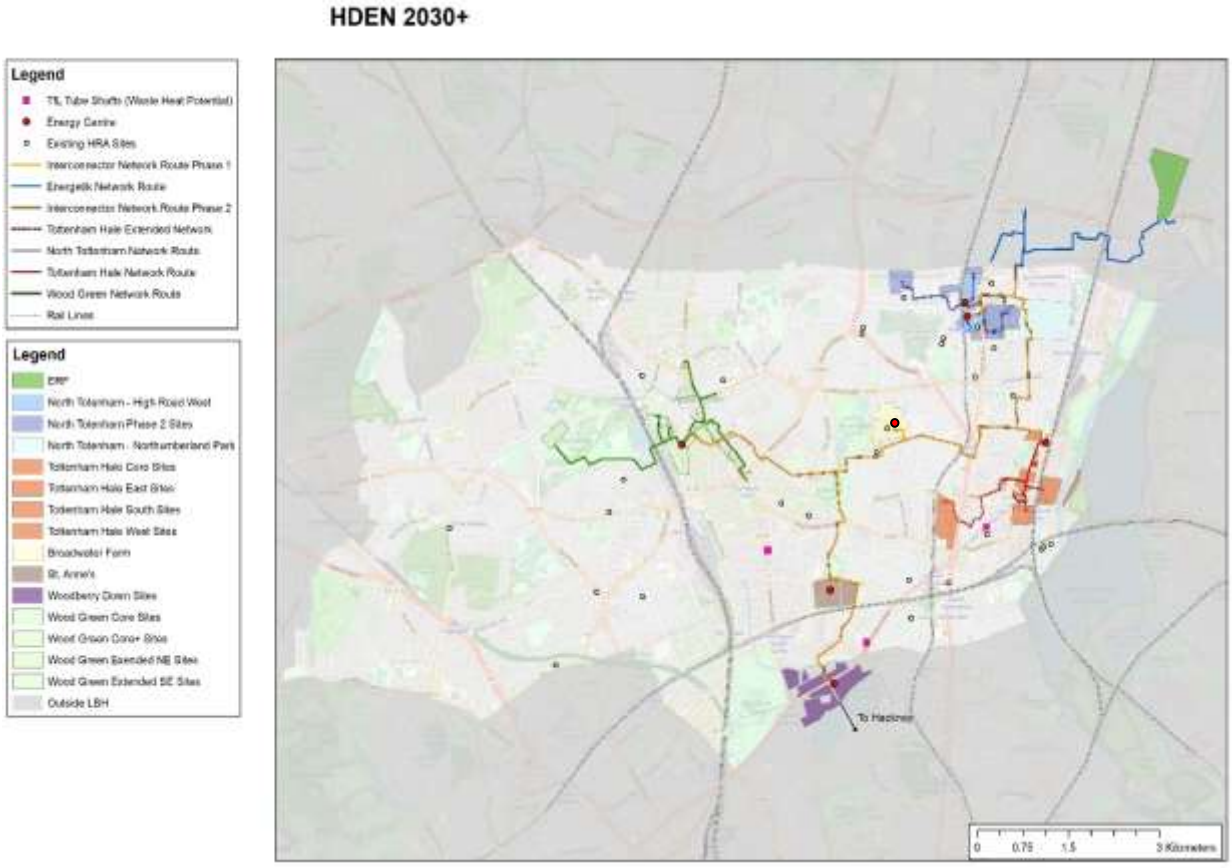


Figure 8: Haringey's proposed indicative DEN map. This image shows the ERF in Edmonton (green area), proposed DENs, their network routes, the interconnector pipework routes, crossings, and energy centres in each DEN area (red dots). It also shows an indication of which sites are expected to connect to the four DEN areas of North Tottenham (blue areas), Tottenham Hale (orange areas), Wood Green (beige/light yellow areas), Broadwater Farm (light brown area) and the Hackney Woodberry Down area (purple areas).

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

12.1.3. Current work

The Carbon Management team currently manages the DEN programme with the long-term vision to establish a council-owned District Energy Company, which was approved in principle by Cabinet in Outline Business Cases (OBCs) in January 2017 and December 2021. The establishment of this energy company is also an obligation on the council in the development agreement for High Road West and a condition of the central Government grant funding available to the Tottenham Hale and Wood Green DENs.

Following the Cabinet approval of the OBC to support the developments in Tottenham Hale and Wood Green in December 2021, we are moving toward producing Full Business Cases by early/mid 2023.

12.2. Solar Together London

Solar Together London is a group-buying programme for households and businesses that enables Londoners to install solar panels and battery storage at an affordable price.

Haringey Council took part in Solar Together again this year, supporting the programme with digital marketing and wider communications. As of February 2021, 961 Haringey residents registered for the scheme. So far, 122 of those have accepted the offer and 19 have begun installation (4 with an additional installation of battery storage), which are all expected to be completed by March 2022. This is a current total of 18 kW/year of installed energy, representing a carbon reduction of 3,289 kgCO_2 per year.

13. Community emissions

Over 90% of all borough emissions are not within direct control of the council. Therefore, the support and delivery of action by wider borough stakeholders is vital to ensure delivery of this Action Plan. This means that all residents need to feel ownership of this ambition and feel empowered to act. Alongside the council, the borough hosts multiple active environment- and climate-related stakeholder groups who have successfully delivered a range of projects.

Community support will be vital to deliver the HCCAP. The council has committed to supporting our communities to help us deliver change and achieve net zero carbon together.

13.1. Haringey Community Carbon Fund

In June, Cabinet approved the use of £390,000 in Section 106 carbon offset funds towards setting up a Community Carbon Fund, a four-year grant scheme to support community-led carbon reduction projects in the borough. £90,000 is available for grants in the first round of funding (2021/22), with £70,000 for each subsequent year. Any excess funding is rolled over into the next year.

The first round of funding was opened to applications on 31 October 2021 and closed on 7 January 2022. Application scoring and grant recommendations are made by a five-member judging panel, made up of two community representatives and three council officers. Funding announcements are expected to be made in March 2022, with the first projects expected to be completed in 2023.

Figure 9: Banner for the Community Carbon Fund, including the Net Zero Haringey 2041 logo in the top-left corner.

13.2. Biodiversity and habitats

Haringey is a relatively green borough, with 148 parks and green spaces directly managed by the Parks & Leisure service. These, along with 27 council-managed allotments, create 383 hectares of open space in the borough. There are, additionally, 59 sites of importance for nature conservation (SINCs), five local nature reserves, two cemeteries, and several parks and green spaces not directly managed by the council.

The council is committed to providing inclusive parks and green spaces that serve the Haringey community and the natural world. The Draft Parks and Green Spaces Strategy, Draft Tree and Woodlands Plan, Draft Biodiversity Action Plan, and Draft Parks Asset Management Plan are expected to go to cabinet in 2022, shaping the council's strategy and actions in these areas over the coming years. Two key areas include:

- Plant at least 250 more trees than are removed each year, with over 500 street trees planted in 2021 to make up for the interruption in planting from the Covid-19 pandemic in 2020, and funding committed towards tree maintenance.
- Further funding committed to energy efficiency upgrades to parks lighting systems and park buildings to achieve at least EPC grade C by 2025.

13.3. Tottenham Community Eco-Fest

From 18th-28th September, Haringey Council helped support a series of local community and environmental groups to host the Tottenham Eco Urban Festival in Chestnuts Park. The festival brought local people together to discuss, learn, and collaborate around a range of green issues. Activities ranged from glasshouse open days to upcycling workshops, educational speakers, seed swaps, and pop-up markets for sustainable fashion and second-hand bikes.

Sustainable and equitable growth was a focus of the festival, including an emphasis on inclusion, employment, and sustainable community wealth building. This helped support the local green economy through networking sessions for green start-ups led by local businesswomen, platforms to bring unemployed people together with local businesses offering training and employment in sustainable roles. This was combined with a series of guest speakers focusing on the green economy at the international, national, and local level to help understand and contextualise the challenges and opportunities we face.

Figure 10: Photo of attendees of the Earthing Workshop at the Tottenham Community Eco-Fest, including several organisers of the festival.

13.4. Haringey Climate Forum (HCF)

The Haringey Climate Forum (logo shown right) has largely focused on policy issues over the last year, with virtual public meetings to discuss walking and cycling plans, the new biodiversity action plan, Haringey's planning policies, and energy issues in housing. The Forum also organised several community events and rallies throughout 2021, including the "celebrate cultures, examine shortfalls" community event on 31st October and a rally for climate justice on 6th November. Furthermore, they worked alongside Friends of the Earth, Living Streets, Haringey Cyclists, and others on the big walk and cycle project in September, which promoted active travel and reduced car use.

13.5. Living Under One Sun (LUOS)

Living Under One Sun's Fuelling Empowerment project trained seven Haringey residents as Energy Champions qualified to advise other residents about energy use and fuel bills. This was followed by bi-lingual advocacy and community outreach to provide one-to-one advice and support, including behavioural change advice, checking meter readings, support applying for grants and discounts, energy saving equipment such as LED light bulbs, and examination of alternative energy providers. A total of 32 households received advice and additional 13 received materials. The project was funded by the GLA via Community Energy London, alongside contributions from LUOS, En10ergy, and Haringey residents.

LUOS are currently working on a funding application alongside HEET Waltham Forest to create a Haringey-Tottenham Heat Project.

13.6. En10ergy

En10ergy (logo shown right) is a social enterprise that was set up by the Muswell Hill Sustainability Group.

This year En10ergy has worked with Living Under One Sun in Tottenham and Southeast London Community Energy to deliver the Fuelling Empowerment project described above.

13.7. Muswell Hill Sustainability Group (MHSG)

In 2020, MHSG (logo shown right) members met for two online 'Call to Action' workshops to decide priorities for 2021: further Green Homes work, greening local business, and the key event of the year, the COP 26 Conference.

- **Green Open Homes:** MHSG's 8th Green Open Homes in 2021 included both online and virtual events and attracted record attendance with over 300 bookings.
- **Information events:** Expert speaker meetings continued with Professor Paul Ekins' return visit in January to consider the Government's 'Green Industrial Revolution', and Sam Benjamin on 'Decarbonising the UK'. MHSG hosted further information events in May 2021 on heat pumps and two new services offering retrofit advice, Future Fit Homes and Ecofurb.
- **Greening local business:** MHSG's new Green Business Group was formed, working in partnership with local traders' group Muswell Business, with their first event in July 2021 at N10 Traders for the Earth Week, celebrating and sharing stories of what local businesses are doing to be more sustainable.
- **COP 26:** Ahead of COP26, MHSG and Muswell Hill Extinction Rebellion staged a 'Die-In' in Muswell Hill town centre. This engaged passers-by and who were given information about MHSG's desired outcomes from the Conference.
- **Green Book Club** was founded to discuss recent green titles, meet online, and hold winter and summer socials.

Figure 11: Photo from MHSG's Traders for the Earth Week in July 2021.

13.8. Yes Outdoors

YES Outdoors is a charity which delivers a popular Bicycle Maintenance project for disadvantaged young people. The six-week course enables local residents to restore bicycles, donated by the Metropolitan Police, one of which becomes theirs to keep upon completion. The bicycles provide participants with a free and convenient mode of transport to use regularly as part of their everyday lives. The project also aims to promote cycling for leisure purposes amongst young people to keep them physically active as part of a healthy lifestyle and enables them to play a part in reducing air pollution by allowing them to travel in a sustainable way. The mechanical skills learnt on the course enable participants to maintain their bicycles on a long-term basis.

Case Study: A young person who took part in the Bicycle Maintenance project greatly benefitted from receiving a free bicycle. During this time, he was actively looking for work. The bicycle enabled him to extend his job search further afield, since he was no longer reliant on public transport. He secured a job that was 30 minutes away by bicycle, that otherwise would have meant taking two buses. He confirmed that he uses the bicycle regularly since it helps him to save money and to stay fit.

13.9. Sustainable Haringey Network

While the Covid-19 pandemic has unfortunately interrupted many of the Sustainable Haringey Networks usual programs, they have continued to produce the “Monthly Mailing” with information about local environmental events and news. This helps keep various local groups informed about what others are doing, as the Sustainable Haringey mailing list has over 1,000 subscribers and information is also passed on to other Haringey networks such as the Friends of Haringey Parks Forum.

13.10. Wolves Lane Centre

The Wolves Lane Centre grows produce to support the Haringey community as part of their Food for All project. This year, they purchased an electric cargo bike to reduce the emissions of their deliveries to local schools, senior homes, and community hubs. Wolves Lane are also combatting food waste and poverty, producing free meals from surplus food donations delivered by the Felix Project and distributing them via the Selby Food Hub and Homes for Haringey.

14. Future Projects

Haringey Council are committed to building on the projects and actions delivered in 2021 to deliver greater carbon reductions in the future. Committed projects include:

- Award up to £90,000 in council grants through the Haringey Community Carbon Fund in 2022 and deliver the first projects with the community in 2023.
- Implement the Energiesprong pilot retrofit project for 51 homes.
- Deliver more School Streets in 2022 and implementing three new low traffic neighbourhoods in St Ann's, Bruce Grove West Green, and Bounds Green.
- Install additional electric vehicle charging points across the borough in 2022 in line with demand.
- Direct Haringey residents to the GLA Warmer Homes Scheme and Green Homes Grants for domestic energy efficiency.
- Complete the Walking and Cycling Action Plan, Parks and Greenspaces Strategy, Tree and Woodlands Plan, Biodiversity Action Plan, and Parks Asset Management Plan in 2022.
- Upgrade Park buildings to at least Energy Performance Certificate (EPC) grade E by 2023 and grade C by 2025.
- Continue to roll out the LED street lighting project, including within parks.
- Produce Full Business Cases for the Wood Green and Tottenham Hale DENs in 2023. Begin work on site for the North Tottenham DEN in 2022.