Cover – to be designed by Haringey Comms

Foreword



Seven years ago we committed to publishing Haringey's carbon emissions, yearly at full council – to document and highlight the borough's efforts to reduce the impact of rising emissions. We did this because in politics we never achieve things unless we make ourselves accountable for them. Making commitments in public life needs to be backed up by action – or they just become empty promises that deliver nothing and only erode trust in our treasured institutions. It is why I am proud that we have been trailblazing in our efforts to be transparent and accountable in tackling climate change, and reducing emissions and making clear what it we set out to do, recording what we have achieved so far – and laying

down tangible means that demonstrate we are serious about our ambitions.

Setting a borough wide commitment to deliver a 40% reduction in carbon emissions by 2020 was extremely ambitious. This ambition has not been thwarted by the lack of action from the government, who in the wake of Brexit, have shown limited leadership or appetite to make the most of moving to a low carbon and independent energy supply for the UK. Nor have they shown leadership to address the impending economic, ecological and humanitarian crises that will ensue should temperatures rise, and should we fail to maintain this rise below two degrees centigrade.

I am very proud of Haringey's continued progress in achieving the <u>40:20 target</u> in the face of reduced funding, and limited policy direction. We lead by example – delivering a 3% reduction in emissions since the last Annual Carbon Report (<u>Sixth Annual Carbon Report, 2015-2016</u>), and a 29% reduction since 2005 when we started this work. But remarkably when we take into account Haringey's population growth, our emissions per head of population have already reduced by 40%.

Since the last Annual Carbon Report, the Council has received the report of the Zero by 2050 Commission. This panel of regeneration experts made practical, realistic and supportive recommendations to show the Council what could be achieved to deliver a low carbon and sustainable borough while still delivering growth. One of the first tasks recommended for the Council is to prepare a route map for the borough to achieve Zero Carbon by 2050, to start delivery once the 40:20 ambition is delivered. The Council is committed to working with partners such as the GLA to deliver this new ambition and build on existing carbon reduction successes.

Alongside this other highlights of the year include activities and events being delivered in the Neighbourhoods of the Future project. This will see the introduction of rapid charging infrastructure to spur the transition from fossil fuel based vehicles to electric vehicles.

In addition, in January 2017, the council decided to take forward a Council-owned District Energy Network to support carbon reduction while delivering growth and regeneration in North Tottenham. And I am proud to say the number of large scale solar panel installations in the borough increased again in the last year. We now have 2,220 panels that generate over 540,000kWh of electricity for the council.

We have seen crowdfunding through En10ergy to deliver solar panels on Woodside High School in Wood Green. And Muswell Hill Sustainability Group has raised awareness through its thermal image survey carried out on 20 local homes, helping residents identify heat loss in their homes. These projects and others show that carbon reduction is really a borough ambition and that we support each other to deliver carbon reduction.

In conclusion, we are moving in the right direction to deliver our ambition for 40:20, and would not have achieved this success without the support of residents, community groups and businesses. I want the borough to continue this ambition and build on this to deliver the Zero by 2050 ambition. Haringey is a leader in this field and I want it to continue to lead and deliver a step change in carbon reduction across the borough, showing the rest of London and the UK what can be achieved by a local authority that shows commitment and determination to tackle climate change. It is a legacy our borough should be proud of.

I thank all those who contributed to reducing Haringey's carbon emissions and who made this report possible.

Councillor Joe Goldberg, Cabinet Member for Economic Development, Social Inclusion and Sustainability

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Summary

Within the last year Haringey Council, along with residents and community groups within the borough, have sought to reduce carbon emissions even further than previous years - to reach the 40% emissions reduction target by 2020.

In terms of the overall decrease in CO₂, Haringey borough has achieved a 29% carbon reduction since 2005. This compares to a 28% decrease recorded by our neighbouring boroughs and across the UK, and a 30% reduction seen in Greater London. However, taking into account population growth the level of per capita emissions has decreased in Haringey by 40%, since 2005. This is a larger decrease than the 33% reduction across the UK but consistent with our neighbouring boroughs. During this period Haringey has the third largest decrease in per capita emissions in London, behind Islington and Camden.

Ongoing and future projects aim to decrease carbon emissions in the borough even further in order to meet these targets as well as addressing other issues such as fuel poverty, traffic congestion and a lack of awareness surrounding the impact of carbon emissions within the community.

Alongside the Mayor of London, the leader of Haringey, Cllr Claire Kober has stated Haringey's ambition to become a Zero Carbon authority by 2050. This will supersede the 2020 target. To help us achieve this, Haringey worked with a panel of experts to deliver a set of recommendations for action – now set out in the report of the Zero 50 Commission. The Council and its partners will need to make choices now to embed these recommendations into their work, ensuring we continue to promote sustainable economic growth by creating new jobs, saving money and delivering carbon reduction.

Introduction

The Annual Carbon Report highlights the work the council and partners have delivered to decrease CO₂ levels in Haringey's business, domestic, and transport sectors. This is the Seventh Annual Carbon Report which reports on Haringey's ambitions to deliver 40% reductions on carbon emissions by 2020. The Leader of the Council, Cllr Claire Kober, recently stated Haringey's ambition to become a Zero Carbon borough by 2050. This will supersede the 40:20 target.

The report includes:

- Recent changes to National Government Policy influencing Haringey 40:20.
- Official Carbon Emissions Data, published by the Department of Business, Energy and Industry Strategy (DBEIS) relating to emissions in 2015
- Information on key projects which contributed to reducing emissions between April 2016 and March 2017
- Future and ongoing projects to reduce emissions from April 2017

Background

Greenhouse gas emissions from human activity are the highest in history and there is clear empirical evidence concerning our impact on the Earth's climate systems. The atmosphere and oceans have warmed, snow and ice cover has diminished, and sea levels are rising. Extreme weather events will increase in frequency and intensity as a result of rising temperatures, which could lead to heavier rainfall and more frequent heat waves. These will impact the borough and the services Haringey provides to residents, which is why the Council is taking action to reduce energy use and carbon emissions, while adapting to our changing climate.

Key Policy Changes – International and National

There has been limited recent change to National Policy in the field of carbon reduction. Recent developments in the national and international arena include:

Energy Company Obligation (ECO) Transition Period

The Energy Company Obligation (ECO) transition period will see funding extended for an 18-month period (April 2017 – September 2018). The funding is targeted at households in fuel poverty, and on lower incomes, who are struggling with heating and other bills. Eligibility will also be extended to social housing in EPC bands E, F or G. Local authorities have a role in identifying eligible homes through the 'flexible eligibility' mechanism.

United States of America withdraws from Paris Climate Accord

In August, the United States of America become the first county to formally withdraw from the Paris Climate Accord. The Accord was agreed in Paris in December 2015. Over 190 countries agreed to cut their greenhouse gas emissions to prevent global temperature rising above 2°C, and achieve a zero carbon environment by 2050.

SAP (2016) Updates

The Standard Assessment Procedure (SAP) is a calculation tool that enables designers and developers to assess carbon emissions, and verify compliance with Part L of the Building Regulations 2013. It compares the Target Emissions Rate (TER) for a "notional" equivalent dwelling to the actual Dwelling Emission Rate (DER).

SAP 2016 is an update of the data assumptions in the existing calculation methodology. There are 18 amendments, the sum of the impacts is significant. The 5 key changes are:

- Reduced grid carbon factor: Grid electricity carbon factor reduced by 23% from 513 g/kWh to 399 g/kWh
- **Distribution Loss factors**: Increase in DLF for heat networks, the existing values were unrealistically low.
- Lighting improvements: Low energy lighting tick box replaced with the details of lighting system load
- Thermal bridges: Increase in the default value from 0.15-0.2
- Hot water calculations: Base hot water demand on estimated load and fitting selection

Key Policy Changes – Regional and Local

London Environment Strategy

The Mayor of London, Sadiq Khan published the draft <u>London Environment Strategy</u> which sets out a range of actions to improve London's environment. Toxic air, noise pollution, the threat to London's green spaces, and the adverse effects of climate change, all pose major risks to the health and wellbeing of Londoners. This is the first strategy to bring together every aspect of London's environment. It is divided into the following areas:

- Air quality
- · Green infrastructure
- Climate change mitigation and energy
- Waste
- Adapting to climate change
- Ambient noise

It commits London to becoming a Zero Carbon capital by 2050 and leading the global community. To do this the Mayor asks for the boroughs to support and share this ambition.

Zero by 2050 Haringey

The leader of Haringey, Cllr Claire Kober has stated Haringey's ambition to become a Zero Carbon borough by 2050. This will supersede the 2020 target. To help us achieve this, Haringey worked with a panel of experts,

the Zero by 50 Commission, to deliver a set of recommended actions. This panel of regeneration experts made practical, realistic and supportive recommendations to show the Council what could be achieved to deliver a low carbon and sustainable borough while still delivering growth. The Council is committed to working with partners such as the GLA to deliver this new ambition and build on our existing success in carbon reduction. One of the first tasks recommended for the Council is to prepare a route map for the borough to achieve Zero Carbon by 2050, to start delivery once the 40:20 ambition is delivered.

Haringey's Performance

2015 Emissions

The data within this report was sourced from DBEIS. Other information was located from the London Data Store, Haringey Council's Carbon Management Team and The Association for Decentralised Energy. The data shown is from the 2015 carbon emissions statistics published in 2016. There is no correlation between this data and the projects, schemes and campaigns that occurred within the last year (2016).

Emissions trend 2005 - 2015

Haringey's overall emissions decreased by 3% in since 2014 – falling from 772 kilo tonnes (Kt) to 749 Kt. A similar trend was seen nationally - 83% of UK Local Authorities (LAs) recorded an overall decrease in emissions. Across Greater London, a third of boroughs saw a decrease in emissions less than 5%, a further third recorded decreases between 5% and 10% and four boroughs failed to record a decrease since 2014.

Since 2005 total emissions in Haringey have decreased by 29%. This is aligned with the 28% decrease recorded by our neighbouring boroughs and across the UK, while there has been a 30% reduction seen in Greater London. The City of London saw the largest overall decrease in emissions since 2005, at 48%.

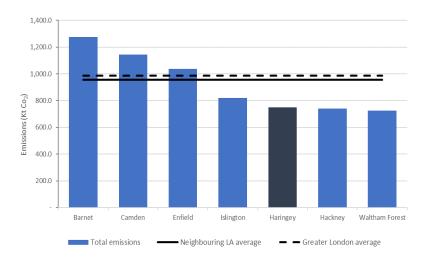


Figure 1 - 2015 Carbon dioxide emissions for Haringey and neighbouring boroughs

Haringey has the third lowest emissions in the group comprising Haringey and our six neighbouring boroughs, and the third lowest level of emissions of any Inner London borough. Figure 1 summaries total carbon dioxide emissions in Haringey compared to neighbouring LAs, Greater London, the South East, England and the UK.

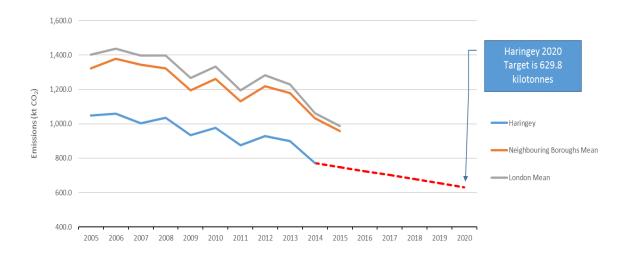


Figure 2 - 2005 - 2015 Carbon dioxide emissions trend

2015 Performance

To deliver our 40:20 target, Haringey's emissions need to decrease by a further 16% - an average of 24 Kt annually over the remaining five years (from 2015-2020). This is a challenging but achievable target given that overall emissions in Haringey have decreased by 14% over the previous five years - an average of 46 Kt/yr. This included significantly above average emissions reductions of 102 and 126 Kt in 2011 and 2014, respectively.

Local Authority and regional emissions per capita

Since 2005 the level of per-capita emissions decreased in Haringey by 40%, from 4.6 to 2.7 tonnes per person. This is a larger decrease than the 33% reduction across the UK but consistent with our neighbouring boroughs. Population growth has increased by 19% over the same period, demonstrating how Haringey continues to meet the ambitious 40:20 commitments to reduce carbon emissions whilst delivering growth.

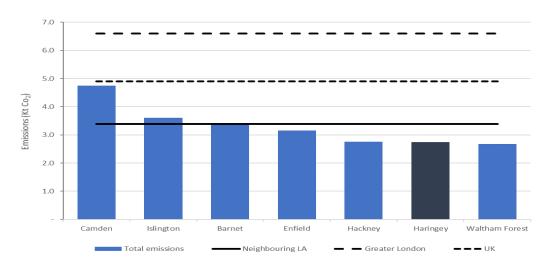


Figure 3 - 2015 Carbon dioxide emissions per capita for Haringey and neighbouring boroughs (t CO2 per person)

Haringey has the lowest emissions per capita, 2.7 tCO_2 /capita, in the group comprising Haringey and our six neighbouring boroughs. Waltham Forest recorded a similar emissions/capita figure. Haringey's tonnes per capita figure is at a considerably lower level than Greater London, at 3.8 tCO_2 /capita, and the UK, at 4.7 tCO_2 /capita. This is attributed to lower emissions from the Industrial and Commercial sector in Haringey, at 0.8, and Waltham Forest, at 0.7. Figure 3 shows the level of carbon emissions per capita (tCO_2 /capita). These

figures are useful measure for domestic emissions, but emissions from industry and transport are driven by factors often outside the borough's control.



Figure 4 - 2005 - 2015 Carbon dioxide emissions per capita for Haringey and neighbouring boroughs

Emissions by sector 2015

In Haringey the level of emissions for all three sectors has reduced since 2005, but the proportion contribution has not changed. Domestic emissions as a percentage of all emissions in Haringey, at 49%, is substantially greater than in both London, at 37% and the UK, at 33%, in addition to being the joint highest among our neighbouring boroughs (joint highest with Barnet). The percentage of Transport emissions in Haringey, at 23%, is in line with Greater London, at 22%, and our neighbouring boroughs, at 21%, but lower than the UK, at 30%. The Industry and Commercial sector accounts for 28% of all emissions in Haringey, which is lower than our neighbouring boroughs, at 39%, Greater London, at 40% and the UK, at 37%.

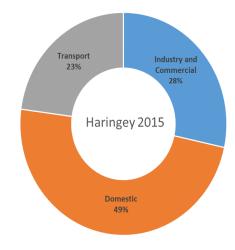


Figure 5 - 2015 Proportion of carbon dioxide emissions

Sector Emissions 2005 – 2015

1. Domestic sector

In 2015, Haringey's Domestic sector emissions were 365 Kt - 3% lower than in 2014. Almost all UK LAs recorded a decrease for this period. The main reason is the reduced use of coal for electricity generation.

Looking at longer-term trends, Haringey's emissions from the domestic sector have also decreased substantially since 2005, with the same being true for all LAs. Haringey's reduction of 33% is lower than our neighbouring Local Authorities, at 30%, London, at 29% and the UK, at 30%.

2. Industrial and Commercial sector

The level of carbon emissions in Haringey's Industry and Commercial sector decreased by 5% to 213 Kt in 2015. A similar trend was seen across the UK, with 84% of LAs experiencing a decrease in emissions since 2014. This is consistent with national trends where emissions fell due to reduced coal use in electricity generation.

Despite two notable increases in emissions in 2006 and 2008, the overall level of emissions in Haringey has decreased by 28% since 2005. While this is positive, larger reductions were seen among our neighbouring Local Authorities, at 31%, in London, at 35% and in the UK, at 36%. But this needs to be set against a loss of the industrial sector, rather than just carbon reduction. Nationally, all but 6 boroughs failed to record a decrease in emissions from this sector between 2005 and 2015.

3. Transport sector

Haringey recorded a decrease of 0.2%, to 171 Kt, for Transport emissions in 2015. At the national level Transport emissions showed a small increase, 1.4%, in 2015, with more than three-quarters of boroughs experiencing an increase in emissions.

Despite small gains between 2014 and 2015, since 2005 Haringey Transport emissions have decreased by 20%. This is in line with the rate seen in London, at 19%; our neighbouring boroughs, at 16% and the UK, at 10%, have showed slower reductions. It is worth noting that these decreases are in the face of an increase in both the number of passenger vehicles and the vehicle kilometres travelled during the same time period. This has been possible due to lower petrol consumption by passenger cars and improvements in fuel efficiency.

London maps - 2015 CO2 emissions per capita at Local Authority level

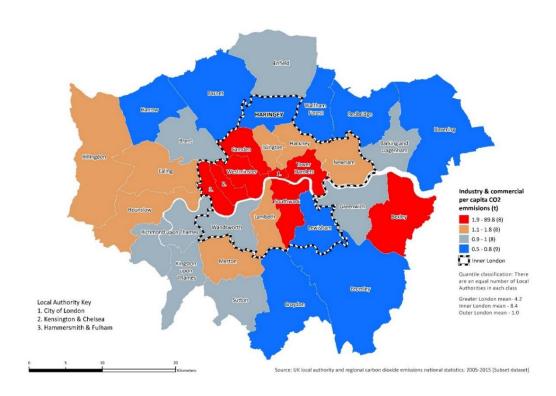


Figure 6 - Industrial and commercial per capita CO2 emissions by Local Authority (tonnes CO2 per capita) for 2015

Key Projects Since 2016

Zero by 2050 Commission

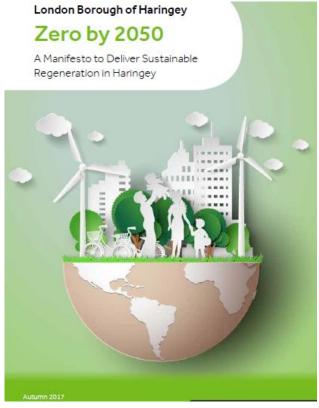
Haringey Council commissioned a panel of experts to consider how the borough's regeneration ambitions and pioneering measures could be a catalyst for carbon reduction. This panel produced a report, with key recommendations on how to improve schemes and deliver environmentally sustainable and socially inclusive regeneration plan for the 21st century.

<u>Haringey Zero by 2050</u> builds on the work of the pioneering <u>Haringey Carbon Commission</u> in 2009, which recommended a measures to reduce Haringey's carbon footprint, and set out the 40:20 target.

The Zero by 2050 Commission goes further, with ambitions for new developments to be carbon neutral and the borough to be a leader in innovative renewable energy and climate change "future proofing".

The seven overarching recommendations:

- Improve the health and wellbeing of the community by creating a natural environment through greening of outdoor spaces and mitigating the urban heat island effect
- Create a climate change adaptation and resilience plan to future-proof and reduce vulnerability
- Deliver a zero-carbon and net energy positive Haringey by 2050
- Abolish waste to landfill to zero and increase recycling rates by 2020
- Drive the uptake of clean technology across Haringey's built environment, targeting new developments
- Ensure that low and zero carbon buildings are delivered
- Set a strategy for connecting communities, work
 places and high streets through walking and cycle
 paths, reducing transport emissions by 20 percent by 2020



Each overarching recommendation is underpinned by a series of specific recommended actions. The council is working on a detailed action plan to show how some of the recommendations could be met.

We need the strong support of boroughs, businesses and Londoners to work towards the Mayor's ambition of making London zero carbon by 2050. This report shows that boroughs like Haringey can become zero carbon and we look forward to more boroughs making this commitment.

Shirley Rodrigues, Deputy Mayor of London for Environment and Energy

Haringey Built Environment Innovation Hub

The <u>Haringey Innovation Hub</u> has been awarded £100k (€102) from <u>Climate KIC</u> - EU's Knowledge and Innovation Community for climate innovations - to continue its work for a further 18 months. The Innovation Hub supports emerging technologies from universities and start-ups in the clean tech sector. After assessing their business model these technologies are promoted to developers and property owners in a "Dragons Den" format. Constructive feedback on the technology is given to the entrepreneur on areas of improvement and market understanding. And if the developers or property owners are keen they will agree to undertake field trials of the technology. In the last year over 20 new technologies have been supported in this way and several have been brought forward to extensive trials with property owners. These trials have demonstrated a reduction in carbon through improvements in operations and management of systems such as community heating networks, and clear solar panels for windows.

Over the next year with this new funding, and alongside GLA support in this sector, the project will move from a Haringey focus to a wider London network. It will be managed by Knight Frank on behalf of the Council. The expanded focus reflects market interest in this project from developers from outside Haringey.

Council Emissions

Haringey is working towards a 10% electricity reduction in our Corporate estates by 2018 – and we are on track to exceed this target. To date we have reduced electricity consumption by over 35% from a 2014/15 baseline saving over 2,400 tCO₂. Moving out and disposing of buildings we no longer need, alongside reviewing our lighting and boiler controls through the GLA RE:FIT programme, has resulted in electricity reductions of 8% compared to 2014. In addition, we have a partnership arrangement with an energy community organisation, en10ergy, that is installing community-led solar panels in schools (see below).

Solar Panels in Haringey

The council has 43 solar installations consisting of over 2,200 panels - in 2016, we added another 5 installations. These generate over 540,000kWh of electricity for the council.

New solar installation feasibility studies have been undertaken for the new waste depot at Marsh Lane, Hornsey Library and Winkfield Centre with potential electricity generations of 122,000kWh, saving an extra 90t CO₂ per year.

Working in partnership with En10ergy, a community energy group, we supported their Solar PV installation programme at Woodside School, a 49.8kWp system. It is predicted this installation will generate 44,598 kWh in first year, and save 20 tCO2 a year CO₂ annually. Currently we are reviewing a potential installation at Hornsey School, which could hold a 30-60kWp system, and save over 10tCO₂ annually.

GLA RE:FIT Programme

In the last year this programme supported the installation of energy efficiency measures in public buildings to reduce emissions. It has resulted in year on year electricity reductions with 90 tCO₂ saved. Installed energy efficiency measures included cavity wall insulation, LED lighting and boiler controls, as well as an innovative heat recovery system for Haringey's data centre.

Waste

In 2016/2017 Haringey's household waste recycling rate was 36.1%. This means 7,734 tonnes of food and green waste was composted and 21,558 tonnes of recyclables were diverted from the general waste stream.

An intensive fly-tipping engagement programme was delivered in the Bruce Grove area, whereby the Outreach Team door knocked residents in the area to educate and inform them of how to dispose of their waste correctly. Further intensive, localised fly-tipping projects are currently being planned in 2017/2018.

Currently 80% of schools have signed up to the food waste collections service. Our Education Officer is engaging with the remaining 20% of schools to encourage them to sign up to the service as well.

Across Haringey we have exceeded our emissions reduction target of 40% reduction from waste contract operations. We achieved 54% carbon reduction in in 2016/2017 against the 2011/12 baseline.

Air Pollution

Air Quality Health Engagement project

Throughout 2016 the Council held 4 public information Air Quality stands at various locations around the borough; 2 in Wood Green shopping area, 1 in Crouch End and 1 in the Tottenham area. In addition to this 2000 postcards were designed and printed to promote low pollution walking routes. Airtext was used to encourage modal shift by discouraging vehicle use in favour of cycling, walking, scooting and public transport, and leaflets were distributed to 9 libraries in Haringey.

Air Quality Action Day

In October 2016 the action day promoted no-idling outside two schools, with the aim of increasing awareness and reducing car exhaust fumes. Officers spoke, gave advice and handed out leaflets to those dropping and picking up their children, particularly focussing on drivers who left their engines running.

Energy Efficiency

SHINE London

In 2017 Haringey signed up to a pilot project with Islington SHINE, running until May 2018. SHINE London is a *one-stop-shop* aimed at tackling fuel poverty, reducing seasonal deaths and hospital admissions. SHINE takes a holistic approach, with one referral leading to an assessment for almost 30 difference services, including energy efficiency improvements, benefit checks, falls assessments, fire safety checks, medicines use reviews, enablement and befriending services, telecare etc. Residents are referred by third parties such as local health, social care, housing services and voluntary sector organisations or can directly contact SHINE themselves. The scheme is funded through the the Warm Home Discount Industry Initiatives. To date over 90 residents have benefited from this service. Residents seeking access the ECO flexible eligibility – eligibility criteria to be developed by Haringey to help identify those most in need of support - will need to be referred through SHINE London:

Telephone: 0300 555 0195

Email: <u>contact@shine-london.org.uk</u>
 Online: <u>www.shine-london.org.uk</u>

National Energy Action (NEA) and Haringey

1. Warm and Healthy Homes Scheme



Action for Warm Homes

The Council secured over £190,000 of funding from the NEA, to provide grants for residents with long term health conditions to install

insulation and energy efficiency measures. Haringey Council installed:

- 4 insulation installations including Cavity wall, loft and solid wall insulation
- 61 heating system installations including heating systems upgrades, controls, boilers and storage heaters

Case Study: Mrs G is 71 and lives with her son. The family were eligible for help from Warm and Healthy Homes as Mrs G is recovering from cancer, her son has a disability and they have a low household income. The home was not very comfortable in the cold months and proved expensive to heat using electric heaters. Under the Warm and Healthy Homes fund a new central heating system was installed including a combi boiler with seven radiators, thermostatic radiator valves and a room thermostat.

Since the interventions the EPC rating has increased from F to D, they are feeling much more comfortable in their home and have hot water whenever it is needed. Their energy bills have reduced considerably.

2. Referral Project

The Council have secured in kind support from the NEA to develop a community focussed referral system to help identify and refer vulnerable householders to relevant support services, such as SHINE London. NEA will assist Haringey Council develop a referral model to include:

- producing a comprehensive community directory/listing identifying a wide range of local agencies/ groups/organisations/clubs etc. who will be invited to participate
- delivering a programme of localised community training/awareness sessions to stakeholders who will:
 - a. cascade their learning to others in their organisation and/or
 - b. make referrals to the programme
 - c. develop training/awareness sessions and any associated resources

3. Schools Education Programme

NEA are delivering a primary school education programme offering an introduction to energy efficiency and sustainability for children in Key Stage 2 (KS2). Four schools are taking part; sessions include:

- a school or key stage assembly presentation, focusing on sustainability and energy efficiency;
- an interactive half day of activities for classes, involving students in discussions and drama;
- learning activities linked to the KS2 curriculum involving science, numeracy, speaking and listening, leading to an understanding of how energy can be used efficiently in the home;
- opportunities for parental involvement.

Green Doctor Scheme (WARMTH - Groundwork)

WARMTH, funded by British Gas Energy Trust, ran from February 2016 until February 2017. It offered a Green Doctor visits - a home visit to assess resident's needs and match them to relevant services. The home visit established current housing condition, facilities, heating and insulation levels and provided practical solutions to problems, such as damp, mould or how to make savings to energy bills. The project achieved:

- **185** Home energy and well-being visits
- 1,053 energy saving measures installed
- £9,657.25 was saved through installation of measures and fuel switching
- £3,080 saving in Warm Home Discount applications.
- 1,843,503 litres of water saved from installation of water saving measures
- 14.8 tonnes of CO₂ avoided from installation of energy saving measures.
- £9,833 and 39 tonnes of CO₂ saved as a result of behaviour change interventions
- 41 households were signed up on the Priority services

WARMTH ran alongside the NEA's Warm and Healthy Homes Scheme. These two schemes complemented one another as residents who were

Case Study: Mrs T is 86 years old and living on her own in a 3 bedroom privately owned home and suffers anxiety. The Green Doctor was able to identify that Mrs T had an extremely old heating system (boiler and radiators); a referral was made directly to the Warm and Healthy Homes Scheme where she was eligible to receive a new boiler and two new radiators. She complained of her draughty front door and so the Green Doctor fitted draught proofing to keep her more comfortable in the house. The Green Doctor was also able to identify the high water bills (>£600/year), so a representative from the water board was arranged to visit the home and fill out the form with Mrs T, and at the time of this visit, they agreed on having a water meter installed as Thames Water have estimated for one person the bills are likely to reduce to £100/year, saving Mrs T almost £500/year. Water saving measures were also installed eg a water saving shower head and save-a-flush bag. She received a stay warm pack which included a blanket, socks and gloves which gave her great comfort especially when her heating system failed her during the period of waiting for the new boiler. The Green Doctor was able to provide additional support in linking Mrs T to Haringey Neighbourhoods Connect who was able to inform her of the local services/activities in which she can participate in to overcome isolation.

not eligible for the Warm and Healthy Homes scheme, were still eligible for WARMTH. In addition, some extremely vulnerable residents were identified through WARMTH which meant they could be referred to Warm and Healthy Homes Scheme for grant funding.

Decentralised Energy Network (DEN)

District Energy Networks (DENs) run on 'Combined Heat and Power' (CHP), integrating the production of usable heat and power (electricity), in one single, efficient process. It can deliver more efficient, lower carbon energy. Networks operate at a local level which increases security of supply and reduces transmission loses. Conventional methods of generating electricity waste vast amounts of heat - losing up to two thirds of the overall energy generated.

Heat mapping in Haringey identified three decentralised energy opportunity areas in the borough: North Tottenham, Tottenham Hale and Wood Green. In January 2017, the council decided to take forward a Council-owned District Energy Network to support carbon reduction while delivering growth and regeneration in North Tottenham. Amongst the many benefits potential are:

- Reducing distribution losses and therefore carbon emissions by locally generating heat for Haringey residents,
- Supporting future regeneration in Tottenham and measures to reduce resident exposure to high and volatile fossil fuel prices,
- Delivering wider social benefits such as setting energy tariffs for residents,
- Setting up a local company to support local apprentices and skills development, and reinvesting local spend on energy on service delivery and other improvements in the borough
- Making a significant contribution to the Council's carbon budget and revenue budget as the Council would benefit from 100% of the distributable profit from the entity

Haringey's Local Plan

<u>Haringey's Local Plan</u> sets a new planning policy framework for Haringey. It replaces the old Unitary Development Plan, and sits alongside the Mayor's London Plan as the statutory development plan for the Borough. It will help Haringey deliver the planned future growth of approximately 20,000 new homes and 12,000 new jobs with sustainability and carbon integrated into the development process.

The Local Plan includes policies focussed on climate change adaptation and mitigation. In particular, the plan requires developments to fully exploit sustainable design and construction techniques to minimise energy use to meet, and exceed London Plan targets. Where these targets cannot be achieved there is now scope for the Council to secure carbon offset payments. Further details on carbon offsetting will be set out in an updated Planning Obligations Guidance Supplementary Planning Document (SPD), due to be adopted in 2018.

Informed by Haringey's Decentralised Energy Masterplan, the Local Plan also establishes the policy basis for delivering DE networks within the Borough. Specifically, the plan introduces new local requirements for major development types to optimise the delivery of communal energy systems and prioritise connections to existing or planned DE networks in the Tottenham and Wood Green areas. This includes requirements for proposals on selected strategic sites to fully investigate opportunities for DE network development, as set out in the Site Allocations DPD and the Tottenham AAP.

The Local Plan also includes a range of policies aimed at retaining and increasing green infrastructure. It introduces the concept of the Haringey Green Grid programme, which seeks to make the most of our parks and open spaces by creating better linkages between space, removing barriers to improve accessibility and increasing the quality of the space. These green initiatives deliver on carbon reductions as well as improving air quality, health and wellbeing.

Planning Policy, Zero Carbon Standard and Carbon Offset Fund

Since October 2016, all new residential development must achieve zero carbon on-site emissions in line with London Plan Policy 5.2. In Haringey, we encourage carbon reductions to be sought on-site, in most cases through design features to the development. Where it is clearly demonstrated that emission targets cannot be fully achieved on-site, measures to make up the shortfall to zero carbon may be implemented off-site. In addition, developers can make an in-lieu cash payment which will be used by the Council to fund measures, projects or programmes to deliver carbon reductions in the borough.

This cost has been agreed for Haringey - based on the cost of steps to reduce emissions on the scale required here - at £2,700 per tonne, based on £90 tCO2 over 30 years lifetime of carbon. To date, over £123,000 has been secured and is in the process of being collected.

Homes for Haringey Property Services

Decent Homes Programme

Decent Homes Standard is a Government funded programme aimed at improving council housing, and bring homes up to a minimum standard. Measures installed to improve a dwellings energy performance between April 2016-March 2017:

	No Dwellings
Boiler renewal	364
Loft/Roof Insulation	35
Cavity Wall Insulation	214
Windows (Double Glazed)	707

Decent Homes Plans for 2017/18 onwards

Homes for Haringey will continue to deliver home improvements such as loft and roof insulation, energy efficient boilers and double glazed windows through its major works programme. The Government's transition period ECO scheme (ECO2t) runs from 1st April 2017 to 30th September 2018. Homes for Haringey are working with Keepmoat Regeneration Ltd to claim ECO funding for eligible works carried out in the major works programme over this period. Qualifying works include roof/loft insulation and double glazing. Any ECO funding received will be ring-fenced for future investment in further energy efficiency improvements to the stock.

Local Energy Advice Programme (LEAP): The Energy and Money Saving Service

This is a service for Homes for Haringey residents that can help residents save money and keep their home warm and cosy. Since set up, in April 2016, over 160 home visits to help residents have taken place.

LEAP Local Energy Advice Programme

For more information, contact: 0800 060 7567, or email

helpdesk@projectleap.org.uk

Transport

Wood Green Neighbourhoods of the Future

Haringey has been awarded funding, by TFL, for a <u>Neighbourhoods of the Future</u> project in Wood Green to increase the uptake of electric vehicles – a total of



£600,000 has been secured to fund the project until March 2020. Progress so far includes:

1. Rapid Taxi Rank Installation

A rapid recharging unit is proposed to be installed on the Gladstone Avenue taxi rank. Designs and feasibility studies have been carried out and the installation is expected early 2018.

2. Planning Guidance / Area Action Plan

A policy proposal was included within the Wood Green Area Action Plan (Policy WG11) stating that 'All parking for new development requires the provision of electric vehicle charging points.' This is greater than the 20% required in the London Plan. Guidance documentation is being drafted to support this policy.

3. Business and Resident Engagement

Free electric vehicle reviews are available for businesses. These reviews are delivered by the Energy Saving Trust and provide advice on how electric vehicles might work from an operational and financial perspective. Four organisations are currently taking part.

4. Electric Vehicle Trials

Free trials, of up to one week, are available for Wood Green businesses and residents. So far over 25 residents have signed up for a trial. Vehicles for trial currently

- Nissan Leaf and NV200
- Citroen Berlingo Electric
- Peugeot Partner Electric
- BMWi3 through DriveNOW

5. Events

include:

During September 2017 we held a seminar for the Wood Green Business Forum – Electric Vehicles

unplugged. Guest speakers included the Energy Saving Trust and Source London. Further events are planned for 2018. An electric vehicle display was held on the Wood Green High Road. Vehicles on display included: BMWi3, BMW C Evolution Scooter, Citroen C-Zero, Peugeot Partner van, Mitsubishi Outlander PHEV, Bluecity, Zipcar with the Volkswagen Golf GTE, Nissan Leaf, Vmoto scooter. Over 100 people took a look around the vehicles and asked questions about electric vehicles and recharging.

Electric Vehicle Charging

a. Go Ultra Low Cities (GULCS) funded Electric Vehicle Charging Points

Haringey was awarded £105,000 funding to install pillar chargers and lamp column chargers. The council plans to install a total of 25 standard and lamp column charging points in 2017/2018.

b. Rapid Electric Vehicle charging points

Transport for London (TfL) announced in April 2017 £18million of investment for rapid charging points that recharge vehicles within 30 minutes. These will be installed in London for black taxis and other vehicles to encourage drivers to go electric and help clean up London's air. At least 6 rapid charging points will be installed in Haringey in 2017/2018. Council officers are liaising with TfL to identify suitable locations (on-street and offstreet) for these charging points.

Car Clubs

A car club scheme is one of several parking policies used to influence travel behaviour. By providing residents with a convenient alternative to car ownership we can reduce car ownership, reduce local parking pressures, reduce traffic congestion, improve road safety and encourage the use of more sustainable forms of transport.



To meet the growing demand for car club services from residents and maximise the potential benefits - reducing car dependency and parking pressures, providing access to cleaner vehicles and accommodating growth - the council will be introducing additional car clubs in 39 locations in 2017/2018 which will be operated by Enterprise Car Club, Ubeeqo and E-Car Club.

Controlled Parking Zones

The Council introduced 6 additional Controlled Parking Zone areas in 2016/2017 - making 70% of the borough controlled parking. These zones reduce commuter parking and reduce vehicles traveling into the borough. It aims to encourage the use of more sustainable forms of transport. i.e. buses, trains.

Smarter Travel



The Smarter Travel programme, funded by TfL, aims to change the behaviour of those living, working and travelling within Haringey to encourage more people to travel sustainably and safely. This year, the Smarter Travel team led a number of projects to improve the health of residents, encourage active travel and enhance air quality. These projects have also contributed to reducing transport emissions in the borough.

1. Cycling

- 1852 pupils received cycle training (including those learning to ride)
- 558 bikes were serviced as part of regular Dr Bike sessions in Finsbury Park, Priory Park, Lordship Recreation Ground and at events across the borough.
- 65 residents attended a basic cycle maintenance class.
- 12 residents attended an intermediate cycle maintenance class.

2. Festival of Cycling

In June 2017, Hackney, Haringey and Islington Councils joined together for the fifth time to host an interborough cycling and walking festival. Over 1,500 people across London attended the event on the day.

3. Cycle Ride for Schools

On 14th June 2017 144 pupils from 12 Haringey Schools took part in a cycle ride around Haringey. The ride was supported by the police who rode with us throughout the day.

4. Community Funding

During the year, funding was allocated to community organisations with projects supporting residents to walk or cycle, rather than drive a car. Funding recipients included Tottenham Hotspur Foundation, Selby Trust, Living Under One Sun, the Parents Forum, Step by Step, the Markfield Project and Haringey Play Association.

5. HARI Bear

A walking relay organised during International Walking Month in October 2016, as part of the Haringey Walks Campaign saw our Hari (Healthy, Active, Responsible, Independent) bear saw over 46 primary schools, including 719 pupils, parents and teachers walk a total of 903.4 miles.

6. Cycle Maintenance Project

As part of the Mayor's Air Quality Fund (MAQF), 'No 2 NO_2 ' programme the Council was awarded £1,600 to deliver a cycle maintenance project. A training programme was developed to teach children the basics of bike maintenance and to put into practice what they had learnt.

- Alexander Park School Cycling instructor trained 20 pupils
- Stamford Hill primary Cycling Instructor trained 12 pupils

 Homes for Haringey youth club Cycling Instructor trained 48 children

"Thank you very much for the cycle workshops. Our young people really enjoyed the sessions and we have had lots of positive feedback. Diageo and Digger were brilliant with our young people and really engaged them." Dionne Lennon – Homes for Haringey

"I can finally fix my bike!" Chris aged 11 (Stamford Hill School)



"I want to be a bike mechanic" Nicola aged 12 (Alexander Park School)

7. Personal Travel Planning and Walk Zones

The project, funded by Smarter Travel and the Mayor's Air Quality Fund, delivered a total of 1,800 Personal Travel Plans and 6 ten-minute Walk Zones with 6 primary schools per year between May and November 2017.

Community Projects

Selby Trust

The Selby Centre is used by over 500 visitors a day accessing programmes either run by the Selby Trust, or delivered by the 100+ social enterprises, environmental projects, charities, not-for-profits, sports groups, employability support organisations, and faith groups that use the Centre regularly. The Selby Trust badged its environmentally focused projects under a Green Hub and delivered:



a. Sun Dials Project

Aimed at creating excitement about renewables with local people through workshops on how to make a solar panel charger in a day – this was funded by <u>Haringey 40:20 Community Grant Funding</u>. Three day-long workshops, with an attendance of 28 people, to make solar panel chargers were delivered. Each learner acquired skills to make a solar panel phone charger that they could take home.



b. Green Wheels

Green Wheels, supported by Smarter Travel, delivered bike maintenance workshop to include:

- bike maintenance
- safe cycling for women

walking

c. Big Energy Saving Network

The Trust raised £8,000 external funding in partnership with London Sustainability Exchange to enable 2 Community Organisers to deliver the Big Energy Saving Network project, offering fuel poverty advice. This involved raising awareness of domestic users about switching to more cost effective energy companies. One success story resulted in an end user, wiping out debt of over £2,500.

"The Green Wheels project at the Selby Trust taught me how to fix my bicycle when it has broken down. Michael taught me how to fix a puncture, adjust my brakes and gears. I can also repair or change the cables. I visited the repair workshop many times and it is very helpful for me. My bicycle is working as it should and it feels very nice to ride. Thank you Green Wheels."

Ana Astvdillo

d. New Approaches to Sustainability through Green Hub Projects

The Trust now benefits from donated office furniture from corporate organisations. It sells furniture on at budget prices to local community groups and residents from our charity Ebay Shop. The Global Garden was recently showcased at City Hall, sharing his learning of the Global Garden's crowd funding campaign, undertaken in partnership with Spacehive and local volunteers.

Friends of the Earth local groups (Tottenham and Wood Green and Hornsey and Muswell Hill) have continued to lobby the Council pension committee to invest in more carbon neutral stocks and shares. They also campaigned to reduce air pollution by asking the Council for better facilities for pedestrians and cyclists in the Borough and to shift to electric vehicles. They are also urging the North London Waste Authority to include a sorting facility to remove recyclable plastic from the residual waste stream before incineration in the proposed new Edmonton plant. Find out more: Tottenham and Wood Green friends of the earth

Haringey 40:20 Community Grant Funding - LED in Northumberland Park community

The project was conducted in March 2016. The focus was to raise awareness of the LED energy bulbs and fit the energy efficient LED bulbs in resident's homes in the Northumberland community.

160 bulbs were fitted in 80 homes - 91% of these were fitted by the trained professional, 6% of residents fitted their own bulbs. A number of residents refused the installation saying they were not comfortable using the LEDs.

Using LED bulb emissions figures from London Electric Design, a LED bulb of 19.7 W used for 10h per day will emit 78KG CO2 in a year. The project reduced emissions form lighting by 30,208 KG CO2/Year in Northumberland community.

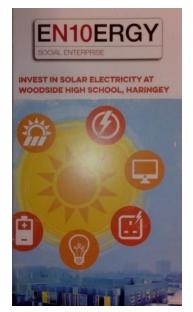
Transition Crouch End

This group holds bi-monthly film shows with discussion to raise awareness of climate issues. These are attended by 30-40 people. Films this year include How to Change the World (about Greenpeace), A Plastic Ocean and Cowspiracy. In November 2016 a Green Christmas Fair showcased locally made and recycled gifts, about 300 people attended. In March 2017 there was the Alternative Clothes Show, attended by 300 people, raising awareness of the environmental consequences of the clothing industry. The Meadow Orchard community project welcomes around 10 volunteers each Saturday to carry out food growing and conservation tasks. Find out more here

Muswell Hill Sustainability Group (MSHG) (with en10ergy)

MSHG continues to hold speaker meetings to raise awareness about climate issues- hosting 30 people. Topics this year included, smart meters, electric cars and the London Assembly environmental plans for London.

Two Green Open Home events were held where local residents who have carried out energy saving improvements to their homes, showcase what they have done. Over 60 visitors attended each event.



In January 2017, a thermal image survey was carried out on 20 local homes to help residents identify heat loss areas in their houses. The group has received funding from the Climate Forum to purchase a thermal image camera and carry out more surveys.

En10ergy, MSHGs community energy enterprise held a share offer this year to place 300 solar photovoltaic panels (100kWp) on Woodside High School. This will provide cheap electricity to the school and save roughly 40,000 tCO₂/year. The income from its current solar pv panel array continues to fund carbon saving projects in the Borough. Find out more here

Sustainable Haringey Waste Group

This group organised 4 visits to the Edmonton incinerator to see where Haringey's waste is treated – approximately 10 people attended on each visit. There was also a visit to the Bunhill combined heat and power project in Islington.

Growing in Haringey

This group continues to host regular green gardener's lunches in the Lordship Rec Hub and Tottenham Green Sunday market stalls to talk to local residents about food growing. The Urban Harvest Group continue to help

out local residents by picking fruit that might otherwise go to waste. A seed swap was held in October 2017.

Friends of Parks Forum

This group continued to work hard with Council officers at its bimonthly meetings to improve maintenance of the Borough's green spaces. A review of parks provision by the Council is now underway. Find out more here

Trust for Conservation Volunteers

Based in Railway Fields nature reserve, this national body organises local volunteers to carry out conservation work on green spaces in the Borough.

Tottenham Trees

This group campaigned to get as many signatures as possible on the Tree Charter – a charter for trees, woods and people. It also organised a poetry event and tree planting. Find out more here

Future plans

Decentralised Energy

The ongoing project to decentralise energy from the national grid and make Haringey more energy efficient will continue into 2018. Haringey promotes opportunities in new developments. The current plan will see several district energy networks delivered alongside the growth and regeneration agenda in the Wood Green, North Tottenham and Tottenham Hale areas.

Electric Vehicles

Haringey's Neighbourhoods of the Future project runs until 2020. Next year will see the expansion of charging infrastructure and a ramping up of business and resident engagement.

Solar

Haringey are reviewing the potential installation at Hornsey School for Girls as well which has a potential 30-60kWp system saving over 10tCO2 annually.

Fuel Poverty

Haringey in partnership with LB Islington, Enfield and Barnet have applied for funding from the National Grid to deliver an Affordable Warmth project from 2018-2019. The Warm Homes Fund project will be aimed at households in fuel poverty. It will involve the installation of new gas heating systems to provide space heating and domestic hot water. It may also include installing insulation measures to bring homes form EPC band E, F and G to EPC Band C. Haringey aim to secure approximately £375,000 through the Warm Homes Fund and an additional £375,000 through Energy Company Obligation Funding – increasing the impact of our fuel poverty service in Haringey.



Zero Carbon Haringey by 2050 route map

Haringey is working in partnership with Ove ARUP and Partners to deliver a route map and implementation plan to show how the borough can achieve its ambition to be <u>zero carbon by 2050</u>. This work will review current projects being delivered, and look at key action areas to deliver zero carbon. The Zero50 implementation plan will enable Haringey to leverage in external funding to deliver projects. External funders increasingly require firm evidence of the commitment to carbon reductions.